TRANSFER OF TRAINING IN A CULTURAL CONTEXT
A COOK ISLANDS STUDY

by

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ABSTRACT

The purpose of this study, which was undertaken in the Polynesian islands state of the Cook Islands, was to investigate the influence of cultural factors upon teacher in-service transfer of training and to identify strategies and barriers that could impact or impede the process. Although emphasis was upon an interpretivist paradigm, both qualitative and quantitative data were collected over a period of 4 years to inform the research. There were three research phases and a range of purposeful sampling techniques used to select teachers, teacher educators and principals as participants. During phase 1, general data concerning course transfer was collected via a number of meetings and an interview survey (N = 30). In the next phase, interviews (N = 28) identified 116 transfer strategies and barriers occurring before, during and after the course that were considered important by the participants. The value of each of these was subsequently assessed by a larger group of participants (N= 49). School and teacher strategies assumed a particular importance although all strategies were of significance to the participants. Thematic analysis of the interviews revealed three major themes – individual qualities, training and support – as significant factors determining whether transfer occurred or not. A key finding related to the function of support, which operates to provide a sense of *aroha* (concern about welfare) and protection from ridicule/criticism from peers. Significantly, the sense of unity between the individual and the community, a feature so apparent in the Cook Islands culture, was also central to these themes. During phase 3, a range of transfer strategies that emphasised support and collaboration, were incorporated into an in-service course and impact data collected from the teacher and principal participants (N = 31). The usefulness of these strategies for transfer was confirmed. Findings from this research make a significant contribution to our understanding of transfer of training. By using a phenomenological approach, rare in this field of study, I have identified how the cultural dimension can have an impact upon transfer of training. This has important implications for course planners, as it identifies the need to consider the complexities of local factors and the cultural context when developing training programmes, not only for a context like the Cook Islands but also more generally.

ACKNOWLEDGEMENTS

ABBREVIATIONS AND ACRONYMS

ACEAD	Advisory Committee on External Aid and Development.
CI-ITIS	Cook Islands In-Service Training Interview Schedule (needs analysis Survey)
CI-TEIS	Cook Island – Teacher Educator Interview Schedule (Needs survey Phase 1 – Teacher Educators)
CITTC	Cook Islands Teacher Training College
Dip. ESSTN	Diploma in Education – Students With Special Teaching Needs
GDP	Gross Domestic Product
IEP	Individual Education Plan
KSA	Knowledge, Skills & Attitudes
MOE	Ministry of Education
NZMFAT	New Zealand Ministry of Foreign Affairs and Trade
NZODA	New Zealand Official Development Assistance
NZQA	New Zealand Qualifications Authority
ODA	Overseas Development Assistance
PIC	Pacific Island Countries
PIERC	Pacific Island Education Resource Centre
S-R	Stimulus - Response
UNESCO	United Nations Educational, Scientific and Cultural Organisation
WCE	Wellington College of Education

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CHAPTER ONE

INTRODUCTION

Transfer of learning is universally accepted as the ultimate aim of teaching. However achieving this goal is one of teaching's most formidable problems. Researchers have been more successful in showing how people fail to transfer learning than they have been in producing it, and teachers and employers alike bemoan students inability to use what they have learned.
(McKeough, Lupart & Marini, 1995, p.vii)

Overview of the Problem

In recent times there has been considerable interest in the educational, psychological and management literature about transfer of training; the research for this study concerned transfer of training as it related to teacher in-service training in the Cook Islands. Baldwin and Ford (1988) have defined transfer of training as the application of knowledge, skills and attitudes learned from training on the job (inclusive of in-job and training programme approaches) and the subsequent maintenance of them over a certain period of time. For a number of reasons, but particularly because of the often cited failure of training programmes in education and business to ensure on-the-job application, there has been a demand for research to provide answers about transfer of training (e.g. Baldwin & Ford, 1988; Cheng & Ho, 2001; Ford & Weissbein, 1997; Veenman, van Tulder & Voeten, 1994).

Although in the past there has been limited and somewhat disconnected research within the framework of the various learning theories (refer Thomas, 1990), attempts have been made more recently (e.g. Cox, 1997; Yamnill & Mclean, 1999) to develop transfer of training models within learning theory domains and such developments have provided an impetus for initiating systematic empirical research. Training manuals/programmes and educational texts (e.g. Brethower & Smalley, 1998; Broad, 1997b; Cree & Macaulay, 2001; Kirkpatrick, 1994; Ormrod, 1998) have frequently reminded trainers and educators of the importance of transfer of training and many provide suggestions to enhance transfer. However our theoretical and conceptual knowledge is still somewhat fragmented and consequently, practical application is haphazard and at times ill founded (Cheng & Ho, 2001; Cox, 1997; Ford & Weissbein, 1997). This research will attempt to provide some insight into the issue of what constitutes an effective transfer of training model for teacher in-service training within a Polynesian setting, and thereby identify an approach that is cognisant of cultural imperatives. Training of transfer research that identifies the multi-dimensional nature of training with attention to *what group*

of trainees, under *what conditions*, and with *what training* approaches is needed (Baldwin & Ford, 1988; Ford & Weissbein, 1997).

The focus of this study was Cook Islands teacher in-service programmes. The Cook Islands Teacher Development Project (Special Education) was collaboratively developed by the Wellington College of Education (WCE) and the Cook Islands Teachers College (CITC) and the first course was implemented in 1995 - although considerable preparatory work was undertaken in the two preceding years. This inservice programme was in response to an acknowledged need for teachers in regular classes to be skilled in working with all learners but in particular those students in the classroom who had difficulty in learning, attending, retaining material, etc., were to be specifically targeted.[1] There were clear indications (Cook Islands Ministerial Task Force, 1989; Densem, 1990; McDonald, 1995a) that inclusive education strategies and procedures needed to be developed as there was no literature relating to the classroom application of special education and inclusive education practices. This was not surprising since many of the Pacific Island nations had directed their attention to the establishment and consolidation of post-colonial regular education systems (Mara, Foliaki & Coxon, 1994).

A training programme framework (McDonald & Moetaua, 1993) was developed to assist the teacher to promote better achievement levels with those students who had special educational needs and the in-service programme was developed specifically for Cook Islands teachers, their educational system and community. The emphasis was to be upon teacher application of ideas in their classrooms. Furthermore, the programme was designed to ensure that the Cook Islands Teachers' College staff would be directly involved in planning and implementation, and increasingly assume responsibility for the programme.

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[1] The contacts with the principal of the Cook Islands Teachers College and other Cook Islands educators, as well as the report written by Densem (1990), were instrumental in initiating this teacher in-service project.

Research Setting

Description of the Cook Islands

The Cook Islands is a tropical, self governing nation located in the centre of the Polynesian triangle in the South Pacific Ocean. To the west is Tonga and Samoa whilst to the east the French territory of Tahiti is located. It comprises 15 islands divided into two distinct groups – the southern volcanic/atolls group (Rarotonga, Mangaia, Aitutaki, Mauke, Mitiaro and Atiu, Palmerston, Manuae and Takutea) and the northern group atolls (Manihiki, Rakahanga, Penrhyn, Pukapuka, Suwarrow and Nassau). The islands are widely scattered over two million square kilometres but the total land area is only 240 square kilometres. Refer to the maps in Figure 1.1. Rarotonga, the business and economic hub of the islands, has the seat of government and over half the population. Avarua, the major town in Rarotonga, is the largest population settlement in the Cook Islands. The indigenous population is Polynesian with close affinity to the Maori of New Zealand and most speak Cook Islands Maori (with varying dialects) and English.

In 1965 the Cook Islands became independent of New Zealand but remained in free association ensuring access rights to New Zealand (and therefore Australia) with rights and privileges of New Zealand citizenship. With the agreement of the Cook Islands government, New Zealand retains responsibility for defence and much of its foreign affairs. It has a Westminster style of government and the head of state is Queen Elizabeth. The House of Ariki comprises the hereditary chiefs and is advisory to the government. Each island has a measure of autonomy vested in the island council.

The Cook Islands experience one of the highest GPD per capita in Polynesia (excluding French territories). In 1999, according to the Cook Islands Investment Board (Cook Islands Government, 2001), the GDP per capita for Fiji, Tonga and Samoa was US$2,286, US$1,630 and US$1,020 respectively, but in the Cook Islands it was US$4,510. The Islands have a small export base but since the mid-nineties a growing primary and manufacturing sector. Tourism is the mainstay of the economy and is growing rapidly. Off shore financial centres, remittances and foreign aid contribute significantly to the islands' economy (e.g. in the 2000-2001 year, New Zealand provided NZ$6.2 million in bilateral aid to the Cook Islands).
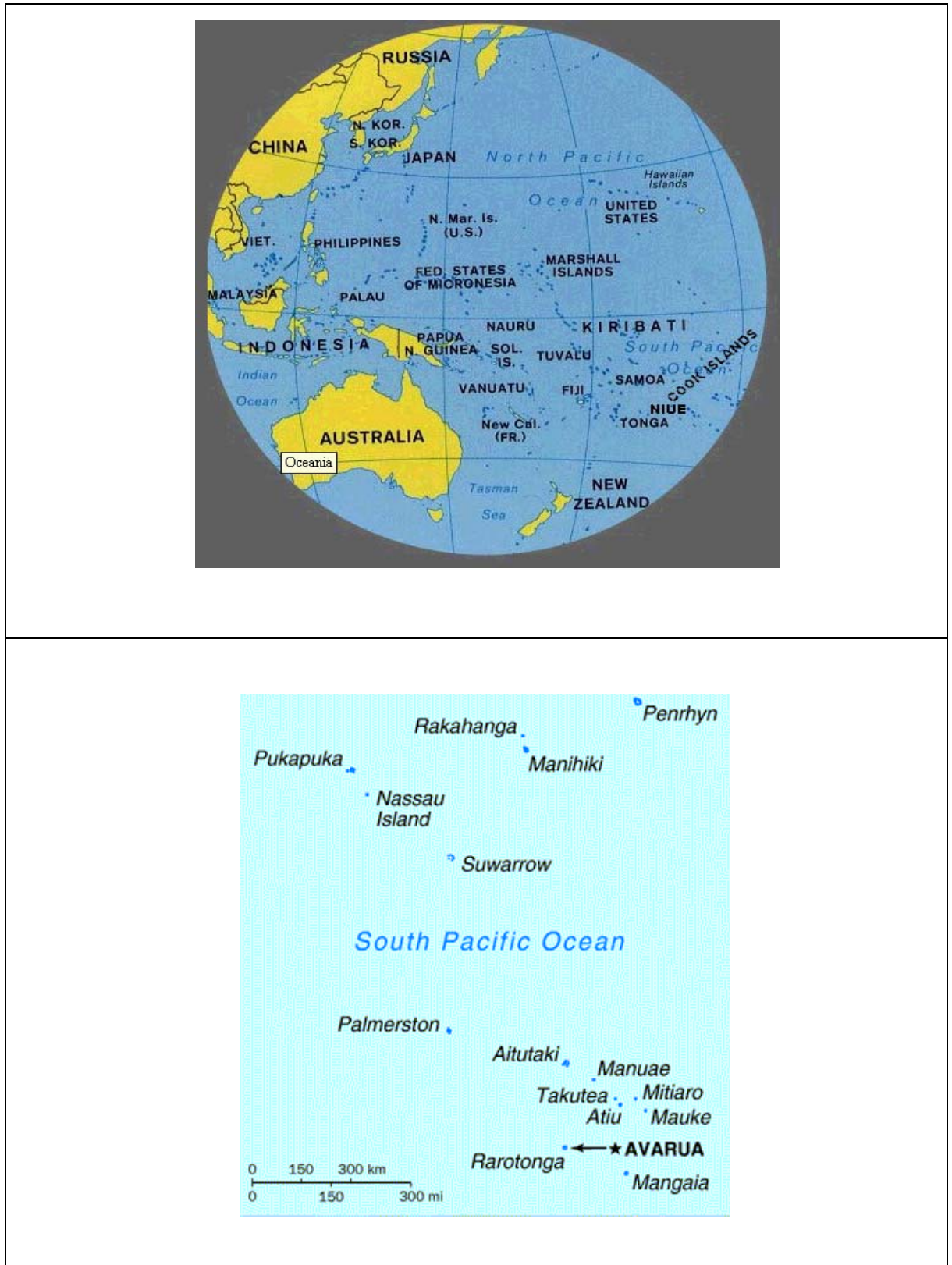
Figure 1.1. Maps of the Oceania region and the Cook Islands.

The Cook Islands, like so many of the other South Pacific nations, is isolated from markets, has a lack of natural resources, relatively inadequate infrastructure and is subject to occasional devastation by natural disasters. In recent years, a number of significant problems have been encountered in the Cook Islands and these have impacted socially, economically and demographically (Cook Islands Social Impact Assessment report, cited Victoria Link, 2001). With its small land area and widely dispersed population across a vast ocean it is increasingly presented with sustainability problems. One of the major consequences has been migration to Rarotonga, as well as New Zealand and Australia and accordingly the age dependency ratio of the remaining population is increasing. The Cook Islands currently has a population of approximately 15,000 but there are over 50,000 Cook Islanders living in New Zealand and, increasingly, many are moving to Australia.[2] This has impacted upon human resource development planning and the economy of the country. Furthermore, when New Zealand revised its budget allocations to the Cook Islands in the mid-nineties an austerity programme was implemented and over 2000 public servants were made redundant and the public sector restructured. A wave of migration followed. The quality and provision of basic services (e.g. education and health) has become an even greater concern for many of the locals as de-population continues (Asia Development Bank, 1997). Education, health and many technical services are supplemented with assistance from overseas aid agencies and consultant services. For example, in the 1998 –1999 year, 25% of the NZ$6.3 million bilateral aid was allocated to the education sector (Davenport & Low, 2001).

Education in the Cook Islands

Education is compulsory for all children between the ages of 5 and 15 years and the government, church groups and a few private schools/facilities provide this. There are 36 schools in the Cook Islands with at least one school on each of the inhabited islands. Refer to Figures 1.2 and 1.3 for photographs of Mauke School and the Cook Islands Teacher Training College.[3] Resources and facilities are limited. There are approximately 4700 students overall (including preschool) but enrolments are falling. The Teachers Training College, Nursing

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[2] Cook Islanders are moving abroad because of a range of factors. In particular because there are more employment opportunities in New Zealand and Australia and the recent economic down-turn in the Cook Islands (1995-1997) resulted in heavy losses. Improved social services and educational opportunities overseas have also had a part to play (Cook Islands Government, 2001)

[3] Mauke School is on Mauke Island. This island is in the Southern Group and is one of the Nga-pu-toru islands to the north of Rarotonga. Some of the course work was undertaken at Mauke School. The Cook Islands Teachers' College is on the island of Rarotonga and most of the teacher in-service work is located on this site.

Figure 1.2 Mauke School in Nga-pu-toru

Figure 1.3 Cook Islands Teacher Training College

School, Trade Training Centre and the Tourism Training Centre provide tertiary training. An extension centre of the University of the South Pacific is located in Rarotonga and provides vocational, foundation and degree courses. The educational system has been considerably influenced by New Zealand education policies although adaptations are made to meet local needs. Adoption of the New Zealand Qualification Authority standards has recently been agreed upon and currently teachers are training to implement the National Certificate in Educational Achievement.

In the Pacific there are frequent demands for more and better in-service training (Davenport & Low, 2001). Teachers have on the whole been poorly trained and with the rapid educational, social, and economic changes combined with globalisation of knowledge, improved professional development is considered a priority. Changes in curriculum, qualification structures, advances in disciplines and professional knowledge, language requirements, etc., require teachers to be updated on an ongoing basis. One commentator noted:

> More money should be going into teacher education but not necessarily pre-service courses. There is a great need for in-service training as a lot of Pacific teachers have been in the job for 20 years and they didn't have particularly good pre-service….. so there is a huge need for in-service. (Davenport & Low, 2001, p.22)

Rote learning has been a favourite methodology of these teachers (Jenkins & Singh cited Davenport & Low, 2001) but in-service training has been used to facilitate the development of a more active and learning oriented approach to teaching. In the past 10 years in the Cook Islands there has been an increased emphasis on aid funded in-service training with a significant proportion of the teachers (i.e. 80% in 1999) receiving some form of training.[4] Improved teacher performance was one of the goals of the Education Sector Action Plan (Matheson, 1999); however, improvement in teacher skills and performance has not been ascertained, as impact data has not been collected. Numerous training programmes in sectors other than education have also been undertaken but, once again, effectiveness and impact data has not been collected (Matheson, 1999).

During the past 10 years significant changes in the Cook Islands have impacted upon education. Declining rolls, loss of trained teachers, declining educational achievement and restraints on educational expenditure have caused considerable problems for the educational

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[4] Data supplied by the Director of Operations, Cook Islands Ministry of Education 1999.

sector and contributed to expressions of concern from parents as well as political and community leaders (Victoria Link, 2001). Over the years, numerous education sector surveys and reports (e.g. Cook Islands Ministerial Task Force, 1989; Victoria Link, 2001) have identified educational issues and concerns that require attention. Throughout the Pacific, considerable donor agency aid (e.g. Asian Bank loan, New Zealand Official Development Assistance) has been provided to facilitate more efficient development although, overall, much of this has been directed toward tertiary training (Davenport & Low, 2001). In the Cook Islands concerns have been expressed about teacher training provisions, competency and on-going professional development. Also considerable financial investment from NZODA has been provided to facilitate development in these areas (Victoria Link, 2001).

Development Aid

Development aid is particularly important to the small nations in the Pacific region. The Ministry of Foreign Affairs and Trade administer New Zealand's aid programme, New Zealand Official Development Assistance (NZODA). It places particular emphasis upon human resource development and has six guiding principles -

- Partner responsibility
- Building capacity
- Sustainability
- Reducing poverty
- Participation, and
- Involving the New Zealand community

These principles define the criteria for evaluating projects (MFAT, 2000).

Undoubtedly recipient countries welcome aid programmes but increasingly there are concerns expressed about its intent, nature and usage.[5] Both Campbell (1992), and Knapman (1986) point out that much of the Pacific Islands aid is likely to be politically motivated rather than needs based. In a similar manner, Sevele (1987) noted that most of the aid allocated in the Pacific is given for strategic and commercial purposes rather than the professed humanitarian reasons. He suggested that a long-term development approach needs to be adopted, that endeavours should be made to ensure that the aid reaches the intended recipients, and that donor personnel should recognise the political and socio-cultural realities of the island

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[5] The recent review of NZODA activities (Ministerial Review Team, 2001) has been particularly critical of NZODA activities.

nations. Vera and Arias (2000), in an Oxfam report, commented on educational aid to developing countries and observed that it was not a balanced process. Not only was much of it spent on tertiary provisions but it was often uncoordinated and poorly implemented. Most of the funding was allocated for technical assistance and nearly one half spent in donor countries, giving more limited opportunity for capacity building and participation in the local scene and by the locals.[6] Overall, it was concluded that aid funding was poorly spent and more attention needed to be given to sector wide approaches (e.g. education as a sector) rather than project funding that is more piecemeal. It was noted (Victoria Link, 2001) that both the World Bank and International Monetary Fund were opening up such opportunities.

Approximately 20% of NZODA aid is devoted to education and in the Pacific region this involves a significant funding allocation - much of the $NZ 80 million NZODA bilateral aid is spent on education. A considerable proportion of this is related to training projects. For example, in the Cook Islands 1998-1999 financial year, close to $NZ1 million was invested in training projects in the education sector alone (Davenport & Low, 2001). In an examination of the Pacific region aid funding provisions, Davenport and Low also noted the importance of changing priorities. This report indicated that educational standards in Polynesia were declining and the local capacity for alleviating the problem was limited. An integrated strategy and plan was recommended covering sector wide initiatives rather than dealing with each issue separately.

Surprisingly, it appears that most attention in reviews of donor assistance training has been directed toward quantitative and administrative concerns and minimal consideration given to examining many of the important qualitative issues. Important questions relating to the process of improvement and change as well as the value and impact of the expenditure seem to be implied only. In the Advisory Committee on External Aid and Development report (ACEAD, 1999) for example, to achieve increased access to education and training, more equitable outcomes and improved quality of service, it was recommended that the following would need to apply:

- Increase funding for basic education, giving priority to primary education and the needs of girls and women.

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[6] In New Zealand it has been estimated that 60% of foreign aid never leaves the country (Coxon cited Baba, 1999)

- Increase expenditure on technical and vocational education, including secondary education, non-formal education and apprenticeships.

- Increase support for in-country and Pacific regional education, by reducing expenditure on scholarships and awards for study in New Zealand.

- Foster open learning methods and methods for achieving credit portability. (p. 5)

Sanga (2000) draws attention to the nature of the aid project partnership and notes that there are a number of concerns that need to be attended to if aid projects are to facilitate sustainable and equitable development. There is over reliance upon donor input whilst local input, knowledge and capacity building is not given equal consideration. Consultants and donor agencies infrequently understand the contexts of the local community and to compound matters, aid relationships are often short-lived. The basic educational needs of Pacific island nations however require long-term strategies if meaningful impact is to be achieved. Sanga notes that aid projects "have not resulted in autonomy, strengthened capacities, sustained policy communities and leadership by and for the PICs. Instead, donors have continued to control educational agenda, over-loaded local institutions with aid activities and preoccupied limited resources with imposed frameworks and value systems." (p.6)[7] He argued for integrity in aid relationships with a valued relationship between donors and recipients. A valued relationship was one that engendered confidence, encouraged growth and motivated people toward autonomy.

For aid training projects, it appears then, that aid can be problematic. There is a lack of extant data on their value and impact to facilitate sustainable growth and motivation of participants. Millions of dollars are annually devoted to NZODA projects but evaluations are project-based summative evaluations with little regard given to systemic improvements in the quality and processes of training for impact. The goals and objectives of the donor and in country planning (as it relates to the provision of in-country training programmes) seem to be overlooking an important dimension – 'how effective, in terms of impact, is the training and how can it be sustained?'

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[7] PICs is an abbreviation used for Pacific island countries.

Cross-Cultural Contexts

A growing literature base exists on cross-cultural contacts and for this project this literature was an important consideration. Considerable preparation and research was undertaken to ensure that the researcher was sufficiently skilled and knowledgeable to enter the Cook Islands' cultural context. The work of Hofstede (1984; 1991) concerning cross-cultural interactions and the need for congruence in the relationships was particularly valuable in assisting the researcher to conceptualise and respond to differences in culture. Relatively little is understood however about inter-cultural competency, that is, how individuals function in a new culture. This was also an important area of investigation for the researcher. Ptak, Cooper and Brislin's (1985) survey acknowledged that many adult educators can have a knowledge of inter-cultural competency but it was unclear how this could be operationalised. Taylor (1994), and Jacobson (1996), although disputing the theoretical framework for understanding the process, promoted the need for development of strategies and understandings. A number of studies (e.g. Benson, 1978) have identified specific behaviours and predictors of inter-cultural competency such as language skills, attitude, socially appropriate behaviours, friendliness and mobility. Hammer, Gudykunst and Wiseman (1978) identified three important factor constellations: the ability to deal with psychological stress, the establishment of interpersonal relationships and the ability to effectively communicate. It was hypothesized that the development of a `third cultural perspective' enabled an individual to interpret host culture experiences. Undoubtedly, as one moves towards an inter-cultural identity (Kim, 1992) there is an adaptive process (e.g. Kim & Ruben, 1988; Oberg, 1960). Jacobson (1996) noted that many earlier attempts to explain the process of inter-cultural competence were flawed, it was seen primarily as internal phenomena (albeit as a consequence of being in a social context). His approach clearly identified situated cognition as the crucial determinant in learning culture "........ ways of knowing of how to make sense of a situation, and how to interact in ways that will make sense in that situation, are inextricably linked to that situation. (p.16)"

The Nature of the Research Problem

This study was designed to explore the cultural aspects of transfer of training in a specific setting and to determine application ideas. In doing this it would contribute to our understanding of how culture impacts upon transfer and would therefore build upon the existing theoretical constructs. Although there is some awareness of the significance and impact of culture upon transfer (e.g. Adler, 1986; Dillon, 1993; Haskell, 2001; Hofstede, 1991; Lim, 1999; Lim & Wentling, 1998; Xiao, 1996), there is a need for more sustained and consolidated research (Haskell, 2001).

This research project acknowledges the importance of the key stake-holder views from an individual, contextual and cultural perspective and thereby provides the requisite and integrated holistic interpretation of the process (Haskell, 2001), but emphasis has been placed upon operationalising cultural factors impacting upon transfer. The psychological and personal view of transfer, although in many respects still problematic, has attracted considerable research attention and theory building (Haskell, 2001). However, Haskell argues it is also necessary to acknowledge the importance of cultural and context factors in transfer. "It is clear, then, that cultures and contexts are powerful shapers of transfer." (p.149) Bridges (1993) in discussing the development of transferable skills in the higher education field also recognised this need: "We need to ask what would make one social context different from another to the extent that it might constitute a challenge to the transfer of skills." (p.49)

Lim (1999) noted that with globalisation there is an increasing need to consider transfer of training from a cross-cultural perspective. That is, there is a need to define a model of transfer that reflects the generally established principles of transfer but also incorporates key dimensions (such as learning/work environments and cultural factors) that are specific to the context. Bamford (1986) noted that practices, relating specifically to the Pacific region, need to be integrated into any training programme. With the current worldwide interest in transfer of training, professional development and teacher change, it was expected that investigation on teacher in-service training in the Cook Islands would promote not only general understanding and application implications - but also a much needed theoretical contribution on how culture impacts upon transfer of training.

There is no known literature concerning the cultural issues relating to transfer of training in relation to professional development effectiveness studies in the Cook Islands or the South Pacific. Undoubtedly, the considerable literature that relates to in-service training and practices of teachers in western countries has considerable value for the training and professional development of Polynesian teachers and for this research study. Nevertheless, caution needed to be exercised in a study of this nature. There is considerable literature (e.g. Jonsson, 1992; Tupuola, 1993) to suggest that much care needs to be exercised if western philosophy and practices are to be incorporated into the educational systems of non-Western nations like the Cook Islands. Brady and Anderson (1983) noted that Pacific Island traditional cultural values and economic needs should be significant factors in the development of programmes in the region. Accordingly, it was considered important by both the instigators of the teacher in-service project (the context for this research) and the researchers that those relevant contextual-cultural determinants be reflected within a collaborative, consultative training and research framework.

In acknowledging that the quality and nature of teacher professional development determines the nature and success of educational systems and processes within a context, this research project had particularly important objectives. It was anticipated that the following objectives would be achieved by the research project, viz.,

1. The identification of appropriate and specific strategies for transfer of training that would provide a basis for teachers, trainers and other significant people to work together to plan for effective in-service training;

2. An understanding of the patterns of the transfer process (that would underpin an explanatory model). These patterns would be useful for planning teacher in-service training and other professional development activities (with particular reference to Cook Islands educational context); and

3. The development and delivery of a teacher in-service programme that reflects the findings of these understandings; and,

4. A contribution would be made to transfer theory – an explanatory model of transfer with specific reference to how culture impacts upon transfer of training.

Chapter Summary

This chapter has outlined the significance of transfer of training and why it is regarded as an important area of research. The location of this research was the Cook Islands, a small island state located in the South Pacific. It receives considerable aid from the New Zealand government for training purposes but questions have been asked about the utility of the funding and in particular the lack of extant data on impact. One of the major issues is how best to implement training programmes in a different cultural setting? This research was concerned with the identification of cultural factors that influence transfer of training and developing a range of strategies to facilitate on-the-job application.

CHAPTER TWO

LITERATURE REVIEW

.....it is worth noting that there are vast areas in which transfer is not a problem at all and where it is so straightforward that no one bothers to do research on it. (Bereiter, 1995, p. 26)

The argument against transfer becomes more believable when one realises that universities are full of people who are attempting to make one significant transfer. They are called professors. If a professor can apply what he or she has learned to one new, novel situation, he or she will have earned his keep. The truth is that most professors pass their entire academic career without a single novel important insight. Novel insights as cases of transfer are probably rarer than volcanic eruptions and large earthquakes. Like any other rare event, important cases of transfer are difficult to study because no one knows exactly when or where they will occur. (Detterman, 1993, p. 2)

Introduction

The concept of transfer is one of the significant, yet more perplexing, issues related to teaching and learning. It is only in more recent times however; that there has been a resurgence of interest generated in the theoretical and research considerations within the frameworks of instructional psychology, training, education and management (Haskell, 2001). There is debate and confusion in this literature about the construct.

For the purposes of this paper, transfer of <u>learning</u> will refer to the more generalist concept concerned with applying new learning (gained on-the-job/in the setting and could involve training) in new settings. Haskell (2001, p. xiii) defined transfer of <u>learning</u> as "our use of past learning when learning something new and the application of that learning to both similar and new situations." To him, it is the very meaning of learning. Transfer of <u>learning</u> has occurred, for example, when the knowledge and skills learned in using one computer programme (e.g. Excel) are applied to a different software programme (e.g. Access). This could be achieved in a formal training course or via incidental learning. Transfer of <u>training</u> will specifically refer to the use in the work setting of knowledge, etc., gained via <u>an identified training programme</u>. Gradous (1991, p.12) stated that transfer of <u>training</u> "is deemed to have occurred when a training participant applies in the work setting the knowledge or skills he or she has learned in a training setting, usually a classroom." A teacher who implements a new practice (e.g. cooperative learning) in the classroom based upon her knowledge and skills gained via a training course is an example of transfer of training. Although in technical terms the differentiation between the two terms is

useful, in much of the literature, the terms are used inter-changeably and accordingly, in this literature review, emphasis will be upon the transfer literature that relates to <u>training</u> contexts.

To most employers, the ultimate value of a training programme will be determined by the degree of application of useful, valued information and skills to the job setting. Accordingly, the trainer's understanding and utilisation of transfer of training strategies becomes a survival issue. Youker (1985, p.54) commented that in job-related training, transfer "isn't just an issue, it is ***the*** issue." It is important to recognise however, that the viability and usefulness of that which is to be transferred is subject to professional judgement.

Given that it is such an important issue, it is somewhat surprising that there are still fundamental theoretical and research questions unanswered and that there have been only limited attempts to address the issues in the past in a systematic manner. A coherent and united research framework is still lacking (Haskell, 2001). There is ongoing debate, for example, about the nature, theoretical basis, terminology, types and focus of the transfer, the extent of application, the role and relative importance of the trainer/trainee/context variables and what and how we teach for transfer (Baldwin & Ford, 1988; Broad & Newstrom 1992; Cheng & Ho, 2001; Fenstermacher, 1986; Ford & Weissbein, 1997; Gist, Bavetta & Stevens, 1990; Gradous, 1991; Miles & Biggs, 1979; Oates, 1992; Taylor, 1974; Thomas, 1990). Increasingly, demands have been made from industry, training and education to develop our understanding of transfer of training so that impact is achieved in the work setting (Haskell, 2001).

Overview of the Research Literature

The issue of transfer of training has been of considerable interest to many practitioners and theory builders involved in education, psychology and training (Haskell, 2001) for the past 25 years. It has, however, had a long history and has generated debates that relate to the very essence of the nature of teaching and learning. In this section, an overview of the importance of transfer of training, its nature, the theoretical background and models purporting to explain its occurrence and the influences upon transfer will be outlined. Following this, in subsequent sections, more detailed accounts of some of these elements will be discussed. What is very apparent is the complexity of the issue, viz., locating an agreed upon definition and invariant characteristics, the competing theoretical explanations and models of the phenomena used to define its operation, the empirical obstacles resulting from research ambiguities and problems, and making adequate links between transfer of training theory, research and application.

Although many have an interest in understanding transfer of training better and developing theoretical constructs, most of the demands to unravel the complexities of transfer are pragmatic in origin. Changing job requirements and technological advances in particular have made training a global priority and millions of dollars are devoted to the training business. But as commentators (e.g. Broad, 1997a) note, long-lasting general transfer is very difficult to prove. Training, in many situations is failing to have an impact. Hence there has been a search for approaches that will maximise the training impact. The need for valid and relevant training for the key stakeholders, and their involvement in the training planning process are key issues related to this interest in transfer of training.

Essentially, transfer of training is concerned with how training impacts in the work-place but there has been considerable discussion about its nature and characteristics (Salas & Cannon-Bowers 2001). The interpretation given to transfer is a particularly significant issue for it then defines theory, practice and research endeavours (Ford, 1994). Most would agree however that transfer is a multi-faceted process. It is a prerequisite to complex learning, difficult to achieve, requires planning and is related to an individual's capacity to identify similarities in situations (Alexander & Murphy, 1999). Transfer can be enhanced by facilitators and thwarted by barriers.

There have been four major theoretical explanations of transfer (de Corte, 1996). The formal discipline approach promoted the idea that exercising one's cognitive capabilities would impact upon later learning achievements. Associationism, the precursor to the behavioural explanation, identified similarities in situations/contexts as the explanation for transfer, whilst the Gestalt perspective argued for an opposing approach and emphasised the importance of the learner using generalised principles to transfer knowledge and skills. In more recent times, the cognitive approach has contributed significantly to our understanding of transfer although there has been a vast range of explanations within this theoretical perspective.

The differing theoretical perspectives of the experts have contributed a number of models that attempt to explain transfer. Implied in these discussions are questions relating to what is transfer, and how best it is described and evaluated. Is it a process or outcome and what evaluation procedures should be used? Increasingly however, some experts in the field (e.g. Haskell, 2001) have called for the narrow fragmented approaches to be abandoned and

replaced with a more encompassing and principled theoretical position that includes the differing theoretical perspectives.

Baldwin and Ford (1988) outlined the difficulties that had been encountered in the transfer of training research. Their review identified four significant limitations. There was the problematic issue of how transfer was defined and operationalised, the imposed methodological restrictiveness because of the low complexity of the research tasks, the difficulty in relating specific trainee characteristics to transfer, and fourthly, the problems associated with the operationalisation of key environmental impact factors. Ford and Weissbein (1997) nine years later noted that more complex tasks and samples, as well as more adequate measures, were being used although the lack of specificity in measurement remained a problem.

There have been three major influences on transfer that have engaged the attention of the researchers. Training factors, trainee variables and workplace characteristics were identified by the Baldwin and Ford (1988) study as pervasive factors that needed to be operationalised, if we were to understand transfer of training. But increasingly, there have been calls to examine these not as unitary influencing factors but as multi-dimensional influences interacting in the learning setting (Cheng & Ho, 2001; Ford & Weissbein, 1997).

Ford and Weissbein (1997) outlined that one of the major weaknesses in the earlier training design research was that many assumptions had been based upon the use of short-term memory transfer with college students; as Schmidt and Bjork (1992) had noted, such findings are likely to have no applicability for long-range transfer. Research since the late 1980's has to some extent overcome this problem but generalised measures of design effectiveness were still limiting progress in the area (Ford & Weissbein, 1997).

There was little empirical data relating to trainee characteristics and transfer although some limited evidence was available that ability, aptitude, motivation and personality factors would influence behaviours on the job. In general, the investigations into trainee characteristics had been hampered by the lack of an appropriate theoretical framework and the over-use of self-report studies. It was suggested by Baldwin and Ford (1988) that more interactive studies were needed relating trainee characteristics to the training design and content - research that identified which individual participants were suitable to what training programme. Information on the motivation of trainees was also very limited. The Ford and Weissbein (1997) and Cheng and Ho (2001)

reviews also agreed that difficulty remained in the development of adequate theoretical frameworks to explain the relationship of trainee characteristics to transfer but both acknowledged that some advances had been made in relating motivation to transfer.

It was further noted in the Baldwin and Ford (1988) review that there was limited empirical evidence to correlate organisational climate factors (such as freedom to set goals, promotional opportunities, and pre-course discussion with the 'boss') with transfer. Criterion measures that were taken at more than one point in time were also not being undertaken. Supervisory support was recognised as an important variable. However, research studies had not isolated which particular factors had the greatest impact, on individuals, and/or groups or organisations.

With regard to the work environment, some studies since 1988 had operationalised independent variables (such as work climate, opportunity to perform and support), but Ford and Weissbein (1997) indicated that further research was needed to identify the complex interactions between the individual and the work environment characteristics. Cheng and Ho (2001) in discussing these advances detailed how work support (particularly supervisor support), continuous learning culture and task constraints impacted upon transfer.

Baldwin and Ford (1988) further noted in their critique of the literature, the importance of obtaining reliable and valid measures of generalisation and maintenance, the need to consider transfer of training as an interactive issue, and the significance and relevance of the training content. They succinctly summarised their findings -

> *While the limited number and the fragmented nature of the studies examining transfer are disturbing by themselves, a critical review of the existing research reveals the samples, tasks, designs, and criteria used limit even further our ability to understand the transfer process* (p.86).

With regard to definition and operationalisation, the more recent reviews of Ford and Weissbein (1997) and Cheng and Ho (2001) noted that there were now more variable measures being used and prolonged time intervals between training and criterion assessment. Ford and Weissbein indicated that an interesting development since the Baldwin and Ford review was the importance attached to adaptive behaviour and, accordingly, research foci needed not only to be directed toward generalisation and maintenance issues but also to investigate the impact of adaptive expertise.

Both of the later reviews outlined the methodological advances. Ford and Weissbein (1997) noted that recent studies were using more complex tasks and designs with more diverse samples and therefore overcoming the earlier weaknesses in the research. However, the specific identification of factors, their intensity and effectiveness had still been overlooked in favour of a more overall measurement effectiveness. In addition to the need for factor specification, future research needed to be directed towards understanding the impact of cognitive approaches on learning. Cheng and Ho (2001) reported that more attention to improvements in research design was a priority as was, the testing of the generalisations in specific settings, the need to more thoroughly research far and long-term retention transfer and the continuing need to move beyond self-report measurements.

The survey of the literature has highlighted many of the theoretical and methodological advances and emerging issues that continue to sustain the interest in transfer of training and the ever increasing demand for improvement in training impact. It has been suggested by Baldwin and Ford (1988), Ford and Weissbein (1997), Cheng and Ho (2001) and many others that progress would only be maintained if there was a consolidation of research intentions. Research needed to be directed toward identifying effective training design strategies, incorporation of different samples in the research, recognition of the potent trainee, training and work characteristics, operationalisation of key variables impacting upon transfer and development of models that emphasised 'person X situation interactions'. The literature however has recognised the complexity and interactive nature of transfer and the ongoing difficulties associated with the research endeavours.

Growing Interest in Transfer of Training

During the past 15 years, there has been considerable interest generated in transfer of training with a demand for sound theoretical advances to be made. This interest has been generated by a number of developments reported in the literature, viz.,

1. The advances in educational and psychological knowledge and theories. For example, developments in cognitive, socio-cultural and cultural psychology have made significant contributions to our understanding of how learning might be more readily transferred. At the same time these developments have identified new areas for research. The disciplines of training, management, psychology and education have become more aware of the need to be more integrated in their search to answer this vexed question of transfer.

2. A realisation has been reached that accountability systems and evaluation should also focus on training endeavours that have impact. After all, vast amounts of money are spent on

training and if this is not ascertained to impact upon organisational effectiveness then training is deemed to have failed[8].

3. The understanding that many training projects are, not only, too theoretical but also fail to change behaviour and do not impact on-the-job. This promotes disillusionment and frustration in trainees and management alike.

4. Changing job requirements as a consequence of globalisation, technological advances and increased interdependence of units, as well as increased demand for high quality outcomes, necessitates increased attention to improved job performance. Furthermore, many individuals now change their jobs more frequently and this often requires the development of a new set of skills and competencies. Effective training has a vital role to play with changing job requirements.

5. There are unfavourable consequences for non-involvement of trainees and management in the training design, implementation, evaluation, etc., of the programme. To many trainees and managers, the validity of the training programme is questionable as their real issues are often over-looked.

6. The understanding that it is not viable or ethical at times to leave change to chance. Institutions need to plan for change to occur.

7. The realisation that transfer of training is an interactive, dynamic concept and is therefore not the responsibility of the trainee only. The array of training inputs and outputs influence the outcome and accordingly the organisation, the trainer and trainee have responsibility to <u>plan</u> for and achieve training outcomes.

(For example refer to: Baldwin & Ford, 1988; Bransford, Brown & Cocking 1999; Broad, 1997a; Broad & Newstrom, 1992; Caffarella, 1994; Fogarty 1997; Ford & Weissbein, 1997; Fullan, 1991; Gradous, 1991; Greeno, 1992; Haskell, 2001; Misko, 1995; Patrick, 1992; Ratner, 1997; Resnick, 1996; Rogoff, 1990; Special Issue Performance Improvement Quarterly, 1997; Veenman, et al., 1994; Vygotsky, 1978).

Training manuals often reflect this interest and have devoted sections/chapters to transfer of training suggestions, and yet, theoretical and conceptual knowledge is still somewhat limited and

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[8] There have been various estimates of the amounts of money spent on training and the extent to which this is considered wasted because of lack of impact on-the-job. For example, Haskell (2001) notes that in the USA the annual budget for training is approximately US$20 billion and yet there is a paucity of evidence linking improved performance to the training. Brinkerhoff and Gill (1994) noted that 80% of the efforts of most training departments are wasted whilst Tannenbaum and Yukl (1992) in a review of the evaluation data in the literature estimated that only 5% of the course participants indicated they had applied learning on the job. Broad (1997b) was more optimistic however and reported that HRD trainers noted immediately after training 40% of the programmes were being implemented (although after 1 year this had slipped to 15%).

practical applications often even more questionable because of a lack of understanding of the details of the process (Haskell, 2001).   Although there has been limited and somewhat disconnected research and sub-theory research building within the frameworks of the various learning theories (Thomas, 1990; Yamnill & McLean, 1999), attempts have also been made to develop transfer of training models and these have provided a basis for advocating systematic empirical inquiry (Garavaglia, 1996).   Furthermore, many of these models (examined in more detail in a subsequent section of this chapter) are useful for furthering our understanding of the transfer process and provide a research framework.   These models have permitted trainers to develop numerous strategic approaches to maximise learning opportunities and transfer (e.g. Broad, 1997a).   There are similarities between the models but there are also considerable differences, which are accounted for by the differing theoretical positions and interpretations of what constitutes learning and transfer of training (Haskell, 2001).

In this section the growing interest in transfer has been considered, although in reality, transfer has always been an issue in learning. With contemporary perspectives emphasising on-going training with the constant of technology change, the accountability of outcomes and the multi-disciplinary explanations highlighting numerous empirical issues, there has been a realisation that transfer of training is a complex concept central to understanding and implementation of effective training. Training can no longer be left to chance.

In the next section of this chapter overviews of the literature will be discussed.   The different models purporting to explain transfer will then be detailed. This will be followed by a description of some of the issues relating to the models and finally an examination of the influences (trainer, trainee and work context) on transfer will be outlined. Chapter three will discuss adult education, in-service training, change literature, and outline the characteristic features of Cook Island culture as well as its educational/learning environment.

The Nature of Transfer of Training

Although there appears to be general agreement with Baldwin and Ford's (1988) notion that transfer of training is concerned with the application of knowledge, skills and attitudes learned from training and subsequent maintenance of them over a certain period of time, there has been considerable discussion and controversy concerning the specifics and characteristics of transfer of training. For example, in the literature (eg., Baldwin & Ford, 1988; Bellanca & Fogarty, 1992; Broad & Newstrom 1992; Fenstermacher, 1986; Fogarty, 1989; Gradous, 1991; May, 1999;

Oates, 1992; Sternberg, 1984; Stolovitch, 1997; Thomas, 1990; Wittrock, 1967) there has been ample discussion regarding:

- the *character* of the transfer phenomenon (eg., What is its origin? Is it a process or outcome? Is it best described in quantitative or qualitative terms?);

- the *terminology* used (the terms generalisation, transfer of training, transfer of learning, follow-up-to-training are often used interchangeably);

- the *types* of transfer and whether it is a dichotomous concept (i.e. It is variously referred to as simple - complex transfer, near - far transfer, and spontaneous - guided/scaffolded transfer) or more appropriately considered as a continuum?

- the *nature* of learning (Is it best to use generalised or content-specific focused learning?); and

- the *assessment* of transfer (e.g. should quantitative, qualitative or mixed method assessment procedures be used?).

To complicate matters these deliberations have often been considered within differing theoretical frameworks. For example, with regard to the origins of the transfer problem, was it a philosophical research based issue of the inherent discontinuity between theory and practice (Detterman, 1993), or could it be explained by the viewpoint that there is a lack of integration between the educational/psychological theories and the trainees' experiences/competencies, etc., (Haskell, 2001). Firstly however, consideration will be given to analysis of the constituent parts of transfer whilst in the following section, related theoretical perspectives, models and issues will be outlined that provide frameworks for interpreting the transfer phenomena.

Defining Transfer

The literature on transfer of learning and training is replete with definitions but as Haskell (2001) notes, it is a deceptively simple concept. Although many of the definitions are somewhat similar, there are considerable differences and emphases that contribute to the wide interpretation of transfer phenomena. Furthermore, it is important to examine what experts say about transfer because the definitions, theories, practical implications, applications and research endeavours are related (Ford, 1994).

The traditional view in the literature has been that transfer is a special case of learning (de Corte, 1996) but some (e.g. Ferguson, 1963; Haskell, 2001) consider learning to be a special case of transfer since it embodies all of the processes necessary for changes in thinking and behaviour (e.g. abstraction, analogical reasoning, generalisation, logical inference and induction). It is also important to acknowledge that both training and learning, and transfer of training and transfer of

learning are often used interchangeably in the literature. Moreover, as many have noted (e.g. Cormier & Hagman, 1987; Moon, 2001), training and learning do have differences – training is a more focussed task activity whilst learning has a broader meaning and encompasses thinking and behavioural responses. Kraiger (in press) acknowledges however that there is now a blending of the training and learning perspectives. Haskell (2001) defines training in terms of instructional method, design and behavioural characteristics whereas learning is concerned with understanding (and hence incorporated within transfer). Cormier and Hagman (1987) however, along with many others (e.g. Caffarella, 1994; Detterman, 1993; Fogarty, Perkins & Barell, 1991b) either implicitly or explicitly define transfer of learning and transfer of training as the same phenomena. Transfer of training to them is simply the utilisation of learning responses, gained in one context, in another context. In the psychological literature this is often referred to as generalisation.

Some researchers prefer to define transfer of training in more precise focussed terms, that is, considering it a sub-set of learning transfer. For example, Gradous (1991) considers it to "have occurred when a training participant applies in the work setting the knowledge or skills he or she has learned in a training setting, usually a classroom. Transfer of training implies appropriate and successful use of the new learning on a continuing basis or as called for in the work setting." (p.12). Robinson and Robinson (1995), along with Gordon (1989), and Zemke and Gunkler (1985) emphasise 'on the job' application of skills and knowledge acquired during a training programme. The essential difference is that these contributors relate transfer of training to an identifiable training programme (sometimes located away from the immediate job site) whereas the encompassing viewpoint includes incidental and programmed learning experiences in all locations. This distinction becomes blurred however when examining some of the training literature (e.g. Analoui, 1993; Bell & Gilbert, 1996) which also incorporate incidental social learning experiences as an important part of the process.

Simons (2001) has identified six different settings of transfer that need to be considered: training programme to work setting, work setting to training programme, trainees prior learning to training programme, trainees prior learning to work setting, work setting to ongoing learning at work and training programme to ongoing learning at work. In this literature review, emphasis has been placed upon sources that are discussing identifiable training programmes but also drawing upon the transfer of learning literature which is relevant to this process.

The following examples outline the differing definitional emphases of transfer of training and learning which are located in the literature. Most are explicitly stated within the definition although some are simply implied. As stated earlier, these differences are an important consideration as they relate to the interpretation of transfer and have implications for application (Ford, 1994). Furthermore, as previously indicated (Oates, 1992) there is considerable confusion about the term although a general consensus has been reached that learning is generalised to another context.

- Learning is indistinguishable from transfer (Ben-Hur, 1994; Fogarty, Perkins & Barell, 1991a)
- Continuing application and improvement (e.g. Broad & Newstrom,1992; Gradous, 1991)
- Transferring to similar/different contexts (e.g. Bellanca & Fogarty, 1992)
- Acquisition of new skill or adaptation of skill to new situation with emphasis upon degree of effectiveness such as measurement of percentage saving in time or effort or adequacy of the transfer (Arnett & Sparrow cited Oates, 1992; Thomas, 1990)
- Job place performance emphasis (Gordon, 1989; Robinson & Robinson, 1995; Zemke & Gunkler, 1985)
- Meta-cognitive approach - the acquisition of global and/or specific problem-solving skills that provide the trainee with transferable and accessible skills that can be generally utilised. (Redding, 1990)
- Replication of specific behaviours in new setting (Detterman, 1993)
- Replication of specifics (e.g. factual information) and/or generic skills such as meta-cognitive processes (Fogarty, et al. 1991a)
- Transfer as a process (e.g. Foxon, 1993)
- Transfer as an outcome (e.g. Broad, 1997a)

Overall then, as indicated above, there is a literature on transfer of training definitions that is unclear and ambiguous. There is confusion about what it is and where it is place and function located in relation to training and learning. However, some generalisations can be made about this literature and it is these generalisations that have been adopted by the researcher.

- Historically there has been a demarcation between the concepts of training and learning but there is a fusion of ideas today;
- Learning and transfer of learning/training are inseparable and inter-related processes; and
- Transfer of training has assumed a more focussed meaning than transfer of learning.

Given these parameters, a clearer understanding of transfer can emerge but succinct definitions will overlook the complexity of transfer - it is one of the most complicated and pervasive issues in psychology and education (Haskell, 2001). Ford (1994) noted that there are many planning and evaluation implications for adopting a particular definition of transfer. He comments that the meaning of transfer depends upon answers to the following questions:

- What do you expect to change during an organised educational experience?
- What behaviours and in what settings do you expect the learner to apply the newly acquired knowledge, skills and attitudes?
- What are the barriers to effective transfer of learning?
- How long do you expect the acquired knowledge, skills or attitudes to be maintained over time?

Characteristics of Transf*er*

Transfer then, must be interpreted as a very complex multifaceted issue but most agree that it involves knowledge, skill and attitude transfer. There have been considerable analyses of its defining features (Ford, 1994) and accordingly, in the remaining part of this section, consideration will be given to the (somewhat) agreed upon characteristics of transfer, whilst in the next section the issues and debates surrounding its nature will be discussed.

Alexander and Murphy (1999) noted that although there are some disagreements, there are a number of broad generalisations that most experts agree upon with regard to 'nurturing the seeds of transfer.' These are that -

- transfer is an essential prerequisite for competency to be achieved in complex learning;
- transfer occurs far less than anticipated;
- transfer is more likely to occur when planned for;
- transfer and the ability to perceive similarities between situations are related processes; and,
- transfer is multifaceted and involves the learner, the content and the context.

Most of the experts also consider the concepts of positive and negative transfer as a significant distinction to make. When transfer is said to have occurred successfully this is termed positive transfer whilst that learning which hinders later learning or performance is termed negative transfer (Broad & Newstrom, 1992; Cormier & Hagman, 1987; Perkins & Salomon, 1996). For example, when a teacher successfully implements a trainer-modelled lesson in her classroom, this is an example of positive transfer; whilst the teacher who finds that her lesson is unsuccessful (e.g. perhaps because she did not adapt it sufficiently to the needs of the students) has an example of negative transfer.

Another important distinction is that made by Perkins and Salomon (1996), who describe transfer in terms of two distinct mechanisms – the low road and the high road to transfer.[9] Low road transfer refers to the two contexts having similar features (identical elements) and is often more easily accomplished, frequently in an almost automatic fashion. It does not require conscious attention. A teacher who models a trainer's positive reinforcement methods with her own students is demonstrating low road transfer. In contrast, high road transfer requires some abstraction from the context of learning to make the connection into the new context and is more effortful and conscious. A teacher drawing upon her knowledge of problem solving skills in science and purposively developing a social problem solving process for classroom issues is an example of high road transfer. In more recent times and in a similar vein, within the cognitive perspective, the terms surface and deep structure have been used (Detterman, 1993). Two contexts may have similar surface structures (e.g. two classrooms with students in them) but different deep structures (e.g. the complexity of the needs of the students, their temperaments, previous teaching). The point is, that it is mostly the high road/deep surface transfer that characterises intelligent behaviour and yet, it is this, that is so difficult to attain (Detterman, 1993).

The content of the transfer can vary. Ford (1994) identified that transfer can impact upon knowledge, skills and attitudes. With regard to knowledge it can impact upon quantity as well as the different types of knowledge – declarative, procedural and strategic. Skill development usually assumes the three stages of - acquisition, compilation and automaticity. Attitude changes have often been equated with the evaluation of the participant's satisfaction level with

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[9] Many of the experts tend to agree about this dichotomy (with some minor differences of interpretation) but have adopted different terms for these two types of transfer. For example, Perkins, Barell & Fogarty (1989) use the terms simple and complex, Wittrock (1967) prefers near and far whilst Sternberg (1984) uses spontaneous and guided/scaffolded (Fogarty, 1997).

the learning experience. Ford noted however, that this is too simplistic and needs to be broadened to consider such issues as commitment to change, self-efficacy changes and attitude changes to others in their situations (e.g. teacher attitude toward students).

Mayer and Wittrock (1996) in considering the earlier seminal works on transfer noted that specific responses and general principles can be transferred. Thorndike (1903) using a series of experiments proved that specific behaviours learned to solve one problem can be used to solve at least part of a new problem. For example, a teacher may learn how to set achievement objectives for a lesson and this skill can then be used when designing a curriculum statement which would contain a number of component parts including a detailing of objectives. However, Wertheimer (1945/1959) also suggested that transfer can be more general in nature. Principles learned to solve one problem can be used to solve another - such as using a mathematics problem-solving framework to structure problem solving between students in the classroom.

Transfer of training can be promoted by facilitators (enhancers) and thwarted by barriers (inhibitors) (Broad & Newstrom, 1992). Of course, many of the barriers are simply the inverse of the facilitators and vice versa. Broad and Newstrom (1992) identified the workplace, trainees and trainer/training as major facilitator/barrier sources although acknowledging that an interaction between the domains was to be expected (e.g. participant's perception of the course as being irrelevant and impractical could imply a training problem; participant motivation was not only related to the individual but also a factor that could ensue from the course design). Robinson and Robinson (1985) noted that trainers located sources of barriers in the participants, supervisors and organisations whilst Caffarella (1994) acknowledged the trainer, trainee and workplace sources as well as societal and community factors as facilitators/barriers.

Lewin (1951) adopted a force field analysis approach in explaining forces of change and resistance – he made the point that resistances (barriers) take a central place in the diffusion of change and recommended that priority attention needed to be given to the resistances, if change was to proceed readily. In a major review of the literature Foxon (1993) used a content analysis procedure with 30 practitioner reports and identified 128 barriers, which she categorized into four major categories – organisational climate factors (accounting for 42% of the barriers), training design factors (22%), individual learner characteristics (21%) and

training delivery factors (13%). An examination of the literature would suggest that there are four broad categories of facilitation and barriers – training, trainee, work place <u>and</u> other (external forces – culture, etc.). Broad and Newstrom (1992) acknowledged that we still have much to learn about facilitators and barriers and in particular there is an urgent need to identify strategies that have most impact.[10]

Results from the research of Broad and Newstrom (1992), and Wenz and Adams (1991) indicated that barriers could occur at any stage of a course development, but the most likely phase was after the training occurred, followed by the during and before stages. What is important however is the realisation that barriers could occur at <u>any</u> stage of the course, not just following training (Taylor, 1997). Newstrom (1983) in acknowledging Lewin's work on unfreezing ideas prior to learning, noted the significance of barriers and provided a framework for unlearning existing knowledge or habits that would prevent new learning. He suggested categories of strategies that could assist a person to unlearn behaviour, viz., positive (e.g. public commitment to new ideas, intrinsic and extrinsic reward opportunities) and negative (e.g. fear of failure and social demands) and neutral (e.g. extinction of old behaviours and immersion strategies).

This section of the chapter has highlighted the significance of how transfer of training has been defined and described and noted that there are many facilitators and barriers that impact upon transfer. It was noted that differing descriptions of transfer have implications for theory and model building and the practices adopted to implement and evaluate it.

Theoretical Explanations of Transfer

It was at the beginning of the 20th Century that the issue of transfer came to prominence and because transfer was so closely allied to, and at times indistinguishable from, the concepts of training, teaching and learning, it has often been a subject of controversy. The early rudimentary experiments and explanations of Thorndike and Woodworth (1901), and Judd (1908) laid the foundations for the current theories and controversies surrounding transfer of training. The following discussion will consider the major theoretical propositions that relate to transfer, the models that have arisen from the complexities of the theoretical approaches and some of the pertinent issues that surround its explanation.

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[10] Broad and Newstrom have detailed an extensive list of facilitative strategies and key barriers that have been identified by trainers as being significant.

Theoretical Characteristics of Transfer

Since the early days of instructional psychology the issue of transfer has repeatedly been the focus of research on learning and instruction (de Corte, 1996). The early works of Thorndike, Judd and Woodworth contributed initial theoretical advances in the area but initiated a heated debate about the substantive nature of transfer. Following this initial enthusiasm to demonstrate transfer, interest subsided and discussions of transfer were frequently undertaken within other domains of psychology and its place in instructional psychology was overlooked (de Corte, 1996; Haskell, 2001).

It is only in the past 10-15 years that there has been a resurgence of interest in the topic as an instructional issue in education (e.g. Bereiter, 1995; Fogarty et al., 1991a; Gass, 1989; Marini & Genereux, 1995), psychological (e.g. Baldwin & Ford, 1988; Collinson & Brook, 1997; Cormier & Hagman, 1987; Ford & Weissman, 1997; McSherry & Taylor, 1994; Tracey, Tannenbaum & Kavanagh, 1995), and management literature (e.g. Analoui, 1993; Broad & Newstrom, 1992; Garavaglia, 1993; Gregoire, Propp, & Poertner, 1998; Holton, 1996; Robinson & Robinson, 1998; Xiao, 1996). There are now numerous accounts of its importance with suggestions to improve transfer into the workplace. But the literature and research has indicated that transfer is a very complex phenomena that does not spontaneously occur, and is even difficult to obtain deliberately (Haskell, 2001).

One of the central aspects relating to the theoretical descriptions of the transfer phenomena is the degree to which transfer can and does occur. According to Fogarty et al. (1991a), in the literature there are three basic explanations for transfer. The 'Bo Peep' theory implies that transfer is sure to follow learning, whereas the 'Black Sheep' theory maintains that transfer is not readily achieved so it should be ignored and emphasis placed upon effective teaching, in the different contexts. The third approach, the 'Good Shepherd' theory, is more optimistic and suggests that considerable transfer can be obtained if it is taught in ways that foster it. Experts have often incorporated parts of each theory in their explanations of transfer.

Those who subscribe to the 'Bo Peep' theory believe that transfer occurs spontaneously in many situations. Bereiter (1995) noted that transfer frequently occurs in many areas of life (e.g. reading). He also acknowledged however (Good Shepherd theory), that it may need to

be cultivated via the attainment of specific domain knowledge, being aware of the strategies that need to be transferred and by developing a personal investment in the area of study. Alexander and Murphy (1999) noted that transfer can be achieved by ensuring there is principled understanding – 'mentioning' of the content is insufficient, the learner needs to be taught. They emphasised analogical thinking as a valuable strategy to achieve this transfer.

De Corte (1995) although acknowledging the difficulties of transfer, remains optimistic about its potential. He recommends that learners be exposed to a well-organised knowledge base, learning be situated, and appropriate conditions (for the learner, task and instruction) be implemented. Haskell (2001) in a more comprehensive focus on the problem has documented the difficulties associated with transfer and noted that in many situations it never occurs even when planned for. He believes there is a paradox - although transfer is recognised as fundamental to learning it is rarely achieved in instructional settings. When we want it we do not get it and yet transfer does occur frequently. But he too believes the potential is available for transfer, particularly since recent cognitive research data has increased our understanding of the process. All that is required is a compilation of these disparate findings into a meaningful framework. He states that the different theories and applications have concentrated upon disparate skills, techniques and strategies whereas what is required is a principled approach to understanding the transfer process.

The above represent some of the more optimistic approaches to transfer consistent with the 'Good Shepherd' approach but a considerable number of writers (e.g. Detterman, 1993; Haslerud, 1972) have indicated that far transfer rarely occurs. Detterman noted that most of the reputable significant studies (e.g. Baldwin & Ford, 1988) conclude that this is the case but he notes there is some evidence of near transfer (refer Singley & Anderson, 1989). What had been reported as far transfer success had arisen from highly questionable, methodologically flawed research studies (e.g. Gick & Holyoak, 1980; Judd, 1908; Novick, 1990; Woodrow, 1927). He believes that there has been no real evidence to disprove Thorndike's general conclusions – transfer is rare and its likelihood is limited to situations in which the two situations are very similar. He subscribes to the identical elements viewpoint of transfer and places emphasis upon the value of Zeaman and House's attention theory (1963). He explains that there are experts who seem to demonstrate transfer, but this is really a reflection of their experience with many specific examples, which can be drawn upon, in similar settings.

One of the consequences of this complexity and debate has been the abundance of explanations, theories and sub-theories in the different disciplines to explain the transfer phenomena. For example, Campione, Shapiro and Brown (1995) and Ripple and Drinkwater (1982) do not believe it is possible to develop a single theory that would explain the phenomena. They maintain that it is necessary to have a number of psychological theories that purport to explain transfer.

Behavioural approaches (e.g. Thorndike & Woodworth, 1901) explain it in terms of stimulus-response generalisation whilst cognitive theorists (e.g. Ausubel, 1968) utilise knowledge restructuring and the concepts of schema and mental models to discuss transfer. The social learning theories of Bandura (1977) and Vygotsky (1978) consider it as a modelling or imitation process. Yamnill and McLean (1999) explain that various motivation theories such as equity (e.g. Vroom, 1963), goal setting (e.g. Locke, 1968) and expectancy (e.g. Atkinson, 1964) can explain the participant's perception of the impact of training and success on enhanced job performance, job attitudes and expected payoffs.

Other disciplines have also contributed to this theoretical complexity. Workplace environment transfer issues can be explained by the transfer climate theories (e.g. Rouiller & Goldstein, 1993) and organisational theories (e.g. Kozlowski & Salas, 1997). Mathematical theories of learning (e.g. Atkinson, Bower & Crothers, 1965) maintain that transfer is a consequence of sampling probabilities whilst in the training field (e.g. Cross, 1981) transfer is depicted as experience sharing. Ratner (1997) has detailed the contributions that cultural psychology can make to our understanding of learning and transfer.

Haskell (2001) in noting this complexity has suggested that, although many of these approaches have a contribution to make to understanding transfer, there is a need for a coherent, principled over-arching theory that can encompass the varied characteristics of the concept.

It is not only the complexity of the issue however that has created problems for theory development. Holton (cited Yamnill & McLean, 1999), Haskell (2001), Salas, Cannon-Bowers and Blickensderfer (1997), and Wubbels (1992) have all noted the discrepancies between theory and practice. For example, Salas, et al. (1997) in considering the training area

defined a definite lack of reciprocity from theory-to-practice and practice-to-theory. They indicated that reciprocity had not been achieved because:

- Most theories lack specificity and implications for practice;
- Researchers and practitioners were not motivated to incorporate each others ideas;
- There were only a few field workers who wished to test the theories in an applied manner;
- There has been little interaction between the different training disciplines; and
- Although there has been significant interest in the training field in the past 20 years, the current practice and research did not emanate from real world problems or opportunities, but often rested upon exploration of fads in training.

They suggested a framework for overcoming these concerns – an interactive approach to training. A training that links theory and practice to the 'what' and 'how' and the accountability of outcomes. Similar to Haskell (2001) they believe that a more unified approach would be helpful.

Transfer Theory Development

In essence, these difficulties have been reflected in the theories developed to explain transfer. Although, as indicated above many theories purport to explain transfer, there have been four major theoretical developments in the area of transfer (de Corte, 1996) - formal discipline approach, associationism (behavioural), gestalt and cognitive. A number of sub-theory developments within these approaches (e.g. attention theory and motivational theory have also been used to explain the intricacies of the transfer phenomena (Haskell, 2001). Accordingly, this in turn, has added to the complexity surrounding the issue of transfer, although as Haskell (2001) argues, each of the approaches can contribute to our understanding and the application of the process.

The *formal discipline* approach to transfer concerns the general transfer of general skill (Mayer & Wittrock, 1996). It was based on the notion that intellectual performance was dependent upon mental faculties such as memory, attention and judgement. This strengthening of the brain via mental exercise was termed "mental orthopaedics" by Binet (cited Wolf, 1973, p.207). Training in these basic mental functions would impact upon new learning, as is claimed today by the 'brain gym' devotees (e.g. Dennison, Dennison & Teplitz, 1995). In earlier times however, it was subjects such as Latin, Greek, mathematics, logic and classics that were regarded with awe,

for exposure to them would enable an intellect and prepare an individual to listen better, observe more accurately and retain more information. Despite its popularity, research has largely discredited this approach (Perkins & Salomon, 1989). Even as early as 1890 it was noted by James (1890) that memorising poems did not facilitate memory learning of poetry.

Associationism, which favoured specific transfer of specific behaviours, was developed initially by Thorndike and Woodworth (1901) in response to the formal discipline approach. It has been the forerunner of the behavioural explanation of transfer. The new educational psychology developed at the end of the 19th Century promoted the idea that transfer involved the application of identical behaviours from an initially learned task to the new task. This view supported the notion that the learning of A will facilitate the learning of B, only if there were common elements between the two. Thorndike (1923) demonstrated that the learning of Latin did not facilitate reasoning and this, along with other studies severely undermined the formal discipline approach. Associationism has had a significant impact upon schooling in the western world – curriculum was analysed into specific behaviours, spiral sequential teaching was adopted and drill and practice methodologies were emphasised as being important (Mayer & Wittrock, 1996). The approach engendered considerable laboratory research but often much of it meaningless for the classroom.

Associationism was certainly not without its critics and the debate that ensued initiated one of the major controversies surrounding transfer - the role and value of specific and general transfer. Judd (1908) concluded that generalisations, and not just specific elements, could transfer from one situation to another and Polya (cited Bellanca & Fogarty, 1992) also noted the value of a general principles approach (eg., problem solving) to learning transfer. This controversy is located today in the positions adopted by the behaviourists and cognitivists although these early attempts to unravel transfer were prompted more by pedagogical interests than theory building (Cox, 1997).

The behavioural approach to transfer was very much aligned with Thorndike's thesis but in the first 50 years of the 20th Century this theoretical approach concerned itself with the issue of reinforcement and mainly within a laboratory setting (Cox, 1997). Behavioural theory today, as it relates to transfer, is based upon the issue of similarities and differences in the learning and transfer situation (Hall, 1966; Ormrod, 1998; Osgood, 1949). Ormrod (1998, p. 401) notes that the behavioural approach is based upon four principles, viz.,

- *"Maximum positive transfer occurs when stimuli and responses in the two situations are similar."(*e.g. Learning of two similar languages such as English and French).
- *"Some positive transfer occurs when stimuli are different but responses are similar."(*e.g. When a teacher learns a skill on a course and then uses it in the classroom setting)
- *"Negative transfer occurs when stimuli are similar but responses are different."(*e.g. A teacher learns the skills associated with student group work but this subsequently interferes with her level of responses needed for individual students)
- *"No transfer occurs when stimuli and responses are both different."* (e.g. The learning of physical responses will not assist a teacher to develop better instructional techniques for her classroom.)

Cox (1997) indicated, however, that behaviourism was an insufficient answer, for there were a number of unknowns including the reinforcement and transfer history as well as the cognitive developmental level of the individual that impacted upon transfer.

As behaviourism grew in response to the formal discipline approach, the ***gestalt*** position was developed in opposition to the behaviorism of Watson and elementarism of Thorndike. It built upon the early works of Judd (1908), Katona (1940), Ruger (cited Mayer & Wittrock, 1996), and Wertheimer (1945/1959). Katona for example, demonstrated that in a card game if students were taught an understandable principle to solve a problem, then they would out perform others who had rote learned strategies on one card game only. Gestalt psychology was based on the idea that behaviour was only understandable in terms of the total complexes of responses, which was interpreted holistically (not necessarily consciously) rather than via an S-R paradigm (Cox, 1997). Change was qualitative and not trial and error as in the behavioural explanation of behaviour. There were however some similarities with the behavioural approach – both approaches believed in organisation of learning although for the gestaltist the organisation was there already, rather than having to be built via the guidance of the teacher. Hence the gestaltist position was transfer by insight of specific general skills (Cox, 1997; Mayer & Wittrock, 1996). This view supported the notion that the transfer could occur via teaching of a general skill in one setting/context if the second setting/context required the same strategy. That is, if situations A and B both require application of the same general strategy (e.g. problem solving) then transfer can occur. The gestalt approach emphasised this type of transfer in particular, but also acknowledged that specific transfer occurred as well. Bower and Hilgard (1981, p.323) summarise the position in this manner:

A pattern of dynamic relationship discovered or understood in one situation may be applicable to another. There is something in common between the earlier learning and the situation in which transfer is found, but what exists is not identical piecemeal elements, configurations or relationships. One of the advantages of learning by understanding rather than by rote is that understanding is transposable to wider ranges of situations, and less often leads to erroneous applications of old learning.

In more recent times consideration has been given to the notion of 'affordances' – this refers to an individual's perception of the characteristics of a setting. If two environments are perceived to be similar (there are affordances) this will then afford certain activity to an individual. Moreover this perception of affordances is unique to each individual (Cox, 1997). This approach has also been utilised by the cognitivist approach to transfer.

Cognitive psychology has in the past 20 years shown a phenomenal interest in transfer (Cox, 1997). In essence, this approach is based upon meta-cognition – awareness, monitoring and regulation of ones' cognitive processes (Mayer & Wittrock, 1996). The learner recognises the requirements of the new situation/problem, selects previously learned specific and general skills that are appropriate and applies them to the new situation whilst monitoring the application. The learner is an active participant in the process. However, more is required and this becomes a critical issue – the learner needs to know how, where and when to use the skills. These issues have become related to the many different interpretations of how cognition impacts upon an individual in terms of transfer (Cox, 1997).

In the early days of cognitive psychology there was more interest in the analysis of performance rather than making a contribution to learning. However this has now changed and although there are differences in approach in the cognitive camp, De Corte (1996) has identified the characteristics that are common to many of the explanations of how cognition impacts upon learning (and hence transfer). Those characteristics relate to learning being constructive, cumulative, self-regulated, goal directed, situated and collaborative.

The cognitive approach to transfer combines the previous three approaches - that is, it depends upon general intellectual skills (formal disciplines approach), but these are a collection of high level skills that can be transferred to domain specific or general areas (associationism and gestalt viewpoints). There has been a range of responses – from cautious optimism (e.g. Bereiter, 1995) to a near denial of its existence, unless stringently guided (e.g. Detterman, 1993). A description of a number of these interpretations follow.

A number of cognitive psychologists believe that transfer can only occur if information learned in one situation can be *retrieved* in the context of the new situation. (For example refer to Cormier & Hagman, 1987, and Gick & Holyoak, 1987). A teacher who uses the analogy of human social functioning to describe social behaviour in the animal kingdom needs to successfully retrieve knowledge about human social behaviour before it could be defined as transferred knowledge. According to Ormrod (1998), for this to happen the information must be in long term memory and able to be connected to other domains with the ability to connect being related to instruction time, meaningfulness, principled learning, ample examples and the opportunity to practice the information. As previously discussed, similarity of situations enhances retrieval (Sternberg & Frensch, 1993).

Another approach explaining similarity rests upon the *situated cognition* thesis which in part has drawn upon the identical elements approach (Cox, 1997). This is based upon the idea that knowledge and thinking skills are situated within the specific context in which they were developed and would be unlikely to be used outside of this context (Lave, 1993; Light & Butterworth, 1993; Singley, 1995; Singley & Anderson, 1989). The implication is that if we want students/teachers to use what is learned in real-life situations, then the learning context needs to be as authentic as possible to the real world setting. For teachers to learn about cooperative learning a simulated in-service classroom setting in which cooperative learning is practised provides an authentic learning opportunity. Furthermore, if the knowledge and skills are practised in many situations they become context free and transfer capability is further enhanced (Collins, Brown & Newman, 1989). Singley (1995) in arguing for transfer research to be rooted in situated learning noted that it had significant benefits – evidence exists that it can facilitate transfer, promote task analysis, does not under-estimate the inherent difficulties of transfer and provides a central role for the teacher to guide the student. Detterman (1993, p.17) summarises the position when he comments -

> *In general, I subscribe to the principle that you should teach people exactly what you want them to learn in a situation as close as possible to the one in which the learning will be applied. I don't count on transfer and I don't try to promote it except by explicitly pointing out where taught skills may apply.*

A more optimistic view has been expressed by Perkins and Salomon (1996) who, in taking a view that is similar to Thorndike and Wertheimer, have suggested that a 'mindfulness' is particularly significant for far transfer.

Lave (1988) is an activity theorist but influenced by the situated learning perspective. She has demonstrated the importance of social-cultural meanings in learning and has documented a number of cases whereby transfer fails because of the lack of consistency between the teaching setting and the application setting. Vygotsky's (1978) approach to learning is also an activity-based theory and often subsumed under the cognitive domain as he developed learning explanations relating to meaning and language. However, he stated that once a child learns language then perceptions are always filtered through cultural categories, the point being made is that transfer of learning is dependent upon socio-cultural processes embedded in the immediate environment. Learning potential at the time (zone of proximal development) can be enhanced by others providing guidance and scaffolding (supports).

Ratner (1997) has suggested it is important to broaden this situated learning approach. He has noted that most of the literature has emphasised a narrow interpretation of the `situation' regarding it as having a more symbolic mentalistic significance rather than an emphasis upon the impact of concrete social structures on psychological phenomena such as learning (and transfer). As a cultural psychologist, he has highlighted the significance of recognising cultural influences in our daily living. Culture is more than shared meanings - it exists in our daily activities (e.g. child rearing, education) and influences power/authority/status relationships (e.g. group authority), and allocates division of labour that categorises behaviour (e.g. teacher learns from the teacher trainer). He explains that as individuals engage in these practical social activities psychological functions are formed; culture significantly determines perception, self concept, gender behaviour, thinking, emotions, personality, etc., and these in turn perpetuate the culture and modify it. Thus cultural activity and psychological phenomena depend upon and sustain one another. What can be implied from Ratner's approach is that learning and transfer will be mediated by the cultural activities, which in turn will impact upon the activities. The implication of his work is that the identification of the cultural imperatives is a priority, if we are to facilitate learning for impact.

A variant of the situated cognition approach acknowledges that in some circumstances learning in one situation can facilitate learning in another context if one *learns how to learn*. (For example refer to Pressley, Snyder & Cariglia-Bull, 1987). That is, certain skills have been found to be meta-skills and can be situated in many contexts – skills such as meaning making skills (as opposed to rote learning), finding main ideas and use of mnemonics.

Fogarty (1997), for example, supports the process learning approach as a means of accomplishing this and recommends five different learning strategies: de-contextualised (i.e. what is the 'big' picture here?), crystallised (i.e. significant skills, operations and dispositions taught via the content), re-contextualised (i.e. thinking of new contexts for use of skill, etc.), energised (i.e. teaching the skills, etc., in an authentic manner; making it link to relevant context) and personalised learning (i.e. "How is this personally relevant to me?').

Yelon, Desmedt and Williamson (1988) described a strategy for integrating principle-based rules to ensure participant flexibility when modifications to skill teaching were required in a new setting. In a similar vein, Bridges (1993) has noted the importance of transferable skills and emphasised the significance that should be attached to transferring skills – meta-skills that enable a person to adjust, modify, apply skills to another setting. The suggestion being, that we need to be able to discern differences and similarities, demonstrate an ability to utilise such a process and have dispositions that support these modifications (e.g. receptiveness, sensitivity, confidence and enterprise). Bereiter (1995) has in fact suggested that transfer is not a process but a set of dispositions and he argues for character education that prepares learners to think about situations. This is akin to Lave's (1988) work.

Theoretical Advances

Cox (1997) and Haskell (2001) have both concluded that this theoretical confusion leaves us with no answer to the question 'what do we mean by transfer?' Each of the theoretical positions has been unable to satisfactorily answer it. The consequence being, that the concept seems to have collapsed. The behaviourists, although struggling with the limitations of the specificity of transfer, find the subjectivity of the gestalt approach unacceptable. The cognitivists, in more recent times, have made some promising advances in the area but have presented a myriad of explanations that are somewhat confusing.

In an attempt to synthesise the complexity and develop a meaningful encompassing approach to transfer, Haskell (2001) has generated a *general theory* of transfer and has drawn upon a number of disciplines including education, cognitive psychology, neurology, business and industrial training. He notes that a number of experts (Ellis, 1965; Haslerud, 1972; Sechrest, 1966) have explained that the failure in transfer is due to a lack of encompassing theory. Although there are mini-theories explaining the phenomena (and contributing to its failure), no over-arching theory exists to present an integrated account. Accordingly, he has outlined 11 widely accepted educational principles and related them to a general theory of teaching for

transfer. The principles for significant learning and transfer (which he considers are hard-wired into our brain) are:-

- Acquiring a large knowledge base in the content area;

- Acquiring knowledge that is relevant to the transfer <u>as well as</u> knowledge from other areas that may seem irrelevant and useless (for the time being) but could be useful at a later date;

- Understanding what transfer of learning is and how it works;

- Understanding the theoretical bases to transfer;

- Acquiring a 'spirit of transfer' (i.e. be motivated to transfer);

- Developing thinking and encoding skills to facilitate transfer (e.g. 'What does this mean for me? What are my experiences in relation to it?');

- Developing transfer support systems and creating cultures of transfer;

- Developing theoretical knowledge about the area of transfer which must take into account existing personal theories about the area and correct if necessary;

- Utilising practice and drill opportunities;

- Allowing time for the learning to 'incubate;' and

- Using the experiences of people who are exemplars of transfer of training.

He recognises that lower level transfer is more likely to be a meta-cognitive phenomena whilst high level transfer which is a non-conscious information processing may be thwarted by meta-cognitive processing. Haskell argues that transfer will continue to fail if we continue to utilise inappropriate methodology, use untested theories, follow fads in learning (such as motivational strategies, case studies, programme instruction, role plays, etc.) and ignore the theoretical research findings. For example, in an attempt to define the various types of transfer and provide a more precise distinction than the near-far transfer, he has developed a typology of levels and kinds of transfer. These are explained in the 'issues' section of this chapter.

Haskell notes that in the past 20 years, with regard to instructional approaches to transfer, there has been a paradigm shift. The applied instructional view had simply become a call to "teach for transfer" bereft of research based ideas to guide implementation. With the upsurge in cognitive psychology interest in transfer[11], the instructional approaches incorporated many

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[11] Refer for example to the learner and task instructional model developed by Brooks and Dansereau (1987)

of the findings. However, as Haskell argues, there is now a danger that the applied instructional viewpoint becomes inert because of the enormity of the cognitive research findings. What is needed, is a general theory of transfer, that incorporates all the competing approaches (including the cognitive) as lower order mechanisms. Once this is achieved, and on the basis of on-going research, an applied instructional model can evolve.

Models of Transfer of Training

Since the 1980s there have been a number of models developed from the research and theoretical explanations to explain the transfer of training process and these have promoted conceptual understanding and facilitated research endeavours. However, much of the literature has been related to business and industry transfer issues, and there have been calls for more consideration to be given to it as an educational issue. Veenman, et al., (1994) for example have noted the lack of adequate transfer theory and practical implications for in-service training of teachers. Furthermore, many of the models have lacked an encompassing instructional psychology framework and have only partly accounted for the transfer process (Haskell, 2001). Accordingly, the theoretical advances have not always generated practical, prescriptive and successful methodologies for any transfer of training area. In response to these differing models of explanation a number of the experts (e.g. Garavaglia, 1996; Haskell, 2001) state there is an urgent need to develop an encompassing theoretical explanation and model that links the differing theoretical explanations and thereby facilitate the development of a transfer technology.

The following discussion will consider a range of the theoretical models explaining transfer of training. They have been broadly grouped into three categories of origin: instructional-educational, corporate – management organisational and adult training. Each one of the models has been chosen to illustrate the range of differences and the significant elements considered important to explain transfer.

Instructional Models

There have been only a few applied instructional models of transfer, since most of the research into transfer has been in the cognitive domain (Haskell, 2001). One of the first substantive educational models of transfer of training was developed by Walberg and Genova (1982) in an attempt to explain teachers' use of professional knowledge. It was suggested that five sets of variables (background and psychological traits of participants, school characteristics, school climate and in-service workshop features) significantly influenced transfer of training. An

adapted working model, similar to the Walberg and Genova approach was developed by Veenman et al. (1994), and this acknowledged the importance of these factors but added teacher in-service educator characteristics as a further potentially alterable dimension. These researchers stressed the significance of both the use of the knowledge but also its impact upon the class and school. Both models are pragmatic applied explanations of the transfer process. Figure 2.1 details the Walberg and Genova model.
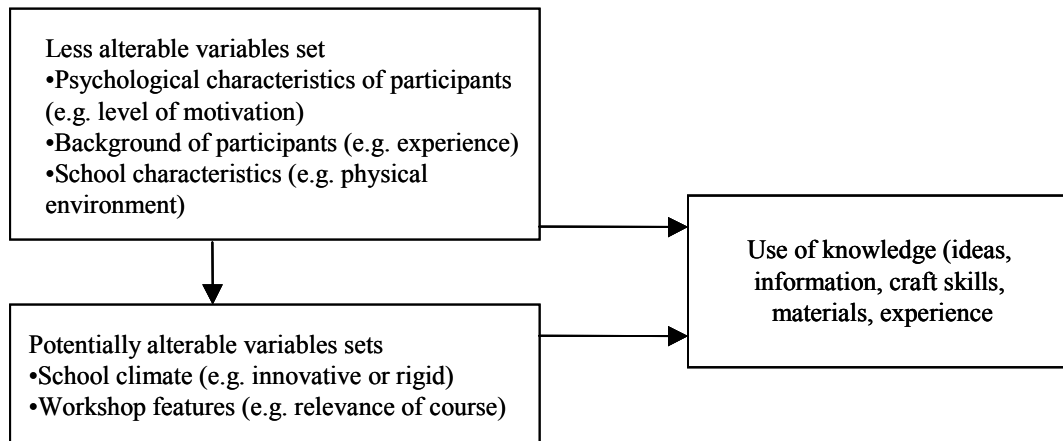
Figure 2.1. Model of Professional Knowledge Use (Walberg & Genova, 1982)

A more comprehensive instructional model has been developed by Perkins, Barell and Fogarty (1989). Refer figure 2.2. This is a cognitive model of teaching for transfer that is deliberately vague in its major elements. It has identified that there are *somethings* that we want to transfer, the *somehows* or the transfer options and the *somewheres* where the *somethings* might transfer to. Determining the *somewheres* ahead of time, or anticipating future applications, also have an impact on the shape of the lesson or learning programme. Within these elements they outline specific items that need to be addressed in teaching for transfer. The model includes elements from Perkins and Salomon's (1989) low road and high road transfer.

Wallace (1992) developed the simple yet clear instructional process model for the training of the Australian defence forces. The incremental-transfer model views near and far transfer as being respective goals of the final two stages of skill learning. There are three prerequisite
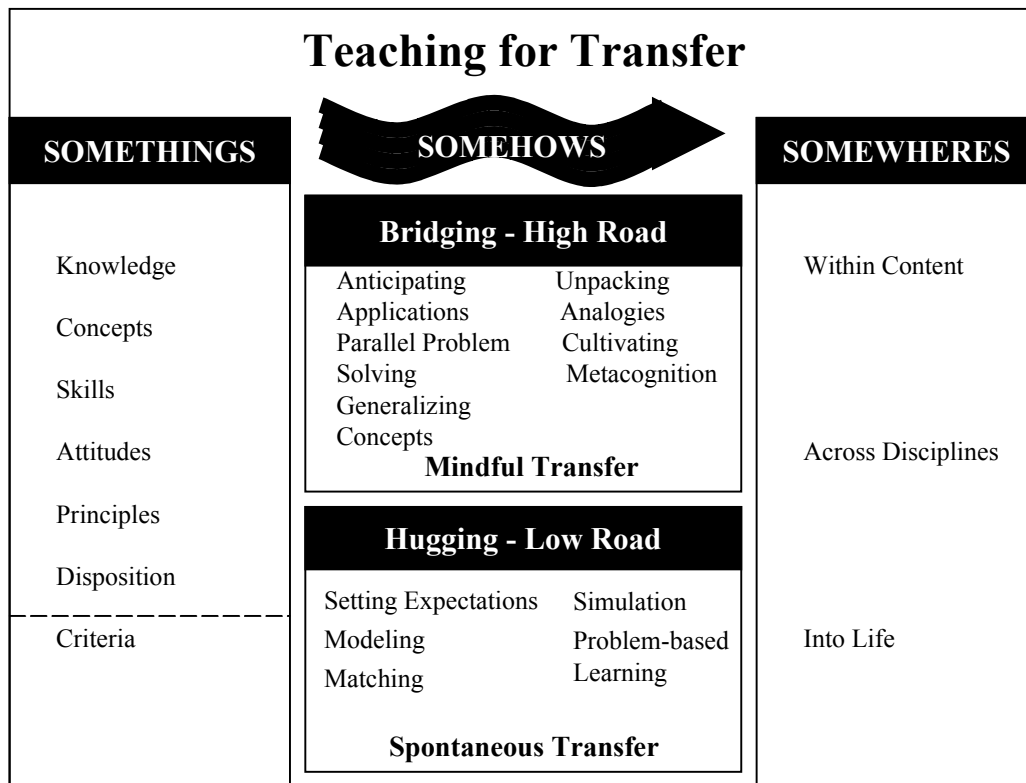
Figure 2.2. Teaching for Transfer (Perkins, Barell & Fogarty, 1989)

near transfer stages. The first stage is skill initiation, during which the skill domain becomes meaningful. The second stage is skill paragon formation, during which a mental model of an individual paragon of skill performance is constructed. The initial skill practice is the third stage during which learners first apply and modify skill paragons. He emphasised the importance of simulation fidelity in terms of the skill process elements, performance transactions and environmental features. This model (refer figure 2.3) overlooks basic teaching strategies but emphasises the cognitive steps involved in learning and transferring a skill. An eight-step methodology was proposed for the design of instruction consistent with the incremental-transfer model of learning. The eight steps included: training problem analysis, skill analysis, instructional strategy, transfer path derivation, learning event specification, statement of requirement, system specification, and implementation guidelines.

A complex, cognitively based instructional model was developed by Brooks and Dansereau (1987), refer figure 2.4, who were influenced by Gagne and White (1978). The framework explored the interactions between learner characteristics and task characteristics in the initial learning situation and these characteristics in the transfer situation. Learner characteristics
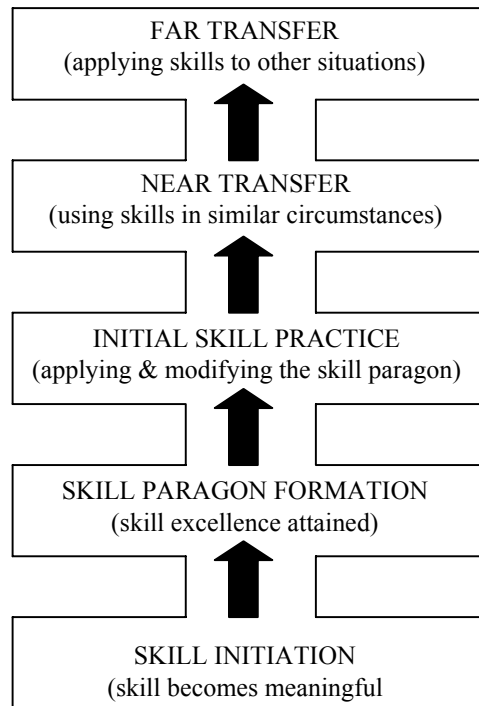
Figure 2.3. Incremental Model of Transfer (Wallace, 1992)
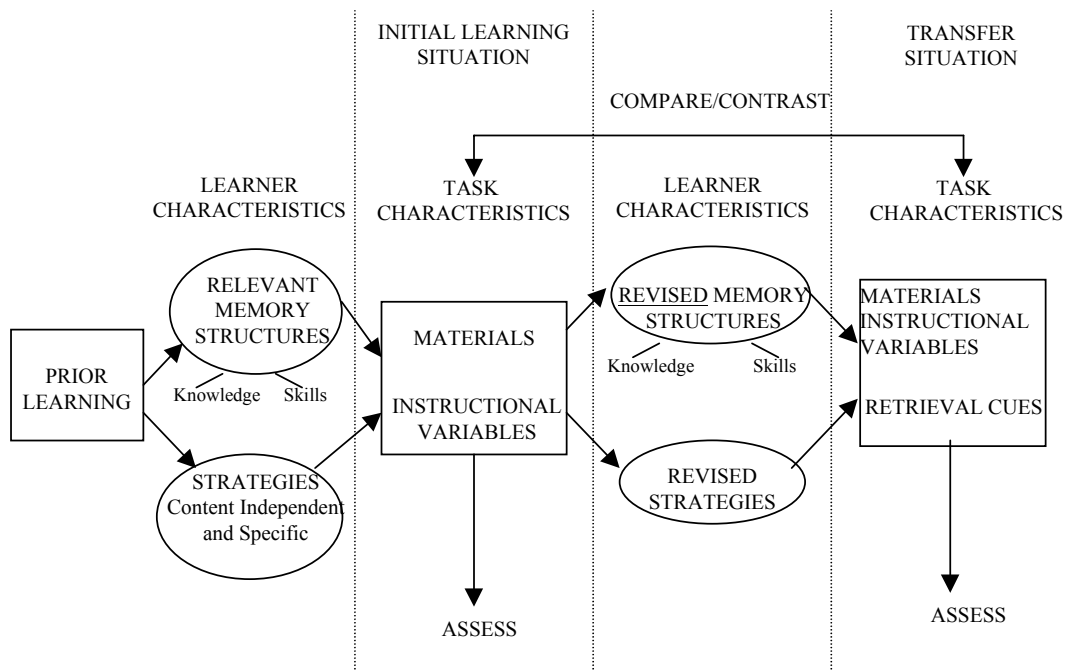
Figure 2.4. Framework for Instructional Transfer (Brooks & Dansereau, 1987)

were divided into categories of knowledge and skills. The framework was used to identify teaching and learning principles that facilitate the transfer of knowledge and skills.

Stephen Yelon, an educational psychologist, has promoted a process approach to transfer of training and has contributed significantly to our understanding of how to train professionals (refer for example to Yelon, Resnich & Sleight, 1997). His **MASS** model is based upon relevant training that supports and motivates the learner to achieve appropriate goals within simulated work settings. It emphasises the importance of a performance technologist who could:

- **M**otivate trainees to value competence and achieve organisational goals by needs based on relevant training opportunities and the provision of a supportive environment;

- increase skills and ideas **A**wareness by focussing on the importance of the skills and the appropriate use of them;

- enable trainees to apply the **S**kills by simulating the varied work conditions and requirements during training and by the utilisation of cognitive procedures (e.g. mnemonics, distributed practice); and

- give ongoing **S**upport before, during and after the training

The previous five models (Brooks & Dansereau, 1987; Perkins, Barell & Fogarty, 1989; Walberg & Genova, 1982; Wallace, 1992; Yelon, 1992) represent the few approaches that have been developed as educational instructional models. The model of professional knowledge use although acknowledging context, training and trainee factors has essentially overlooked the cognitive contributions, whereas the other approaches, especially Perkins et al. (1989), and Brooks and Dansereau (1987) have recognised the importance of this contribution. The Wallace (1992), and Yelon (1992) models are process models (as opposed to outcome) and emphasise that transfer of training evolves over a period of time and cannot be validly ascertained by a terminal outcome measure only. Foxon (1994) recognises this as being a particularly important quality of transfer of training.

A number of other models relating specifically to teacher in-service, and more generic in nature, are discussed in the in-service training and change section of this literature review. Some models relating to part of the transfer of training process are discussed in other sections of this literature review.

Management Models

In the past 20 years there have been numerous transfer of training models developed within the management – corporate – organisational sector. One of the earliest models was developed by Huczynski and Lewis (1980) (refer figure 2.5), and drew attention in particular
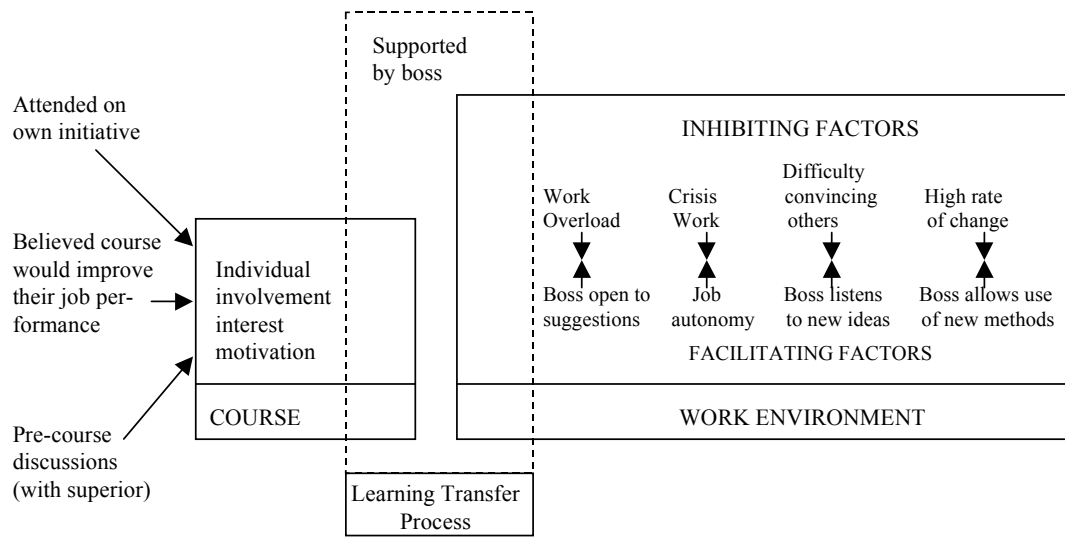
Figure 2.5. Management Training Transfer Model (Huczynski & Lewis, 1980)

to the importance of the work environment. It outlined factors affecting the management training transfer process and was based both on research by Vandenput (1973) and an empirical study of two groups attending a management course. The research was particularly important because it identified a number of inhibiting and facilitating factors in the work environment, which determined whether a student would or would not attempt to transfer the new learning. The mediating factor within the learning transfer process was the support, or lack of it, from 'the boss'. The trainee characteristics impacting on the likelihood of transfer included – pre-course discussions with their superior, belief that the course would improve their job performance, and that the trainees attended the course on their own initiative.

One of the best-known transfer of training models was developed by Baldwin and Ford (1988). Refer to figure 2.6. This was an organisational model of the transfer process and had similarities to the Walberg and Genova, and Veenman et al. models. Two of the training inputs (trainee characteristics and work environment) were defined as directly influencing generalisation and maintenance (on job application), which were also influenced by the training outputs (learning and retention). The training outputs were in turn influenced by the training inputs of trainer characteristics, work environment and training design (defined as principles of learning and sequencing of content). This model commanded significant interest and initiated a number of research studies into transfer of training (Ford & Weissbein, 1997).

Training Inputs   Training Outputs   Conditions of Transfer

Trainee
Characteristics
•Ability
•Personality
•Motivation

4

2

Training
Design
•Principles of
learning
•Sequencing
•Training
Content

Learning
&
Retention

Generalization
&
Maintenance

1

6

3

Work Environment
•Support
•Opportunity to use

5

KEY
1. Generalization of material   2. Maintenance of the material
3. Effect on training outcomes of work environment 4. Effect on transfer of trainee characteristics
5. Effect on transfer of work environment   6. Effect on transfer of training outcomes

Figure 2.6. Model of the Transfer Process (Baldwin & Ford, 1988)

A transfer partnership model, widely acknowledged in the corporate world, was developed by Newstrom (1986), and Broad and Newstrom (1992). Although it tended to overlook the cognitive approaches to learning (Haskell, 2001) it has developed an approach based upon responsibilities of the key players. In reaction to the decision-making models that emphasised either management or trainer responsibility for training in industry and business, and following ideas initiated by Robinson and Robinson (1985), they developed a systems classification approach (refer figure 2.7) to transfer of training within the context of a performance improvement system. This model was based upon the establishment of a transfer partnership between the trainer, trainee and supervisor/manager with each role contributing to the before, during and after training programme effectiveness. This training partnership approach, termed 'Role-Taker/Time Differentiated Integration of Transfer Strategies Model', promoted a 3 x 3 training strategy matrix of transfer categories, the frequency of which could be estimated, as could the impact value. Broad and Newstrom, used their experience, research and the available literature to identify a number of role based strategies for each category cell but, the need for additional research to validate the approach was emphasised. Particularly important in this approach was the identification of the barriers to effective transfer, the intention being to remove,

TIME			
		Before	**During**	**After**
ROLE	**Manager**			
	Trainer			
	Trainee			

Figure 2.7. Role X Time Transfer Strategies Model (Broad & Newstrom, 1992)

diminish or convert them to positive forces.

Gradous (1991) developed her model of the transfer process in response to Newstrom's (1986) approach. She noted that Newstrom's approach was too limiting as it overlooked the dynamic nature of systems, the interdependence of the players and did not clearly identify the key responsibilities/tasks for each of the nine cells (which would, in turn, more readily provide criteria for the identification of the specific transfer strategies). She also incorporated organisational forces as a determining factor on the behaviour of the key players. Broad and Newstrom (1992) have subsequently acknowledged the importance of the interactive aspects in their classification model. Milheim (1994) also recognised the importance of interaction and feedback features in training of transfer and argued for interactive pre-, during-, and post-training strategies within a feedback loop system. He recommended strategies similar to Yelon's (1992) **MASS** model.

The Kozlowski and Salas (1997) multilevel transfer model (refer figure 2.8) built on the work of Baldwin and Ford (1988) and identified a broader perspective on training with implications for the training process. It focussed on internal characteristics and relations, their relevance to implementation and transfer after training needs had been identified, but recognised the external environment as a critical influence on the organisation. Environmental characteristics were identified as directly relevant to organisational-level characteristics which generated the need for organisational change, and drove the determination of training requirements. The dominant feature of the model was the distinction between individual, team and organisation levels. There was, moreover, a need identified for congruence between the organisational, team and individual levels. This model is particularly important because it has identified vertical transfer procedures that are considered to be crucial for training effectiveness. This has largely been overlooked by researchers (Salas and Cannon-Bowers, 2001).

TECHNOSTRUCTURAL
FACTORS

•Goals
•Strategy
•Resources
•Technology
•Structure

CONGRUENCE

ORGANIZATIONAL LEVEL

•ENABLING PROCESS
•FACTORS

•Vision
•Rewards
•Leadership
•Organizational
culture & climate

TRANSFER

Congruence:
Organizational to Team Level

TRANSFER

•Task Interdependence
•Task technology
•Task structure

CONGRUENCE

TEAM OR UNIT LEVEL

•Teamwork and leadership
•Consensual team climate
•Team coordination

TRANSFER

Congruence:
Organizational to Team Level

TRANSFER

•Technical skills
•Technical knowledge

CONGRUENCE

INDIVIDUAL LEVEL

•Individual differences

•Human process skills
•Human process knowledge

Figure 2.8 A Multilevel Transfer Model (Kozlowski & Salas, 1997)

Xiao (1996) also noted the importance of congruence and specified that for training to be effective the following factors needed to be present in the workplace – training orientation, matching KSA (knowledge, skills and attitudes) with work design, reward practices, supervision and peer support. Her model (refer figure 2.9) outlined the links between these factors, worker characteristics, training and the output of the transfer of training. The assumption within the model was that training programmes enabled trainees to acquire only the potential to work more efficiently. Transforming this potential into actual behaviour on-the-job depended on worker perceptions of expectations, opportunities, reinforcement, and outcome of their input in the workplace. So the organisational environment, as outlined in the factors included in the model, may be either conducive to the workers' changed performance or may act to limit the transfer of training output.

Worker Characteristics

Training

P   P   P   P   P

| Application Orientation | Match of KSA with Work Design | Rewards | Supervision | Peer Relationships |

OC   MC   RC   SC   PC

TA

WC

Output of the Transfer of Training
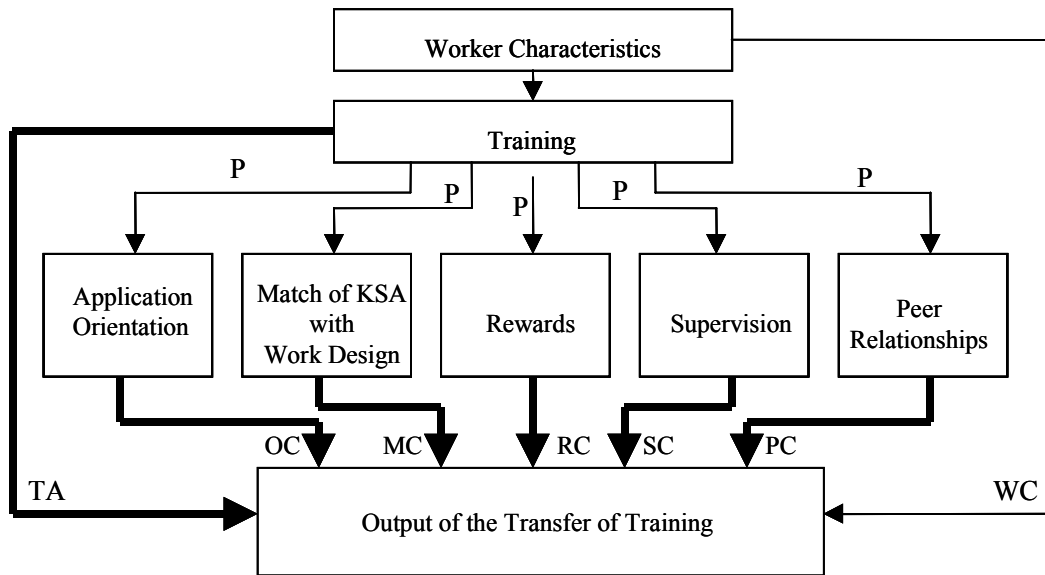
Note: P + Potential capacities
TA = Training achievement
OC = Realized capacities resulting from the impact of application orientation
MC = Realized capacities resulting from the impact of matching KSA with work design
RC = Realized capacities resulting from the impact of rewards practices
SC = Realized capacities resulting from the impact of supervision
PC = Realized capacities resulting from the impact of peer relationships
WC = Worker characteristics

Figure 2.9 Determinants of Transfer of Training (Xiao, 1996)

The transfer of training model presented by Gielen (1996) aimed to incorporate empirical evidence into a comprehensive view of the corporate transfer of training process. Refer to figure 2.10. His model identified the trainee characteristics that appear to influence behavioural change and these included – motivation to learn, ability, self-efficacy, learning style, job involvement, and perception of relevance. Work environment characteristics including supervisory support and feedback were perceived to influence both the motivation to transfer and the frequency of training use. An obvious weakness of this model was the omission of training design as an important contributing factor in the transfer of training.

Surprisingly few of the models have emphasised the importance of socio-cultural factors in transfer of training. As a means of overcoming this weakness Analoui (1993) developed a socio-technic grounded model. Refer figure 2.11. It viewed the trainees' likelihood to both learn and transfer training as being based, not only on their skills acquired previously and interactions with peers, but also on the acquisition of new technical and interaction with other trainees during and after the programme. He stated that ……."the overall effectiveness of the
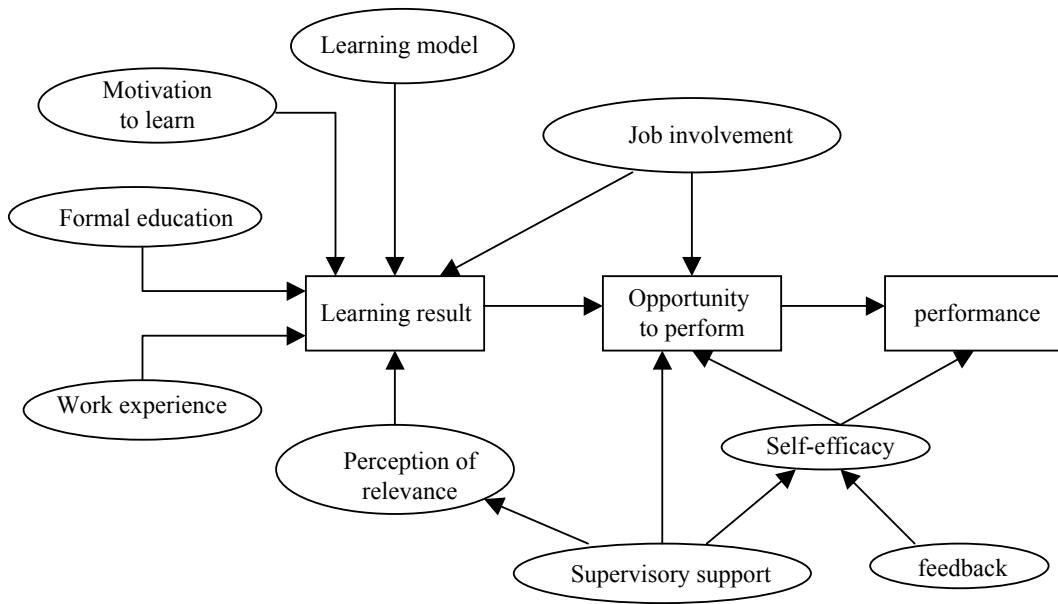
Figure 2.10. Transfer of Training Model (Gielen, 1996)
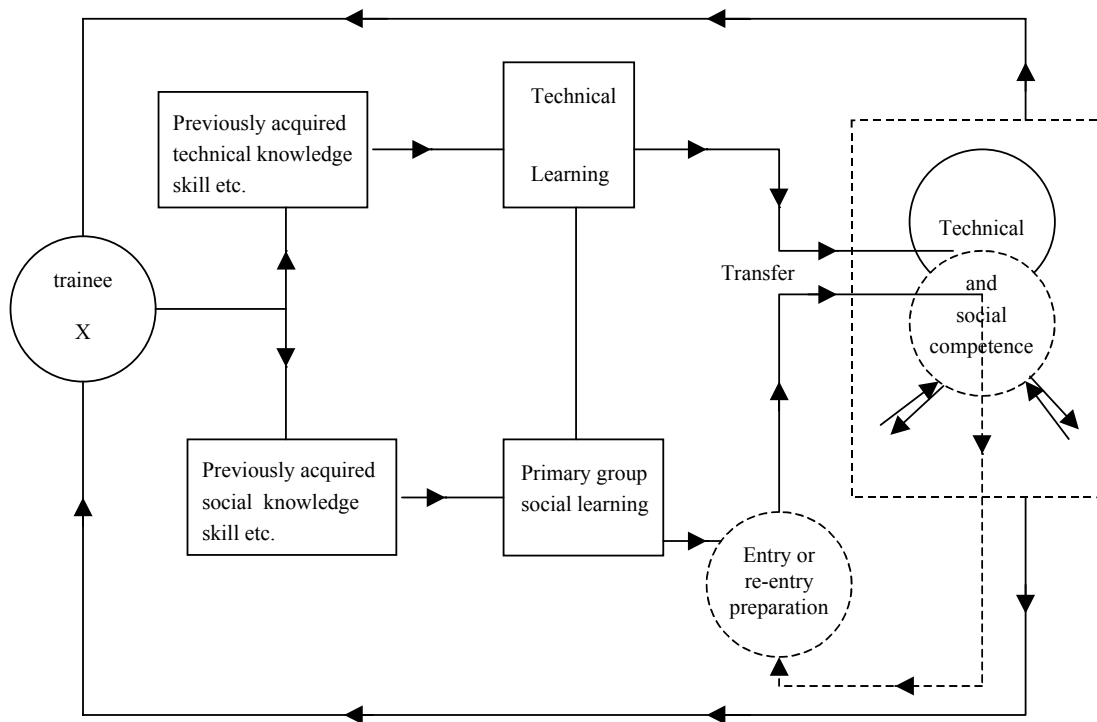
Figure 2.11. Socio-Technical Learning Transfer Model (Analoui, 1993)

trainees may not necessarily be related solely to the improved task performance but could also be due to their social competence skills." (Analoui, 1993, p.5) One of his main arguments was that too much attention had been directed to the task components whilst social learning

processes had been ignored. He noted that " some of these social learning processes may have an undoing effect on the task-related learning and the process of transfer as a whole."(p.52) The social learning processes were not only related to the training environment but also included the social, cultural, and interpersonal dimensions of the work environment. He argued that, in general, change agents and the more complex skills (etc.) should be trained off campus, but a preparation for return to the work environment undertaken. Training closer to the work site had in-built advantages if managed correctly – in the impact of the work-based social-related learning processes.

Lim and Wentling's (1998) model is unique in that it represents one of the only models that explicitly recognises the importance of cultural factors in transfer of training. They base their international model of transfer of training on the earlier works of Brinkerhoff and Gill (1994) and Baldwin and Ford (1988). Their approach identified the learning environment, cultural differences and work environment as the factors most affecting the transfer of training. Lim and Wentling noted that cultural differences were found to significantly affect transfer of training in international settings as previously identified by Dillon (1993), Adler (1986) and others. Their model (refer figure 2.12) then considers these factors in terms of second and third level components. Within the learning environment the major elements were trainee characteristics and training design as detailed in the model. The other factor in the model, the work environment, had two components – work system related factors and people related factors. Overall, the three major domains were considered to interact with each other, although there was a general directional flow starting with the learning environment, through to cultural differences and then work environment.

Foxon's (1994) stages of transfer model (figure 2.13) recognised the importance of change processes and, indeed, is based upon the notion that transfer is a process influenced by inhibiting and supporting force fields. The intent to transfer was followed by initiation attempts and partial transfer of skills (etc.), whilst the final two stages of conscious and unconscious maintenance ensured that the behaviour was maintained over time. To increase transfer, attention needed to be directed toward reducing the inhibitors and increasing the facilitative factors. The advantage of this model is that transfer is conceptualised as a process with various stages through which transfer can be tracked. It is not simply a matter of defining whether transfer has occurred or not.
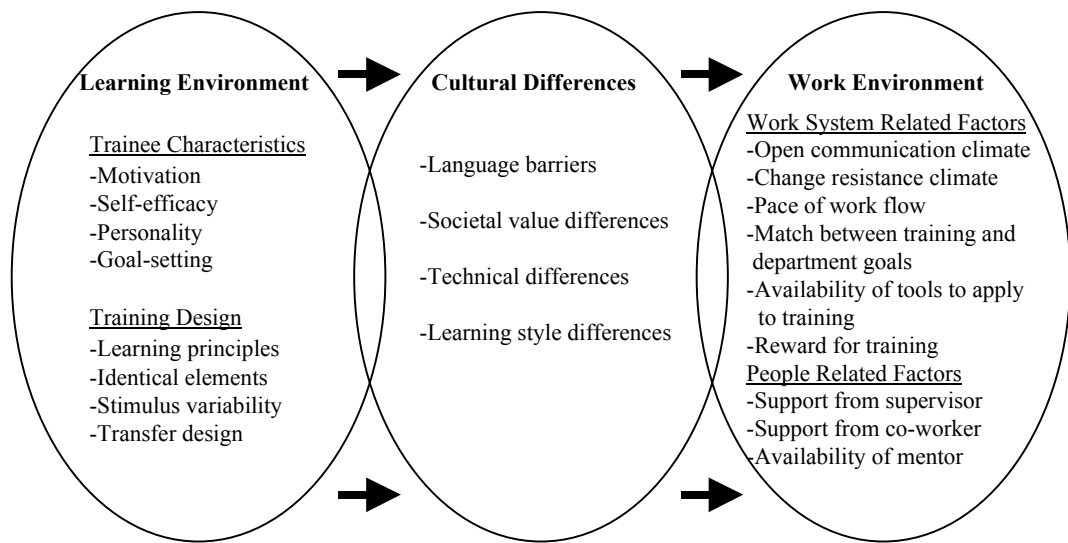
Figure 2.12 Model of International Transfer of Training (Lim & Wentling, 1998)
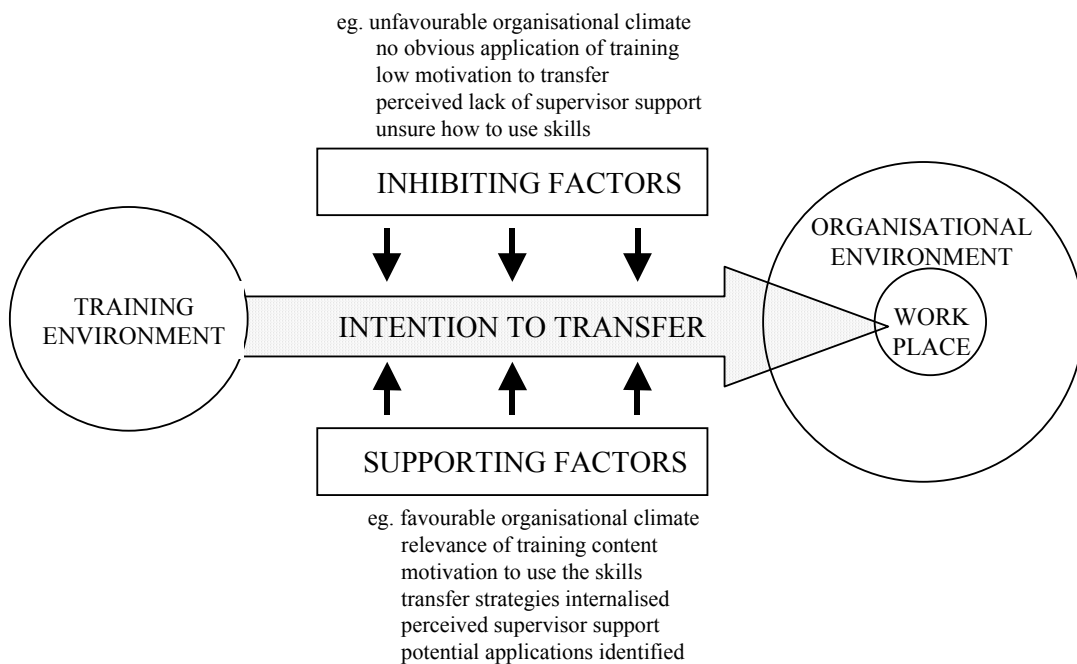
Figure 2.13 Stages of Transfer Model (Foxon, 1994)

In an attempt to combine many of the features of the Baldwin and Ford (1988), Richey (1992), Yelon (1992), and Foxon (1994) models, Garavaglia (1996) developed his transfer design model. Refer figure 2.14.   This model encompassed an initial performance measure, systemic design factors (eg., trainee and work environment characteristics), instructional design features, the implemented training programme, a maintenance system (e.g. employer support) and a transfer
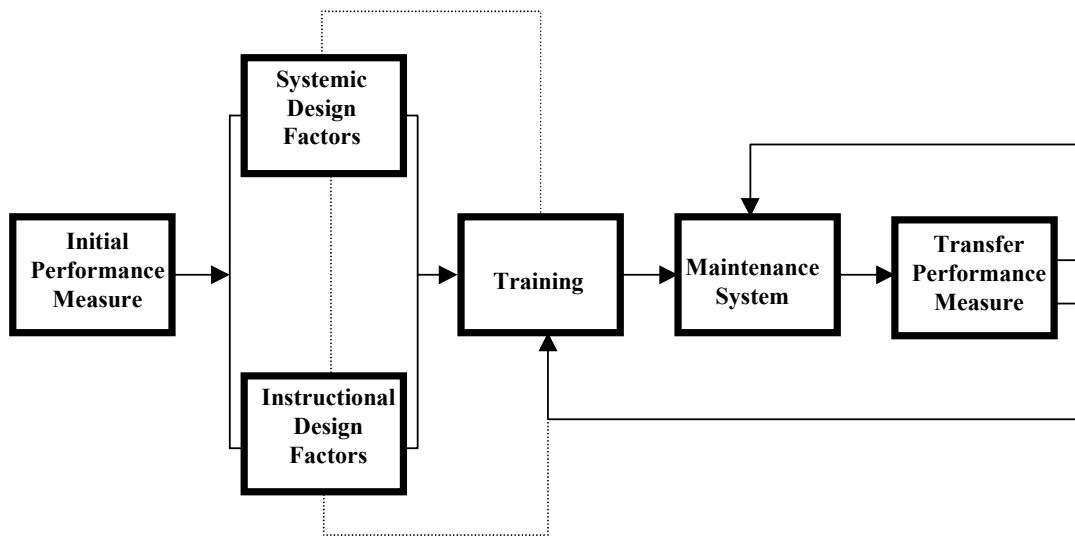
Figure 2.14. Transfer Design Model (Garavaglia, 1996)

performance measure. In all of these models, however, little if any attention has been directed toward the forces external to the training.

Adult Education Models

Drawing upon a number of sources, Caffarella (1994) has developed an adult education model that categorised factors influencing transfer of training. Depending upon their specific characteristics each of these factors was regarded as either a potential barrier or enhancer in the transfer process. Refer to figure 2.15. This categorisation identified participants, programme design and content, change processes, the organisational context, community and societal forces as the important determining factors of the transfer process. Not all of them were deemed by Caffarella to influence every programme but the more complex it was, the greater the magnitude of change and the greater the likelihood that many of the factors would be involved. This is one of the few models that explicitly identified community and social forces impacting upon transfer.

Using a research based systemic training approach; Richey (1992) developed an adult education input-process-output model. Refer figure 2.16. The multiple interactive training outcomes of knowledge retention, attitude change and on-the-job behaviour were related to the inputs of trainee background, perceptions of the organisation, initial knowledge, attitude, behaviour, the processes of instructional design/delivery and trainee attitudes. Similar to the Walberg and Genova, and Baldwin and Ford models there is little, if any, prominence given to the wider context or of the trainer characteristics apart from training input. Both the Richey and

BARRIERS	FACTORS	ENHANCERS

BARRIERS	FACTORS	ENHANCERS
Do not possess required prior knowledge or experience Do not have the time to incorporate what they have learned into what they do Are not interested in making changes	Program Participants	Have useful prior knowledge & experiences that they are able to link to what they have learned Are ready and willing to learn & to apply that learning View the program content as relevant and practical
Lack emphasis on application in terms of instructional methods Include no follow-up strategies Offer unrealistic transfer-of-learning strategies	Program Design and Execution	Include applications exercises as a major part of the instructional activities Recognize that responsibilities of planners include ensuring that learning transfer actually happens Include transfer-of-learning strategies that are well executed
Focuses on knowledge when it is skill and attitude changes that are needed Is not relevant or useable	Program Content	Is relevant and practical Builds on previous knowledge and experience of participants
Are unrealistic Are too disruptive to present practices/ routines have no ownership in the program changes by affected parties to build on	Changes Required to Apply Learning	Are doable and realistic Are allotted enough time to develop Take place in an environment where the change process is perceived as caring and equitable
Lacks concrete support from peers, superiors, and/or managers Builds in reward systems that work against changes Offers nonsupportive climate for learning	Organizational Context	Offers support from key leaders and superiors Makes tangible rewards apparent Adapts to new structures and norms
Result in economic conditions that are poor Offer societal norms that are not supportive of changes Include key leaders who are openly hostile	Community/Societal Forces	Result in economic conditions that are favourable Offer support from key leaders Make receptive political climate

Figure 2.15 Transfer of Learning Factors (Caffarella, 1994)

Caffarella models have contributed to the understanding of how influences and outcomes are significant impacts upon transfer. They do not however explain the process of transfer.

Figure 2.16. Input-Process-Output Model (Richey, 1992)

There are a number of similarities and differences between the different explanatory models. The following table 2.1 provides a summary analysis of the some of the key factors emphasised in the models. Some models make reference to additional factors but these have

not been identified as they were not detailed as particularly significant for their explanatory model. A number of the models have very similar features (e.g. Gradous, 1991; Milheim, 1994; Veenman, et. al., 1994, and Walberg & Genova, 1982) whilst some have unique features (e.g. Analoui, 1993). For many of the models the impact of the work environment, the training programme, and trainee characteristics are significant although emphases vary. Some models (Broad & Newstrom; Caffarella; Foxon; Gradous; Veenman et al.) have specifically identified change procedures and change theory as important variables. Only the Caffarella, Gradous, Kozlowski and Salas, and Lim and Wentling models emphasise the importance of the external environment with the Lim and Wentling model specifically identifying cultural factors. On-the-job social factors as important contributory factors in determining transfer are recognised in the Xaio and Analoui models. The time dimension in terms of either course development (pre-, during and post-course) or process are significant for Broad and Newstrom, Milheim, Gradous, Caffarell,a and Foxon models.

Table 2.1.

Identification of the Significant Factors Detailed in the Transfer of Training Models

MODELS	FEATURES								
	Training Characteristics eg, design, content	Trainee Characteristics eg, personality, ability	Work Environment eg, climate, support	Workplace Interaction (informal)	External Environment eg, community, influence	Cross-cultural issues	Temporal eg, before, during, after	Process Model	Outcome Model
Model of professional knowledge use (Walberg & Genova, 1982)	+	+	+						+
Teaching for transfer (Perkins, Barell & Fogarty, 1989)	+								+
Incremental model of transfer (Wallace, 1992)	+								
Framework for instructional transfer (Brooks & Dansereau, 1987)	+	+						+	
MASS Model (Yelon, 1992)	+		+					+	
Management training transfer model (Huczynski & Lewis, 1980)	+	+	+						+
Model of the transfer process (Baldwin & Ford, 1988)	+	+	+						+
Role X time transfer strategies model (Broad & Newstrom, 1992)	+	+	+				+		+
A multilevel transfer model (Kozlowski & Salas, 1997)	+	+	+		+				+
Determinants of transfer of training (Xiao, 1996)	+	+	+	+					+
Transfer of training model (Gielen, 1996)	+	+	+						+
A socio-technical learning transfer model. (Analoui, 1993)	+	+	+	+					+
Model of international transfer of training. (Lim & Wentling, 1998)	+	+	+			+			+
Transfer of learning factors (Caffarella, 1994)	+	+	+		+				+
Input-process-output model (Richey, 1992)	+	+	+						+
Stages of transfer model (Foxon, 1994)	+	+	+				+	+	
Transfer design model (Garavaglia, 1996)	+	+	+					+	+

Issues Relating to the Study of Transfer of Training

In this section a number of issues arising from the discussions surrounding the nature of transfer will be discussed. Some (e.g. Bransford et al., 1999; Foxon, 1994) have argued strongly for transfer to be viewed as dynamic rather than static phenomena. This view places the learner in a more central position in the discussion – the learner is active in choosing and evaluating strategies, considering resources and receiving feedback. Transfer thereby

becomes a process that cannot be measured via 'one-shot' tests. While Foxon (1994) has argued for transfer to be considered as a process and not an outcome, others (e.g. Broad & Newstrom, 1992) acknowledge it as a process but define the evaluation of it in outcome terms. This has implications for the evaluation of transfer and it is this issue that will also be considered. In the final part of this section the research literature issues concerning the major influences on transfer of training (i.e. programme design, trainee characteristics and workplace/context characteristics) will be detailed.

Process or Outcome?

When examining whether or not transfer has occurred, most researchers (e.g. Broad, 1997a; Cormier, 1984) are concerned with the end product – a transfer-as-product approach. That is, what are the training outcomes like? But as Foxon (1994) has noted this type of interpretation does not adequately explain the development of intellectual skills. Defining the degree of transfer and the time of transfer will vary from individual to individual and hence it becomes difficult to determine whether transfer has occurred or not. Foxon believes the alternative is to view transfer as a process whereby stages of transfer can be tracked. (Refer to Figure 2.17).
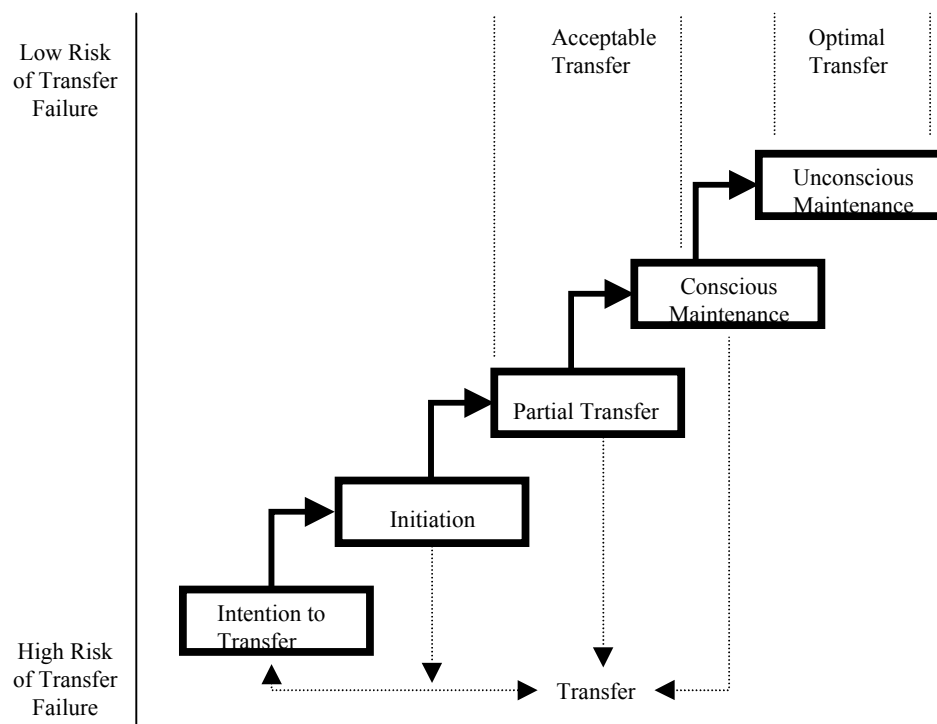
Figure 2.17. Transfer Process (Foxon, 1994)

According to Foxon, the process concerns learners who try skills, practise them, discontinue them, etc. and each stage is a prerequisite for the next stage. A high level of transfer intention (motivation) is likely to lead to an initiation of the learning in the work setting although, often, only partial transfer occurs. This may occur because the learner has incomplete understanding, lack of confidence, etc.. Conscious efforts with deliberate attempts to utilise the learning is characteristic of the maintenance stage but this is followed by unconscious maintenance which implies transfer has occurred in full. If there is no relapse and maintenance is continued, generalisation to other domains of activity may occur.

Foxon, similar to Haskell (2001) argues that we have not related what we know about learning to transfer. Unless transfer mirrors learning as a process, we will continue to have an incomplete understanding of the concept. Many of the descriptions of transfer do recognise transfer as a process and discuss levels/degrees of attainment (e.g. near–far) but in terms of evaluating transfer most have defined it as a product/outcome.

Transfer Evaluation

Salas and Cannon-Bowers (2001) noted that training evaluation is particularly difficult in the field and often delivers bad news anyhow. Some researchers (e.g. Cormier & Hagman, 1987; Garavaglia, 1993) have also noted that transfer measurement has been a contentious problem for there are a number of important issues to be defined, viz.,

- Why is the measurement being undertaken?
- What is the degree of transfer that is accepted for it to be considered as successful transfer?
- What is the performance that is to be measured and should motor, cognitive and meta-cognitive learning transfer be planned for differently?
- Who should be measured and who should undertake the measuring?
- When should the measurement be undertaken?
- How can it be measured?
- How reliable and valid are the outcomes?
- To what extent is adequate assessment of transfer disruptive in the workplace context?

The following discussion outlines a sample of the responses as they relate to these issues.

Determining why the measurement is being undertaken will relate to what data is sought (Ford, 1994). Salinger and Deming (1982) indicated there are four reasons for conducting transfer

evaluation: identifying the extent of learning, identifying the extent of transfer to the job, estimating the degree of knowledge or skill level maintenance over time and relating the improved performance to the cost of training.

Kirkpatrick's (1994) model to measure effectiveness of training outcomes is one of the most widely considered approaches in the training literature. He has proposed that there are four levels of training evaluation, viz.,

- Level 1 - participant's reactions to the training (satisfaction)
- Level 2 - the achieved learning outcomes
- Level 3 - the behavioural changes
- Level 4 - the achieved results (i.e. the impact).

Levels 1 and 2 have been the most used measures and levels 3 and 4 have had little empirical research undertaken on their validity (Broad, 1997b; Veenman et al., 1994). Others (e.g. Brinkerhoff, 1987; Jedrziewski, 1995; Phillips, 1996; Swanson & Nijhof, 1994) have modified and refined Kirkpatrick's approach. Salas and Cannon-Bowers (2001) noted the importance of developing a more comprehensive sophisticated evaluation system. Kraiger, Ford and Salas (1993) have developed a multi-dimensional view of learning and have recognised the need to assess cognitive, affective and skill-based outcomes. Alliger, Tannenbaum, Bennett, Traver and Shotland (1997) identified, from studies using the Kirkpatrick evaluation model, that the ultility-type reaction measures were more predictive of transfer than the affective-type reaction measures.

Holton (1996) criticised the simplicity of the Kirkpatrick approach as a taxonomy that is unable to evaluate results effectively. In developing his own model he specifies the need to explain outcomes (learning, individual performance and organisational results) correctly. Refer figure 2.18. He believes that participant satisfaction should be viewed as an issue in the learning equation rather than a key outcome, and that the behaviour outcome should be broadened into a performance outcome encompassing a wider range of issues (e.g. impact of motivation). He argues for a number of primary intervening variables that need to be considered when measuring the outcomes and defined these as:

- motivation (motivation to learn, motivation to transfer and expected utility) which is influenced by factors such as personality, readiness, attitudes, etc.,
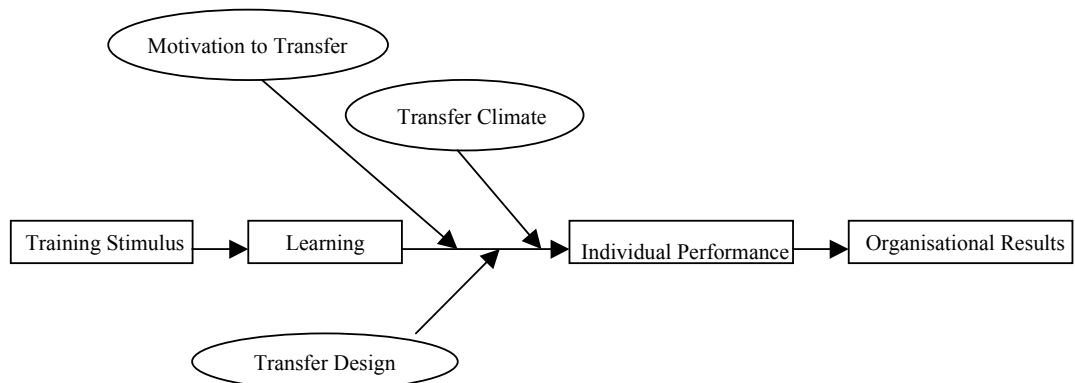
Figure 2.18. Factors Affecting Transfer of Training (Holton 1996)

- environmental aspects (reaction, transfer climate and external events), and
- ability/enabling elements (ability, transfer design and organisational goals).

In more specific terms, there has been an array of questions identified that can assist with the determination of training effectiveness. Foxon (1992) indicated that it was important to use specific rather than generic questions although she agreed that really useful ones were often difficult to construct. Questions such as 'Can you apply this on the job?' 'What problems do you anticipate back on the job?'

Jedrziewski (1995) used the Broad and Newstrom (1992) transfer matrix to define what and how to measure. Before training, needs analysis tools such as observations, interviews, evaluation of existing data were recommended. During the training, the measurement of the reaction to the training by the trainees, trainer, supervisor, assessing comprehension and understanding (via pre and post testing, etc), and evaluation of the course presentation was considered important. After the training, the assessment of knowledge and skill, as well as the evaluation of the results for the organisation (application, improvements in productivity, efficiency and safety, morale, teamwork, quality, return value, etc.) were considered valuable.

There have been a range of strategies that have been suggested for measuring transfer and considerable discussion about the usefulness of different approaches (Garavaglia, 1993). The value of self reports via interviews and rating scales, reports and surveys, interviewing of supervisors, critical incident reporting, post course interviewing, measuring attitude changes, action or implementation plan perusal, observations (simulations or on the job), work samples and performance appraisals has been recognised (Cheng & Ho, 2001; Garavaglia, 1993; Salinger & Deming, 1982). Salinger and Deming (1982) further recommended pre- and post-

course, as well as, time series data collection methods, the tracking of previous course responses and performance analyses as valuable tools.

In Figure 2.19 below Broad (1997a) has related Kirkpatrick's levels of evaluation with specific methods and has identified the advantages and disadvantages of each method.

Levels of evaluation	*Methods*	Advantages	*Disadvantages*
1. Reaction	Survey, interviews, etc.	cheap	Unreliable
2. Learning	Observation, self-assessment	Precise measure	Time consuming
3. Behaviour	Interviews, observation	Meaningful	Expensive, hard to manage
4. Results	Interviews, documented data.	Meaningful data over time	Hard to attribute to learning

Figure 2.19. Methods of Evaluation (Broad, 1997a)

Cheng and Ho (2001), and Cruz (1997) although noting the value of self-report, suggested that it is insufficient and recommended that the gathering of data from other sources (e.g. supervisors and peers) could assist with the interpretation of change. Salinger and Demming (1982) however warned of the 'halo effect' dangers in only using self and supervisor reports and noted the importance of longitudinal assessments if retention of ideas, etc., was a key consideration. Hesketh (1997) suggested that long term evaluation was most appropriate when a determination on which training method best developed generic skills was wanted.

A number of the experts (e.g. Broad, 1997a; Fogarty, cited Fogarty, et al., 1991a; Haskell, 2001) have developed typologies for the levels of transfer to assist with the description and assessment of transfer. Fogarty's continuum for the levels of transfer range from simple or near transfer to far-reaching complex transfer. Refer to figure 2.20. This is a situational point of view and she identified a number of variables that influence the use of what is learned in one context being used in another. Examples of these influences included past knowledge and prior experience, physical learning environment, teaching-learning style match and the affective states of the learner and the teacher.

ASSESSING SITUATIONAL DISPOSITIONS OF TRANSFER		
	OVERLOOK	Missing appropriate opportunities; overlooking; persisting in former ways?
	DUPLICATE	Performing the drill exactly as practised; duplicating with no change; copying?
	REPLICATE	Tailoring, but applying in similar situations; all looking alike; replicating?
	INTEGRATE	More aware; integrating; subtly combining with other ideas and situations; used with raised consciousness?
	MAP	Carrying strategy to other content and into life situations; associated with mapping?
	INNOVATE	Innovating; taking ideas beyond the initial conception: risking; diverging

(Left axis: SIMPLE / COMPLEX; Right axis: NEAR / FAR)

Figure 2.20. Dispositions for Assessing Transfer (Fogarty, 1989)

Haskell (2001) also believed it was important to have transfer tools to consider and he developed a typology of transfer levels that could be related to the different knowledge and transfer types. Refer to Figure 2.21 below. He noted that many of the distinctions (e.g. near-far) were imprecise and a broader more varied description would enhance understanding of the concept.

LEVEL	NAME	TRANSFER DESCRIPTION
1	Non-specific transfer	This refers to all learning – all learning has been connected to past learning.
2	Application transfer	Applying what one has learned to a specific situation
3	Context transfer	Applying what one has learned to a slightly different situation (e.g. recognising something in one context and then in another)
4	Near transfer	Transferring to new situations that are closely similar (e.g. learning a skill and then using part of that learning to develop another skill)
5	Far transfer	Applying learning to situations that are quite dissimilar
6	Creative transfer	In the interaction between the new and old situation something new is created

Figure 2.21. Typology of Transfer Levels (Haskell, 2001)

This typology is based upon similarity judgements by the individual. That is, what is near transfer to one person may be far for another and hence the importance of what is in the mind of the perceiver. In addition to this, Haskell indicated that these levels needed to be related to the varieties of transfer of learning – the knowledge types that transfer is based on (i.e. content, procedural, declarative and strategic) and the specific transfer types (i.e. conditional, theoretical, general, literal, vertical, lateral, reverse, proportional and relational). This has

provided a complex and as yet theoretical typology that enables an evaluation of 'level X knowledge type X transfer type'.

The evaluation of transfer as we have seen is a complex issue. In this section attention has been given to describing the manner by which transfer can be measured and a range of what and how to evaluate transfer has been outlined. However as Haskell (2001) noted the assessment of transfer is fraught with difficulties – often even simple transfer studies have revealed that little if any transfer has occurred. His point is that a precise understanding and analysis of the concept is necessary to demonstrate that transfer has occurred. Salas and Cannon-Bowers (2001) noted

> *Training evaluation is one of those activities that is easier said than done. Training evaluation is labor intensive, costly, political, and many times is the bearer of bad news. We also know that it is very difficult to conduct credible and defensible evaluations in the field. Fortunately, training researchers have devised and tested thoughtful, innovative and practical approaches to aid the evaluation process.* (p.479).

Influences Upon Transfer of Training

There are three major influences in the pre-, during-, and post-training process: training characteristics, trainee attributes and the work environment (Baldwin & Ford, 1988). There is however an interactive dimension to these three influences (Baldwin & Ford, 1988; Gradous, 1991; Kozlowski & Doherty, 1989; Tannenbaum & Yukl, 1992; Tziner, Hacounn & Kadish, 1991). In relation to these three key influences, Baldwin and Ford (1988) undertook an extensive review of the literature and since this time there has been considerable interest generated in the area. Nine years after the Baldwin and Ford review, Ford and Weissbein (1997) updated the review and commented upon both the research studies and theoretical advances that had been made in the intervening years. Cheng and Ho (2001) followed this with a review of the transfer of training studies that had been undertaken in the previous ten years. This section of the literature review will discuss a number of the research studies noted by these reviewers along with other studies and elaborate upon many of the issues raised by the researchers.

Task and Training Issues

The field of training in the past 50 years has grown significantly (Ford, 1997). It has become a distinct area of inquiry and has moved from an initial emphasis upon methods and

techniques to considering the importance of work context upon training effectiveness. A-theoretical approaches have given way to applied psychology and the development of theories concerning learning and transfer. Salas and Cannon-Bowers (2001) noted that in the past 10 years there have been some influential theoretical developments that have generated a number of empirical studies.

In the Baldwin and Ford (1988) review of the literature it was acknowledged that much of the early research had been centred upon improving the design of the training programmes. In particular, this has been concerned with the issues of identical elements, the teaching of general principles, stimulus variability and various conditions of practice. The findings of various research studies (Crafts, 1935; Duncan & Underwood, 1953; Gagne, Baker & Foster, 1950; Underwood, 1951) had confirmed the early identical elements findings of Thorndike and Woodworth (1901) with regard to motor skills (and indeed some verbal behaviours). But it was also reported (e.g. McGehee & Thayer, 1961) that transfer was facilitated when trainees were taught general rules and theoretical principles. Ellis (1965) identified the importance of using a number of different stimuli (examples) during training. Ranges of conditions during training have also been identified as facilitators of training. For example, distributed training (Naylor & Briggs, 1963), performance feedback (e.g. Wexley & Thornton, 1972), over learning (McGehee & Thayer, 1961) and the sequencing of the learning (e.g. Decker, 1980; 1982) had been identified with increased transfer.

Baldwin and Ford (1988) noted a major weakness with a number of these earlier research findings - many of the studies had used samples of university students in laboratory settings to assess simple motor and memory skills transfer. Kraiger (1995) noted those tasks such as climbing ladders and short-term retention of fictitious names were not an adequate measure for transfer. Indeed, Schmidt and Bjork (1992) had found that traditional learning principles (such as massed learning, immediate feedback and use of constant training stimuli) were detrimental to far transfer.

Ford and Weissbein (1997) indicated, some ten years later in a review of the literature, that some positive developments had occurred. Studies were now using more complex tasks, more diverse samples and using longer intervals between training and criterion assessment. For example, Baldwin (1992) used scenario and model competency variability to teach meaningful and relevant assertiveness skills to business students. A behavioural learning measure was

employed to ascertain transfer of the assertiveness skills as well as reported use by a confederate some four weeks later. Ford and Weissbein noted that overall outcome effectiveness was being ascertained and more specificity of understanding was important because it would enable particular design features to be related to transfer. What skills, when they should be applied, and in what sequence, were important factors to determine according to Gist, et al. (1990).

In terms of the theoretical orientation toward training there are numerous approaches for the trainer to consider. For example, Kolb (1984) argues for an experiential approach, Meizirow (1991) recommends transformational learning and reflective practices, Knowles (1970) develops the humanistic andragogical approach, problem-based learning is advocated by Cordiero (1997), and Millis and Cottell (1998) emphasised the importance of collaborative approaches to post-secondary education. Haskell (2001) notes that it is this very complexity of theories (and specific strategies) that has confused transfer and created a fragmented approach. He urges for a more principled and coherent strategic application of the knowledge base. Despite his concern many of the training manuals continue to recommend an array of strategies as the solution to the transfer problem.

Since the Baldwin and Ford (1988) review of the literature there have been a number of significant studies concerning the general design of the programme and identification of factors important for transfer of training (Cheng & Ho, 2001). For example, Tannenbaum and associates (Cannon-Bowers, Salas, Tannenbaum, Mathieu, 1995; Tannenbaum, Cannon-Bowers & Mathieu, 1993) developed an integrative transfer of training framework identifying the variables influencing the design and delivery of training including attention to the pre-, during – and post-training periods. Feldstein and Boothman (1997), computer application trainers, extrapolated the key manager-learner factors in a series of studies between 1989 and 1993. They identified eight key facilitative factors related to attitudes and behaviour viz.,

1. Learners reported exploration or use of software prior to training;
2. Before the training they had a clear idea of how to apply the skills used in class;
3. After training, they had 3 or more practice sessions per week;
4. After training they had many ways to apply the skills on the job;
5. The learners perceived that the supervisors had reasonable expectations for performance change after training;
6. The learners perceived that the supervisor had adequate knowledge and understanding of how the learner would use the software;

7. Learners felt supported by management in their learning and growth using the software; and

8. Learners noted that the management had noticed and communicated about productivity and process changes since the training.

In another development, and as a means to provide a more focussed approach to transfer, Gregoire et al. (1998) noted that a training curriculum that had clear objectives, that was relevant to work context and had varied content was important, as was, positive trainer characteristics, trainer credibility and performance feedback from the trainer. The following discussion outlines a range of more specific findings.

Salas and Cannon-Bowers (2001) outlined the importance of pre-training experiences for learning. The manner in which the training is perceived and presented by the organisation has been identified as important (Quinones, 1995) whilst Smith-Jentsch, Jentsch, Payne and Salas (1996) demonstrated that trainees previous experiences with training impacted upon learning and retention. Baldwin and Magjuka (1997), explained training in terms of an 'organisational episode' and identified a number of pre-training contextual factors (e.g. voluntary versus compulsory attendance) as impacting upon motivation.

Tziner et al. (1991) discussed a number of the curriculum training elements that can enhance transfer. In terms of cognitive methodology they defined over-learning, teaching underlying principles, stimuli that mirror the training environment, and goal setting as being the key approaches. Other dimensions that have recently been considered include the value of alternating task modules (Goettl, Yadrick, Connolly-Gomez, Regian & Shebilske, 1996) and stress exposure training (Driskell & Johnston, 1998).

Many of the training strategies are interactive and bring the trainer and trainee together to work collaboratively (Salas & Cannon-Bowers, 2001). Such processes allow for a partnership to develop between the trainer and trainee and facilitate motivation of the trainee (Baldwin & Ford, 1988; Curry, Caplan & Knuppel, 1994; Guthrie & Schwoerer, 1994). With regard to the trainee-trainer relationship, Clark, Dobbins and Ladd (1993) asserted that trainer credibility was important and this involved establishing a partnership based upon trustworthiness and expertise, as perceived by the course participant.

Although the strategies have been recognised as facilitating transfer, trainees are also confronted with barriers particularly on return to the work setting (Broad & Newstrom, 1992). As a consequence there has been considerable discussion on the positive effectiveness of relapse prevention approaches to prepare course participants to return to the workplace (e.g. Marx 1986; Noe & Ford, 1992; Tziner et al., 1991). In a recent review (Burke & Baldwin, 1999) that investigated relapse prevention and organisational climate there was a more cautious interpretation of its value however. Its implementation had modest influence upon trainees transfer strategies with a variable impact depending upon the nature of the transfer climate (i.e. trainee's perception of workplace support).

Another dimension of training that has received considerable investigation concerns the location of the training (Analoui, 1993; Billet, 1992/1994; Buckley & Caple, 1996: Lave & Wenger, 1991). Billett (1992/1994) indicates that workplace training is important to ensure compatibility of training with the work environment and thereby not overlook the socio-cultural factors. Analoui (1993) agrees with this point of view and acknowledges the importance of the workplace socialisation process but also suggests that off-site courses are important for the more difficult content.

However, according to a number of the experts (Brinkerhoff, 1987; Garavaglia, 1996; Kozlowski & Salas, 1997; Tannenbaum & Yukl, 1992) training elements as described above are insufficient for there is a prerequisite of congruence between the individual, the training courses and the mission/goals of the organisation. Furthermore, in relation to the organisation the relevance of training, managing the potential resistances and ensuring trainer credibility has been deemed to be particularly important (Tannenbaum & Yukl, 1992).

Ford and Weissbein (1997), and Cheng and Ho (2001) have defined future research areas of interest as it relates to training for transfer. It is agreed that one of the future needs is to test the generalisation of results in various training contexts. Cheng and Ho also suggest long-term retention of trained knowledge and far transfer are important and further attention should be directed toward ascertaining training approaches that can achieve these ends. Ford and Kraiger (1995) have noted that short-term transfer training may differ substantially to long term and Ford, Smith, Weissbein, Gully and Salas (1998) have recognised the need for additional research on far transfer facilitation. Widening research samples was recognised by

Noe and Ford (1992) as a requirement for validating the research although they noted that there was a growing trend to use working people to examine research hypotheses.

Baldwin and Magjuka (1997) conclude:-

> *"With respect to future research designs, the training literature would benefit enormously from more qualitative data, such as observations, open-ended interviews, and even participant observation…… Qualitative research would be useful in discovering how informal networks form and modify, and reinforce or counteract the influence of different training elements. A useful general strategy is to move the focus away from micro-instructional design issues and toward consideration of the larger context within which training programs reside."* (p.123)

Trainee Characteristics

The Baldwin and Ford (1988) review of the transfer literature on trainee characteristics indicated a wide variety of characteristics suggested by practitioners (Robinson, 1984; Trost, 1982) in the areas of ability and aptitude, personality and motivation for pre-, during, and post-training periods. Despite this there has been little empirical data presented. A few studies had identified the significance of early trainee success (Gordon & Cohen, 1973) and the importance of levels of motivation (Ryman & Biersner, 1975). The value of ability, aptitude and background was identified by a number of researchers (Neel & Dunn, 1960; Ryman & Biersner, 1975; Tubiana & Ben-Shakhar, 1982) and subsequently confirmed by Bereiter (1995), Castaldi (1989), and Rouillier and Goldstein (1993). Differing personality factors such as locus of control and achievement need (e.g. Baumgartel, Reynolds & Pathan, 1984; Noe & Schmitt, 1986) had also been related to transfer. Post-training interventions such as goal setting and feedback have been reported as significant motivational components (Reber & Wallin, 1984; Wexley & Nemeroff, 1975). However there has not always been unanimous agreement with these findings. Ghiselli's (1966) review of the predictive power of aptitude for transfer indicated that it was "far from impressive"(p.125), whilst Miles (1965) concluded that personality had no relationship with transfer.

Some years after the Baldwin and Ford (1988) review of the literature, Ford and Weissbein (1997), and Gregoire, et al (1998) still noted that, although there had been some developments, overall there remained within the theoretical frameworks and perspectives, a lack of specific understandings to guide research on trainee characteristics. A number of specific research studies had, however, provided some additional data on the links between motivation and transfer. Tziner et al (1991) for example had found those who had internal

locus of control could benefit well from relapse prevention training. Self-efficacy has also recently been examined and related to pre-training motivation, training performance, post training behaviour, transfer performance and skill maintenance (Ford et al., 1998). In a similar vein, research undertaken by Seyler, Holton, Bates, Burnett and Carvalho (1998) indicated that that those with high levels of confidence were more motivated to apply their training. Furthermore, trainees who under-took effective career planning and had high level job involvement were more likely to want to learn (Mathieu, Tanenbaum & Salas, 1992; Williams, Thayer & Pond, 1991) whilst high levels of organisational commitment were also related to transfer (Tannenbaum, Mathieu, Salas, Cannon-Bowers, 1991; Tesluk, Farr, Mathieu, & Vance, 1995). Other pre-training and during-training motivation factors that have been found to be positively related to transfer include: trainee input opportunities, pre-training motivation levels, reaction to training, the perception that the training was relevant and had high job, and career utility (Axtell, Maitlis & Yearta, 1997; Clark et al., 1993; Guthrie & Schwoerer, 1994; Mathieu, et al., 1992). In an attempt to mandate the role of motivation in the transfer process, Holton (1996), along with a number of theorists (e.g. Foxon, 1997), have developed motivational models to assist with its explanation. Refer to Figure 2.18, which outlines the significance of motivation in Holton's (1996) model.

Although the above outlines a range of research findings relating to motivation it has been fragmented research and on the whole theories have not been drawn upon or well integrated into the transfer literature to provide a better understanding of the trainees' choices. Some researchers (Facteau, Dobbins, Russell, Ladd & Kudisch 1995; Ford, Quinones, Sego & Sorra, 1992) however, have used expectancy theory and social learning theory to develop programme transfer features. Ford and Weissbein (1997) noted that it was important to know under what conditions the characteristics (e.g. motivational qualities) of the trainees would impact. Colquitt, Le Pine and Noe (2000), in a meta-analytic review, suggested that motivation was more than this however – it was multi-faceted and influenced by individual (e.g. cognitive ability, personality and age) and situational characteristics (e.g. work climate). They make the point that more longitudinal studies would help with understanding the role of motivation in transfer.

Although some progress had been made in understanding the role of motivation in transfer little research had been undertaken on other trainee characteristics such as personality and prior experience (Ford & Weissbein, 1997). A small number of issues (e.g. tenure, age, managerial

experience and the role of individual cynicism) had been reported in the literature (refer to Ford & Weissbein, 1997). An interesting approach has been adopted by Bereiter (1995). He had considered transfer to be an individual ability (thinking disposition) and hence considered those who simply reproduced knowledge to be at a disadvantage because such behaviour inhibited transfer. Others have also reported on the impact of the general ability of the learner in the field (Castaldi, 1989; Rouiller & Goldstein, 1993) highlighting the importance of the trainee experiences and background for transfer of training. For the post-training context an individual's capacity to gauge the level of support on return to workplace (Rouillier & Goldstein, 1993) was recognised as important, whilst Friedman (1990), and Robinson (1992) identified risk-taking behaviour as a significant contributor to the transfer of training.

Interestingly there is very little research, or even commentary, about an individual's social capabilities and how these impact upon transfer of training. Analoui (1993), Billet (1992; 1994), and Lave and Wenger (1991) are among the few who have discussed the need for social learning processes to be an implicit part of a training programme. These are organisational–learning perspectives however and have over-looked the personal value of skills to an individual, his/her colleagues and the organisation for transfer. Further research is needed in this area to understand which social skills are valuable, how they operate to facilitate training transfer and at what phases of a training programme they are most useful. Little reference was also made in the literature to the trainee's (or indeed the trainers!) cultural background and what impact this had upon transfer. Once again from an organisational perspective some commentaries (e.g. Lim, 1999) have emphasised the importance of understanding cultural dimensions for training impact but little is known about how an individual's cultural background influences transfer.

Overall the findings relating to trainee characteristics are fragmented and lack an encompassing interpretive framework. Some research findings have enabled advances to be made in understanding the contribution that motivational theories can make to transfer theory but here also there are significant knowledge and theory gaps remaining. For example, an expanded understanding of the role of goal orientation (and in particular the development of strategies to enhance mastery orientation) needs to be developed (Cheng & Ho, 2001; Ford & Weissbein, 1997). Alliger et al. (1997) have reported the significance of utility of training as a motivational variable and Cheng and Ho have recommended that this warrants further study.

Another future research area, as discussed above, relates to the interactive effects of personality and motivation on training. For example, the personality Type A (Friedman & Rosenham, 1974) need for achievement construct, when related to an individual's emotional response and behavioural repertoire, is likely to impact upon an individual's motivation to succeed in training (Bogg & Cooper, 1995; Lee, 1992). Investigation of the significance of this is warranted according to Cheng and Ho (2001). The notion of work experience and bio-data has also been noted as an important variable for learning and transfer but little is known about the different work experiences upon transfer of training (Ford & Weissbein, 1997).

The impact of trainee control over training (e.g. decision-making; meta-cognitive processing) has been related to higher levels of motivation and learning (Baldwin, Magjuka & Loher, 1991; Ford, et al., 1998; Milheim & Martin, 1991). Additional data is however required to formulate meaningful constructs that can more adequately explain the role and significance of trainee control in training (Cheng & Ho, 2001).

Work Environment and Wider Context

The work environment is the location where the trainees are expected to demonstrate the benefits of training and is therefore regarded as an important area of research to locate the major influencing factors (Baldwin & Ford 1988). Until recently few empirical studies had been undertaken to locate the impact of the key work environment factors (support, climate and opportunity) upon transfer. A few researchers or commentators have also signaled the importance of the socio-cultural environment factors beyond the immediate work-place task context (e.g. Analoui, 1993; Haskell, 2001; Lim, 1999) although limited research has been undertaken. There has been recognition of the difficulties associated in researching this area because of its high-level multi-dimensional nature, the particular significance of the interactive relationship between personal qualities/work factors and the fluidity of the work context (Ford & Weissbein, 1997; Gregoire et al., 1998; Noe, 1986; Wright & Fraser, 1988).

There have been numerous workplace factors associated with transfer of training, viz., organisational climate (Rouillier & Goldstein, 1993), decision-making (Hand, Richards & Slocum, 1973), management style (Huczynski & Lewis, 1980), supervisory support (Brinkerhoff & Montesino, 1995), opportunity to perform (Ford et al., 1992), and continuous learning culture (Tracey et al., 1995). Gregoire et al. (1998) note that there are two components to consider when examining influences from the work environment: the actual work climate and the perception of the climate by the individual trainee.

In the Baldwin and Ford (1988) review it was noted that were was little empirical evidence on workplace influences and no studies could be located that had assessed the effect of changed work environment on transfer. Furthermore, what had been undertaken were correlational studies (such as climate, leadership and support) and these were commonly only measured by self-reports. In addition to this, Ford and Weissbein (1997) stated that there was a need to specifically operationalise the key variables and assess their impact from a multi-dimensional perspective. When their review was undertaken some progress had been made although they urged that additional research attention be directed to the area. For example, operationalisation of the work climate had been considered by Rouillier and Goldstein (1993). Furthermore, Ford et al. (1992) have operationalised the 'opportunity to perform' and assessed in a multi-dimensional manner the impact of it in relation to trainee characteristics and work environment factors.

Supervisory support has received considerable attention in the literature and some believe that the supervisor could be the most important stakeholder in the transfer process (Baldwin & Ford, 1988; Gregoire, 1994; Kozlowski & Doherty, 1989; Tannenbaum & Yukl, 1992). After all, it is the supervisor who controls many of the contingencies in the work environment and not the trainer. However the role specification of the different actors (including the supervisor) in transfer is still not entirely clear (Ford & Weissbein, 1997) and additional operationalisation of these variables is needed. But as Gregoire et al., (1998) outline there is considerable evidence to demonstrate that transfer can be enhanced by a supervisor who goes about "providing a supportive rewards-based environment, rich with performance feedback, mentoring, modelling, and positive attitudes toward training." (p.9)

Garavaglia (1993) has detailed the importance of supervisor attitudes toward training and the impact of this upon the trainee. Meeting with the supervisor and agreeing on the benefits and objectives of training enhances trainee commitment to the training (Gregoire, 1994). Direct supervisor support was considered important by Noel and Dennehy (1991) who argued for a partnership between the trainer, trainee and supervisor prior to and after the courses. Brinkerhoff and Montesino (1995), Garavaglia (1993), Gregoire (1994) and McGraw (1993) concur with this viewpoint but also acknowledge the importance of the wider work environment. McSherry and Taylor (1994) suggested supervisor led courses and workshops to follow through on the training, whilst in the electronics industry in Shenzhen (China) Xiao (1996) recognised supervisors and interaction between workers as the most critical factors in

transfer, and urged that consideration be given to planning for the workers changed expectations. In a similar vein, May and Reilly (1997) in a review of the literature concluded that the most distinct pattern emerging was the significance of supervisor and peer support as key transfer climate factors.

In an attempt to operationalise the supervisor role the Gregoire et al. (1998) study confirmed the importance of supervisor for transfer but identified that many supervisors were not readily facilitating transfer. Their research recommended that more attention needed to be directed toward the supervisor 'owning' the training, motivating the trainees, being directly involved in the training and making provision for a facilitating work climate.

Some attention has been directed at the role of socio-cultural factors in transfer of training. Analoui (1993), Billet (1992; 1994), and Lave and Wenger (1991) have for example emphasised not only the technical aspects of training but also the role of social processes in transfer. On-site training maximised opportunities for this to occur as it was more likely to match the task and social requirements of the setting and make re-entry less problematic (Analoui, 1993; McGraw, 1993). Congruence of training intentions and the work site was embodied within the research of Tracey et al. (1995) who, when training supermarket managers, identified the importance of a facilitative transfer climate and a continuous learning culture on site. Managerial/peer support and work appraisal opportunities within an ongoing learning environment provided the context for inter-related social and task learning opportunities Rouillier and Goldstein (1991), and Noe (1986) identified behavioural cues from supervisors and peers as important post-training transfer environment issues whilst Tannenbaum and Yukl (1992) added that transfer can be actively discouraged if there is ridicule from peers in the workplace.

Few empirical research studies have considered the relationship between national culture and transfer of training although a number of experts have recognised the difficulties of cross-cultural barriers in learning. For example language barriers (Dillon, 1993), societal value differences (Adler, 1986), learning style differences (Hofstede, 1991) and technical differences (Lim & Wentling, 1998) have all been recognised as training problems. Haskell (2001) has recommended the incorporation of culture as an important variable into a comprehensive model of the transfer process and Xiao's (1996) study in China emphasised that transfer is indeed an international concern. Lim (1999) has emphasised the importance of considering cross-cultural issues in training and has proposed a model (Lim & Wentling,

1998) that encompasses three primary interacting domains: learning environment (training and trainee characteristics), cultural differences (language, social, technical and learning) and work environment (work and people factors). He argues that individual, organisational and cultural needs assessment procedures will facilitate effective training by being mirrored in training design with diverse teaching strategies.

Two small-scale studies (Hynds, 1997; Tufue, 1998), very similar in design and undertaken by the researcher's students, related the issue of culture to the nature and value of support in-service for transfer of training. The Hynd's study used pakeha (New Zealand European) respondents whilst the Tufue investigation used Polynesians resident in New Zealand. Hynd's noted that support was very often related to an individual's professional goals whilst the Tufue study had similar results but more attention was directed to the value of support as a collaborative goal. Additional research needs to be undertaken to extend the findings of these studies.

A number of future research areas have been identified to facilitate understanding of the role of workplace context in transfer of training. Baldwin and Ford (1988) drew attention to the need to move beyond individual levels of analysis and to operationalise workplace variables. They recognised the centrality of support impacting upon transfer but stated that it had not been examined as a multi-dimensional construct. Ford and Weissbein's (1997) review acknowledged that in the intervening period progress had been made operationalising workplace variables but once again noted that the interaction between the factors (e.g. trainee characteristics, design and work environment) and how these impact at the individual, departmental and organisational levels had not been systematically investigated. "Future research needs to focus more attention to which person and situational factors may interact to affect learning and transfer." (p.38). Cheng and Ho (2001) have also called for testing of the generalisation of results in various training contexts. For example, they asked questions about the validity of the work climate findings for other training contexts outside the organisational domain.

In this section attention has been directed toward understanding the contribution of workplace and wider contextual issues to transfer of training. Since the Baldwin and Ford (1988) review considerable progress has been made in identifying factors beyond the trainee and training that impact upon work performance. Salas and Cannon-Bowers (2001) noted that in the past ten years the plethora of research findings have resulted in some significant and conclusive

findings. In relation to the workplace environment they identified the following as important propositions and conclusions that summarise the knowledge about the workplace environment and transfer:-

- The capacity to validly measure the varied organisational learning environments;

- A recognition of the importance that context plays in developing motivations, expectations, and attitudes for transfer;

- The importance of transfer "climate" on development of skills, knowledge and attitudes;

- The importance of the opportunity to perform;

- A recognition of the skill decay that can occur if there is a lengthy time between training and actual use;

- The value of situational cues and consequences;

- The significance of social, peer, subordinate, and supervisor support;

- A recognition that training can generalise from one context to another;

- An understanding that intervention strategies can be designed to improve the probability of transfer;

- The recognition that team leaders can shape the degree of transfer through informal reinforcement or punishment; and

- The need to conceptualise transfer as a multi-dimensional construct.

Research Implications

With the theoretical developments and research studies undertaken on transfer of training since the Baldwin and Ford (1988) review there has been a growing interest in how research can more effectively contribute to our understanding of the process. Research concerns have centred around the need to operationalise of key variables and adequate criterion measurement of transfer alongside the development of conceptual frameworks that describe training, trainee and workplace variables (Ford & Weissbein, 1997).

Baldwin and Ford (1988) foreshadowed this research interest by highlighting a number of methodological concerns with the literature base. "While the limited number and the fragmented nature of the studies examining transfer are disturbing by themselves, a critical review of the existing research reveals that samples, tasks, designs and criteria used limit even further our ability to understand the transfer process." (p.86) The reliability of the findings has been a problem since learning and short-term retention measures with self-report procedures were initially used to ascertain transfer (usually near) for training of motor skills.

In more recent times, studies have used a wider range of assessment tools (such as behavioural measures and supervisory/peer/self ratings) over varied time intervals and have more adequately assessed maintenance and generalisation of knowledge and skills learning (Ford & Weissbein, 1997). This later review also emphasised two key needs. There is the need to continue research on how best to improve generalisation and maintenance, and secondly locate additional means of refining the adaptability of a response to novel or changing situational demands.

Cheng and Ho (2001) concurred with Ford and Weissbein (1997) about methodological advances. They also suggested that developments in research methodology were needed particularly those that would promote an interactive understanding of causality, improve research design, and utilise a wider range of measures. Variables impacting upon transfer such as self-efficacy, mastery learning, achievement striving, reaction to training, trainee-control over training and transfer climate needed investigation. The use of varied samples, training approaches and model designs with a more precise definition of key dimensions (such as support) and improved statistical analysis of data was warranted. Consistent with Haskell's (2001) approach, Cheng and Ho also considered that there was value in relating the study of transfer to a wide range of theoretical perspectives.

There has been limited research undertaken via qualitative methodology. May (1999) discussed how a qualitative approach can be useful for generating information about transfer of training. He noted that this type of data can often elaborate upon the meanings of statistical findings and provide additional insight into causal factors. Additional research using qualitative approaches would provide an additional perspective and add to our knowledge about the phenomena.

This section of the literature review has examined the major improvements in research methodology and the nature of study variables. It has detailed how over the past 20 years significant advances have been made and how there has been a movement from examining near transfer of motor skills (with mainly student samples) to a multi-dimensional approach that assesses transfer via varied measurement procedures with work-place populations.

Concluding Remarks

Baldwin and Ford's (1988) review and the two subsequent reviews were purposeful and significant, for not only did they re-energise theoretical interest in transfer of training but also contributed to our understanding and have initiated numerous research studies. Nevertheless, some ten years after the Baldwin and Ford critique, when Gregoire et al. (1998) extensively surveyed the social work, educational psychology, organisational psychology, management and organisational behaviour literature it was still being concluded that much more had to be achieved. The "findings of this review indicate a paucity of empirical literature regarding the transfer of training to the work environment." (p.3). Most experts agree considerably more research needs to be undertaken to fully understand the transfer of training.

> *Can higher thinking skills be taught? Yes! Can higher-order thinking skills be learned? Yes. Will students then demonstrate the ability to use higher-order thinking skills in the classroom? Maybe….In the best of all possible classrooms, where all students are equally prepared, highly motivated, have made an effort to learn and remember, and are interested in the task at hand, this assumption may be accurate. However, after spending 25 years in the classroom, I am still in search of this classroom for even one week."* (Phye, 1997, P. 453)

Transfer of Training Models and Definition Revisited

For the purposes of the current research project it is important to specify a definition of transfer of training. As indicated, the literature presents a somewhat confusing account of what transfer is and what constitutes its features. The following definition attempts to integrate many of these disparate issues and viewpoints and provide a definition that is more encompassing.

> *Transfer of training is a contextual process that occurs as a consequence of training strategies, processes, activities, arrangements, etc., that occur before, during and after training and has sustained on-the-job impact in terms of outcomes relating to behaviour, cognition, affect, motivation and organisational results.[12]*

This definition is based upon the literature and models that explain transfer. In particular, it draws upon the works of:

Analoui (1993) – the importance of context and social support;

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[12] It is a contextual process because there are a range of influences upon the process – climate for transfer, personality, motivation, trainee ability, attitudes, culture, etc., - which in turn may be impacted upon.

Baldwin and Ford (1988) – the importance of training, design and work input (context) variables;

Broad and Newstrom (1992) – the importance of the role X time dimension;

Foxon (1993) – the importance of transfer as a process;

Kirkpatrick (1994) – the importance of outcome measures (reactions);

Krager, Ford and Salas (1993) – the importance of outcome measures (cognitive, affective, motivational); and

Lim and Wentling (1998) for the importance of aspects relating to cultural and international transfer.

Chapter Summary and Research Implications

This literature review has identified the key issues relating to transfer of training and has provided an integrated view of the diverse sets of practices, knowledge, theories, models and paradigms that account for the process. It has highlighted the complex multi-faceted nature of transfer of training, the paradoxes of transfer and the difficulties in attaining meaningful transfer. Increasingly attention is being drawn to the need for a more syncretistic theory of transfer that not only explains individual processes but also the contextual and cultural factors. A more integrated examination of the influences upon transfer will permit the development of a more comprehensive understanding of the process.   From both a practitioners and a theoretical perspective more information is needed to understand under what conditions a particular training programme can have long-term impact with a specific group of trainees. This research project will contribute to this development – it will examine the significance of Cook Islands educators' perceptions for the value of transfer ideas and then relate these to a teacher in-service training programme.

CHAPTER THREE

ASSOCIATED LITERATURE

> *.....there is no more important topic in the whole of psychology of learning than transfer of learning… practically all educational and training programmes are built upon the fundamental promise that human beings have the ability to transfer what they have learned from one situation to another… The basic psychological problem in the transfer of learning pervades the whole of psychology of human training…There is no point to education apart from transfer.* (Deese, 1958, p.213)

Increasingly many teachers are becoming aware of the importance of, and becoming involved in, professional development activities (Butler, 1992: Craft, 2000). The literature on adult learning, teacher professional development and educational change is robust and influential knowledge sources that assist with the development of effective teacher in-service programmes are readily available. In this section, attention will be directed to the teacher as learner and the contribution of the professional development literature, particularly in-service education. Change theory, as it relates to professional development will also be considered. In the final section, details of Cook Island culture and schooling will be outlined.

The Adult Learner

Adult Learning Perspectives

The teacher is an adult learner and effective staff development programmes need to reflect this characteristic (Butler, 1992). In this section, the perspectives that have generated research in the area of adult learning, the psychological and contextual, will be examined and then attention will be directed toward some of the issues relating to the education of adults. Imel (1995) has, for example, discussed whether teaching adults is different to teaching children and has also asked how adult learning can generate change in individuals and groups.

Based on a review of the literature, Caffarella and Meriam (1999) have identified two major perspectives with regard to the adult learner: the individual and the contextual. The psychological paradigm has driven the individual approach in adult learning whilst sociological theory and the interactive nature of the learning process has been the basis of the contextual viewpoint. The individual learner approach has been the dominant perspective in

the research literature for some time but recently the contextual perspective has resurfaced as a major factor in explaining adult learning.

The individual approach has been based upon two assumptions: learning is an internal event and a set of principles and competencies can guide this learning. Examples of this approach include the development of issues related to participation and motivation (Boshier & Collins, 1985), self-directed learning (Tough, 1971), andragogy (Knowles, 1970), transformational learning (Mezirow, 1991), memory and learning (Ormrod, 1995) and the neurobiology of learning (Sylwester, 1995). Following an introductory discussion on motivation and the impact of beliefs upon the adult learner, two of the better known approaches (andragogy and transformational learning) will be discussed in more detail as examples of this perspective.

Literature concerning the motivation of the adult learner is related to knowledge about learning, change and professional development programmes (Butler, 1992). Butler (1992, p.4) noted that "generally speaking, learners need to be interested, successful, and supported in their learning, and such intrinsic motivators are critical to programme success." Wlodkowski (1999) subscribes to intrinsic motivation theory and identifies ways in which teachers of adults can create learning environments that motivate the learner. In his earlier work, Wlodkowski (1985) considered the following factors that influence adult motivation:

- Attitude to the learning;
- The need for the learning;
- The stimulation offered by the learning;
- The learner's affect condition;
- The learner's feeling of competence; and
- The reinforcement offered by the learning event.

He believed that the qualities of expertise, compassion, enthusiasm, cultural responsiveness and clarity were particularly important for a trainer if the learner was to be motivated. In addition to this he has also analysed four major learning conditions of the instructional process that motivate adults to learn: *establishing inclusion* (individuals feel respected and connected), *developing attitude* (using personal relevance and choice to create a favourable disposition), *enhancing meaning* (appreciating adult's perspectives and values) and *engendering competence* (learners develop an understanding that they are effective in learning something they value).

Another significant consideration relating to the teacher is the personal consideration - what does it means to be a learner and the nature of the beliefs that impact upon the learner (Butler, 1992; Craft, 2000, Moon, 2001). Joyce and Showers (1988) found that teachers who were more active professionally were more active personally. Raymond, Butt and Townsend (cited Craft, 2000) have argued that the link between personal and professional disposition needs to be considered in professional development. They make the point that individuals need to understand their context, current pedagogy, curriculum, personal and professional lives before they can understand the present and what is in store for the future. Craft (2000) adds that such views relating to teacher biography are in contradiction to the technicist views of teaching.

Another dimension to consider relates to the impact of personal learning on the teacher. This is concerned with the individual's view of the nature of teaching and learning. West (1992) stated that a teacher's 'theory in action,' which was constructed from the teacher's beliefs about learning and teaching, impacted upon the teacher's attitude and response to professional development. In a similar vein Trigwell and Prosser (1999), noted that there is evidence to demonstrate that learner's view of learning influences approach to a learning task and also instructors instruct according to their image of the learner. In a Pacific setting, for example, Moli (1993) demonstrated how student teachers' beliefs impacted upon their thinking and behaviour about teaching and learning.

A number of years ago Saljo (1978) and others (e.g. Van Rossum, Deijkers, & Hamer, 1985) devised a typology to categorise differences in an individual's perception of learning and this has provided opportunities to investigate an individual's understanding of the learning process. In essence this is a typology that is a continuum from surface to deep learning (Marton & Saljo, 1997). That is, there are a range of qualitative ways of responding to learning from knowing the content to gaining the meaning and understanding its ideas. Biggs (1993) in extending the idea further identified the importance of a strategic approach and argued that it was also important to consider how a learner chooses to tackle a task (i.e. 'Do I need to use surface or deep approach here?'). Kember (1996) noted however that such approaches are somewhat stereotyped for there can be an integration of approaches – for example, memorisation can be strategically used to gain meaning. Nevertheless, Entwhistle and Entwhistle (1997) did find that students adopting a deep approach to learning (in

comparison to surface learning) were more satisfied, confident and could explain in a more coherent sensible manner.

Another issue relates to how teachers perceive learning to be related to practice, which of course has manifest implications for training. Practicality was identified by Day (2000) as a common thread which has been supported by the technicist viewpoint. Hoyle (1980) however viewed this as a 'restricted professionality' whereas the 'extended professional' located teaching in the broader educational context (e.g. collaborating with others, having an interest in theory and current educational developments). An alternative viewpoint was postulated by Stenhouse (1975) who believed that teachers analysed practice to generate local theory, which in turn would inform the practice. The existence of these different models was acknowledged by Higgins and Leat (1997) but they concluded that even for the extended professional individual, learning preferences had a significant role in what teachers selected to do.

Joyce and Showers (1988) discussed how personal growth status could impact upon professional development opportunities. 'Gourmet' consumers had a high activity and explored the environment, 'passive' consumers had a high degree of dependence and activity depended upon others around him/her while the 'reticent' consumer was seen to be reluctant to interact positively and often negative to others. Craft (2000) discussed how the career stage (in terms of experience, time in a position and psychological status) of an individual impacted upon professional development.

 Knowles (1970) popularised the term andragogy and has been termed "The Father of Adult Learning." He contrasted andragogy with pedagogy (Imel, 1989) and maintained that adults have unique learning needs, which has implications for the type of training that is planned for them. He defined andragogy as a technology that should drive the education of adults, "the art and science of helping adults learn." (Knowles, 1980, p.43). He acknowledged the importance of Maslow's hierarchy of needs in describing adult learners (Knowles, 1980). Four major assumptions were the basis of androgogy, viz.,

- Adults tend to be self-directing;
- Adults have a rich reservoir of experience for learning;
- Because they have a need to know or do something, adults tend to be life-, task- or problem-centred rather than subject oriented; and

- Adults are intrinsically motivated (Knowles, 1985).

On the basis of these assumptions he developed strategies that he believed would best meet the needs of adults. He stated adult educators should:

- Set a cooperative learning climate;
- Create mechanisms for mutual planning;
- Undertake a diagnosis of learner needs and interests;
- Plan learning objectives on the basis of the identified needs;
- Design sequential activities to meet the objectives;
- Select appropriate methods, materials and resources and;
- Evaluate the learning and re-diagnose learning needs (Knowles, 1985).

Feuer and Geber (1988, p.33) have noted however that Knowles has changed his views from a stage to a process position for "[w]hat he once envisioned as unique characteristics of adult learners, he now sees as innate tendencies of all human beings, tendencies that emerge as people mature." Regardless of this, andragogy has had a significant impact upon how adult education has been perceived and it has been viewed as different to teaching children and adolescents.

Mezirow (1991) has been associated with initiating interest in transformative learning and has reflected many of Knowles's views in his work. He has however expanded upon the cognitive characteristics of the learning process and places significance upon the higher level thinking skills of adults. Transformative learning is about dramatic individual change - how the individual sees himself and the world. Experience, inner meaning and critical self-reflection are essential components of this approach and individuals use these to examine their underlying assumptions. This process is often triggered by a problem, issue, dilemma, etc., and may be individually (or collectively) acted upon. By this process a change in an individual's perspective occurs. By changing the individual's meaning perspective, a change in their world will occur. Although this approach has been linked to social action, Taylor (1997) notes that predominantly most of the developments in this area are from the individual perspective.

The question of the uniqueness of *adult* teaching approaches for transformative learning remains an unanswered question, but it seems that setting the stage for transformative learning is at least necessary (Imel, 1995). The educator's role is essentially creating the conditions for the learning to occur and then facilitating the learner's understanding of how the new values, assumptions, ideologies and beliefs have been constructed (Newman, 1993). The ultimate goal is for the learner to independently engage in critical self–reflection.

Regardless of whether transformative learning is uniquely adult it has taken centre stage since the late 1980s (Caffarella & Meriam, 1999). For example, Taylor (1998) has undertaken a critical review of the topic, Dirkx (1998) has outlined the theoretical perspectives associated with the approach, Hopson and Welbourne (1998) have related it to adult development whilst, Livingston and Roth (1998) have considered the practice of transformative learning.

The second major approach to adult learning is contextual and it has been directed by two basic ideas: the interactive nature of learning and the sociological contributions relating to the structural aspects of learning. The interactive component emphasis is that the learner cannot be considered separate from the surroundings – the context and the learner's situation, background, history, etc., all impact upon learning. Examples of this approach include learning from experience (Bateson, 1994), situated cognition (Wilson, 1993), cognitive and intellectual development (Kegan, 1994), organisational learning (Barrie & Pace, 1997; 1998) experiential learning (Kolb, 1984) and reflective practice (Boud & Miller, 1996; Boud & Walker, 1992). The following discussion considers some of these approaches.

In the past few years there has been a growing literature base relating to adults' cognitive learning in contextual settings. The earlier discussion on theoretical developments in transfer of training has noted the features of the situated cognition approach. It emphasised that learning and the situation in which it takes place cannot be separated. Brown, Collins & Duguid (1989, p. 320) noted that knowledge and the process of learning should be viewed as "a product of the activity, context, and culture in which it is developed and used."

Reflective practice is concerned with using experience and prior knowledge, whilst engaging in practice, to make decisions. Caffarella and Meriam (1999) have identified within the contextual approach, three major assumptions of reflective practice:

- Those involved in reflection are committed to both problem finding and solving;

- It involves making judgements about what actions will be taken in a particular situation; and

- The issues of power and oppression as they impact upon decision-making need to be addressed

Schon (1987) has had a significant influence in this development and his notion of reflection in action has provided a means of ensuring that we can reshape our thoughts and actions whilst engaged in these behaviours.

With regard to organizational learning, Barrie and Pace (1997; 1998) have discussed the preference for human development *learning* that is grounded in meaning, valued contributions and cognitive orientation rather than the more narrow behavioural, performance approach. Xiao's (1999) investigation of the emerging economy in Shenzhen highlighted the significance of self-directed learning in the workplace and identified a number of important themes to facilitate on-the-job learning, viz.,

- The *meaningfulness* of the learning that contributed to self-learning and work-place learning;

- The role of *experience;*

- *Self-assessment* providing direction to the learning;

- *Work-place support;*

- Individual qualities of *responsibility, accountability and caring* promoting thoughtfulness and mindfulness; and

- The development of *thinking skills* arising from broad based course involvement.

Xiao found that continued learning improved the competence of employees and promoted organisational capacity.

The degree to which organisational learning imperatives are reflected in professional education opportunities is worthwhile to consider in this debate. These approaches to organisational learning are consistent however with MacKeracher's (1996) approach to adult learning that emphasises a learner-centred cognitive perspective. She accentuates the notion that teaching should respond to learning rather than controlling and directing it. She views

learning as a natural evolving process that originates within the learner and relies upon interaction with the environment/context. Learners need to make sense of the experience in that context.

Bonk and Kim (1998) address the psychology of adult learning from a socio-cultural perspective. They relate how interactional, social, cultural, institutional and historical factors are important influences upon learning in specific contexts. They note however that most work in this area has been applied to learning in children and not adult learning and problem solving. Furthermore, technological innovation has created new forms of socio-cultural tools that, for many adults, provide alternative opportunities for learning. The activity settings of adult learners (e.g. personal computers, internet based learning) has widened extensively in recent times and issues such as cognitive apprenticeships, scaffolding and learner assistance need to be examined in relation to _adult_ learning.

The structural component of the contextual approach has been concerned with factors such as race, class, gender, and ethnicity and their impact upon the adult learner (Caffarella & Meriam, 1999). Some of the studies in this area have been concerned with adult cognitive development (e.g. Goldberger, 1996), adult development and learning (e.g. Pratt, 1991), participation studies (e.g. Sparks, 1998) and indigenous learning (e.g. Cajete, 1994).

As Caffarella and Meriam (1999) have noted, most of the writing in this area has arisen from the feminist, critical or post-modern viewpoint. Issues relating to - whose interests are being served, who has access to the programmes, who has the control to make changes in the learning and the nature of knowledge are the fundamental considerations driving these viewpoints. The themes of power and oppression have been addressed as a means of understanding how to liberate the learner.

Most adult educators accept the value of both the individual and contextual approaches to understanding adult learning as a means to enhance learning outcomes, but there is also much to be gained by adopting an integrative approach (Caffarella & Meriam, 1999). The transformative learning and andragogy approaches could readily accommodate cultural considerations for example. Jarvis (1987, p.11) has recognised "that learning is not just a psychological process that happens in splendid isolation from the world in which the learner lives, but that it is intimately related to the world that is affected by it." Both Tennant and

Pogson (1995) and Heaney (1995) have similar views about adult learning and Pratt and Associates (1998) have developed a practical handbook utilising both the individualistic and contextual approaches.

Is Adult Learning Unique?

Since the evolution of andragogy, there has been widespread debate about the efficacy of a separate approach for teaching adults (Imel, 1995). Some (e.g. Garrison, 1994) believe it is unnecessary – all that is required is effective teaching. Cranton (1994), in defining the three categories of adult learning (subject oriented, needs based and emancipatory) identified that it was only Mezirow's emancipatory approach that could claim uniqueness for adult learning. But as Imel (1995) notes, although transformative learning may be unique to adults, does it necessarily require unique teaching strategies or simply a different approach? Donaldson, Flannery and Ross-Gordon (1993) examined research relating to adults' expectations for their learning and found some evidence for the incorporation of the andragogical approach (e.g. relevance of material and concern for student learning) but also there were expectations for teacher directed learning (e.g. knowledge, clarity). Imel (1995) concluded that the answer to the question 'is teaching adults different?' is both yes _and_ no. However, she believes that it is the wrong question. 'Should teaching adults be different?' gets to the heart of the issue. The purpose of the teaching and learning and the needs of the learners should direct the approach. She, along with Pratt (1993), has noted that many of the principles underpinning andragogy have yet to be tested. Indeed the issue is confounded by the intra-group differences and the diversity of adult needs and experiences, which also needs to be considered (Willis, 2000). Consider for example Daley's (1998) investigation of how nurses learn and the implications of this for training. Novice learning was via a contingent conceptual process whilst experts constructed their learning from a wide range of sources, the differences being explained as a function of experience and career development.

Adult Learning and Change

Another important issue raised by Imel (2000) is how adult learning and education can cultivate change. There are different types of change (Hohn, cited Imel 2000). Change by exception refers to an individual making one change to an existing belief structure (e.g. a racist accepts another person of different race as a friend). Incremental change is when change occurs so slowly that it is unnoticed but changes that result in an extreme point of

view are known as pendulum changes. Paradigm change, the type of change most frequently referred to in the educational literature, involves a change of assumptions, beliefs and values about the nature of the issue being considered. Change is transformative, political, involves learning, and takes place over a period of time (Arnold, Burke, James, Martin & Thomas, 1991, Levine, 1996; Lippitt, Watson & Westley, 1958).

Increasingly, power issues have been discussed in the adult education literature and the need for change (Imel, 2001). Until recently the individual perspective has dominated the discussion but there is now more attention directed to issues relating to change and the structural, historical factors shaping education (Caffarella & Meriam, 1999). There has been some consideration given to the difficulties of providing learners with tools to take action (e.g. King, 1998), but Brookfield (1995) has indicated that it is the trainer's responsibility to ensure that this occurs.

Imel (2000) has noted that the adult educator often takes the role of the change agent although not all will accept this role. She suggest that the following should guide such practice:

- Pay attention to context – change needs to be consistent with what we know about the context. Work within that to achieve the change.

- Be prepared to be pro-active – it may be necessary to initiate the change process.

- Attend to learning – facilitate the learning of the adult. For example, teach the skills associated with critical reflection.

- Build in action – provide a strategy for the change to be enacted.

Since the 1990s there have been three discernible, emerging trends in adult education (Brookfield, 1995). The issue of *ethnicity and culture* and adult education is now receiving considerably more attention but although it is acknowledged that between diverse groups there may be inter-group differences, there are also intra-group differences. According to Brookfield this has two implications: the western adult learning tradition will need to be revised to incorporate diverse views about learning and teaching <u>and</u> develop practices that encourage the teaching of the group by someone from within that group.

Hofstede (1984; 1991) has developed an interesting approach to cross-cultural training. He has identified four important factors that conceptualise trainer-trainee relationships and if there is a value or norm match between the key players on these criteria, then there is

potential for sustained, valued relationships. If the dimensions of power-distance (between the bosses and workers in a culture), capacity to deal with uncertainty (e.g. being innovative rather than rule-bound), individualism/collectivism, and masculinity (e.g. assertiveness)/ femininity (eg., concern for others) are concordant for trainers and trainees from diverse cultures, then it is likely that effective learning relationships could develop.

The second emerging trend concerns the development of *practical theorising* (refer Usher & Bryant, 1989). This is concerned with educators becoming aware of the practical theory that guides their practice. Practitioners' understanding has been linked to two interacting sources: colleagues' actions, which assist with a framing of the actor's personal theory and substantive formal theory.

The third major trend has been the development of *distance learning* programmes especially through new technology (Gibson, 1992). Many of the critical dimensions of adult learning – empowerment, reflection, experience and collaboration – have been incorporated into the distance education format (Brookfield, 1995).

Adult Education Research Needs

Brookfield (1995) believes that if research is to impact upon the education and training of the adult learner there are ten issues that need to be attended to, namely:

- Clarification of the term 'learning' and recognition that not all-adult education programmes seek formal learning.
- The interaction of emotion and cognition needs to be clearly understood and developed
- The need to understand learning as social phenomena.
- The development of cross-cultural and diverse perspectives of learning and adult education.
- The need to understand the role of gender in learning,
- Developing an understanding of the connections between skill attainment and less formal education/personalised education (that is so often more successful).
- The use of the adult learner's own constructions in the training arena.
- More use made of the qualitative research approach.

- The integration of the adult development approaches with adult cognition theory. The blending of the applied with the more academic would provide greater understanding.

- The need to relate adult learning to other developmental periods (e.g. childhood and adolescence) to maximise opportunities for growth.

This section on the adult learner has outlined the different perspectives that have framed the research endeavours. The question of the uniqueness of an adult learning style remains controversial. A number of research studies have examined the role of adult learning in the change process and increasingly power issues have been a predominant issue. Overall however, there remains considerable research undertaken to identify how best to develop effective educational programmes for adults.

In-Service Education and Change

Adult education has in the past 30 years assumed a professional status. It has acknowledged the importance of the individual and the context for learning and considered how best to implement changes. The question of whether adult learning is unique remains unanswered although attending to the adults' needs in learning is accepted. Ethnicity, practical theorizing and alternative modes of delivery are current issues that are being researched. One issue that has not been effectively considered however is the integration of adult learning theory with the professional development of teachers. In the past 20 years the issue of what constitutes effective in-service education for teachers has become an important issue (Craft, 2000; OECD[13], 1998). Rapid change, technological advances, increased international competitiveness, the realisation that schools can make a real difference to the lives of people and the consequent demands for higher standards and improved quality have all contributed to this development (Craft, 2000; Mortimore, Lewis, Stoll, Sammons & Ecob, 1988; OECD, 1998: Purkey & Smith, 1983; Rutter, Maugham, Mortimore, & Ouston 1979). Huberman (cited Fullan, 1992) indicated that it is at the class level that sought-after improvements will emanate and, accordingly, it is in-service staff development that needs to be considered as a critical component of the change process (Fullan, 1992).

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[13] Organisation for Economic Cooperation and Development

Effective Teacher In-Service and Transfer of Training:

Although in a subsequent section of this chapter in-service training and transfer of training are aligned as complementary training phenomena, it is important to consider the differences. Why, for example, can one not adequately subsume transfer of training within the notion of effective in-service training? That is, if in-service training is deemed effective, does it not obviously imply improved performance on-the-job? One of the difficulties is locating an agreement on what constitutes in-service training.

Most (e.g. Moon, 2001) would agree that an in-service programme is an 'off-site' or 'on-the-job' training opportunity relating to the current work context. Many incorporate strategies of transfer into the training, which of course blurs the distinction between the two phenomena. But, as with transfer of training (a concept that has been historically grounded mainly in the psychological literature), there are numerous and somewhat conflicting definitions of in-service training (a concept grounded mainly in the education/training literature). Some (e.g. OECD, 1998) view in-service training as an identifiable *process of learning* activities for the participants, whilst others (e.g. JHPIEGIO, 2001) refer to it as *outcome based* and related to subsequent on-the-job *performance.*

Transfer of training has also been defined in terms of outcome and process (Foxon, 1993) but it is more than this – it is implied by most that the application is associated with a focused training task, is effective and continuing as a result of training under-taken in a off-the-job learning environment (Baldwin & Ford, 1988; Graduous, 1991; Moon, 2001). As Ford (1994) noted, a strategy purposely defined in terms of transfer of training requires an orientation towards:

- A clear identification of what is to be changed;
- The nature of the changed behaviour and settings;
- What could prevent the change; and
- The degree of maintenance of change

But once again it is even more than this, it is understanding what facilitates the links between the course ideas, skills, attitudes, etc., <u>and</u> sustained practice of the activity. It is concerned

with identifying the facilitative links between both the internal/external dimensions of the training programme and process/outcomes. Planned transfer emphasises the systematic utilisation of 'value-quality change' approaches before, during and after the training programme. Bellanca (1996), for example, urged educators to adopt a more systematic arrangement for on-the-job teaching performance and noted that transfer of training should be more than a set of in-service training strategies – it is a process that should embody a range of contextually-driven activities/approaches that are relevant, have an expectation to transfer and authentic.

It is speculated (by this researcher) that many, when thinking about transfer strategies they have experienced, would embody these notions. There would be an awareness that that something has changed because of certain actions (despite some real or potential difficulties) and, that it has continued for some time.

Consider for example the use of cooperative learning as a training strategy on an in-service course. This could equally be defined as:

- An effective in-service strategy that is utilized for teachers to learn about a new curriculum (and hopefully implement some of the ideas), or
- An effective transfer of training strategy to ensure that teachers implement (hopefully in a sustained manner) ideas arising from the new curriculum (refer Johnson & Johnson, 1998).

In the first scenario, the emphasis is upon learning whilst in the second importance is placed upon application of ideas. The skilled in-service practitioner, of course, combines the two processes and hence there is a blurring of the distinction between the learning and transfer activities. This differentiation is somewhat analogous to Bloom et al (1956) interdependent levels of thinking and learning (knowledge acquisition, comprehension, application, analysis, synthesis and evaluation) – all have potentiality for development of teaching/learning activities but the application of the ideas is unique in that it moves beyond the various knowledge and understanding domains and requires application of the ideas etc., in a new setting. It is this that makes transfer of training unique.

This research project is based upon the premise that transfer of training needs to be viewed in a systemic manner. What this implies is that transfer has a number of dimensions internal and

external to the actual training event that need to be considered if change is to occur in an orderly fashion. Many in-service training strategies may be deemed to be effective in terms of structure (e.g. teachers help to plan the training), organisation (e.g. teachers work in a collegial fashion) and process (e.g. variety of active training approaches) (Butler, 1992) but this overlooks many aspects related to change and transfer of training. For example - Is the course relevant/appropriate not only to the individual but for the students, school, community and culture? How is the expectation for change identified before, during and after the course? What are the forces inside and outside the course that act as barriers and facilitators of learning and change? How do we best counter the barriers to transfer? Which strategies emphasise metacognitive auditing of the transfer expectation? Which strategies best simulate classroom experience/practice? What best measures the change in behaviour? How do these factors interact with one another? It is acknowledged however that the paradigm shift occurring in teacher in-service (OECD, 1998) is more systemic in approach and focusing upon learning for change.

Hence, the argument here is that, transfer of training expands upon the 'effective in-service strategies' approach and involves wider inter-related systemic issues such as attitudes, personality, cognition, motivation, trainability, learning outcomes, the organisational system, work/community environment, etc. This is consistent with Haskell's (2001) view that transfer subsumes learning.

In summary, training transfer can be defined in terms of sustainability, outcomes, process, internal/external course environments, roles (trainer, trainee, colleagues, and others) and a time orientation (before, during and after). The success of a training programme is dependent upon the creation of a true learning environment with these variables encompassing not only the training programme but the individual and his/her immediate and wider environment. [14]

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[14] In this current research, the participants were asked to identify transfer strategies, etc. not simply identify in-service strategies they enjoyed. Refer to method section (chapter 6).

The Importance of Effective Teacher In-Service

What is professional development? Many terms are associated with the training that teachers undertake beyond their initial induction into the profession such as professional development, in-service, continuing education, etc.. For the purposes of this review, the OECD (1998) definitions for professional development and in-service have been adopted. It defined professional development as any *activity* that develops an individual's skills, knowledge, expertise or other characteristics as a teacher and has included personal study, reflection, and formal course participation. In-service education and training are referred to in more specific terms whereby practising teachers participate in identifiable learning activities. The purpose of professional development is for teachers to assimilate new information, acquire skills and develop new behaviours (Korinek cited Butler, 1992).

There are a variety of educational and political reasons why teacher/staff development has been considered important. Howey, Matthes and Zimpher (1985) outlined that effective staff development constituted pedagogical, personal, cognitive, theoretical, professional and career development. Gall and Renchler (1985) and Lanier and Little (1986) highlighted the importance of the following:

- Personal professional development – individual needs and choice facilitate the development of knowledge, skills and the intellect;
- Career advancement – bureaucratic requirements/encouragement to obtain credentials and widening of career advancement opportunities;
- Induction – adding to the skills and knowledge of the newly employed; and
- School improvement – teachers assuming a responsibility to improve student performance by improving own skills and knowledge.

Teacher professional development has also taken on particular significance because of the changing social, technological, knowledge and economic contexts throughout the world (OECD, 1998). Education has, as a consequence, become politicised and demands are made upon it to respond. Economic globalisation has resulted in constant change with demands for highly educated and competitive labour forces. Concomitant social changes in the family and prevailing social conditions (e.g. rising demand for a high level of living, increased leisure time, increased societal diversity, drug usage, sexual behaviour) have also increased the

demands for a responsive education system. Furthermore, as the OECD report notes, in many countries there is an aging teacher population, which requires re-training of teachers in the new teaching-learning perspectives and the changing policy and curriculum directives. Furthermore, higher educational standards are being demanded. Many believe that such changes can only be achieved by the creation of an innovative flexible system that facilitates new skills and capabilities in the teaching force (OECD, 1998).

Indeed, there is significant evidence to suggest that in-service in the past has failed to achieve the intended outcomes and there are calls for changes to how in-service is approached (Ainscow & Hopkins, 1992; Fullan, 1992: Hargreaves & Hopkins, 1991, 1994: Smyth, 1991). Many programmes are 'top-down' and have priorities set by the management whilst others do not match the realities of the classroom and are irrelevant to teachers' needs. Teacher ownership of programmes occurs infrequently (OECD, 1998).

Accordingly there have been demands for a paradigm shift in the provision of in-service education (Abdal-Haqq, 1989; Clair & Adgar, 1999; Craft, 2000; Craig, Kraft & du Plessis, 1998; Darling-Hammond, 1990; ERO, 2000; Fullan, Bennett & Rolheiser-Bennett, 1990; Hargreaves & Hopkins, 1994; Lieberman & Miller, 1999; OECD, 1998; Simmons & Schuette, 1988; Smylie & Conyers, 1991; USA Dept of Education, 1998). In essence this involves more attention to the *process* of in-service. These experts have called for –

- A move away from undue reliance on competency programmes and adoption of constructivist approaches that value teachers', experiences, skills, knowledge and leadership, that can facilitate professionalism. Teachers need to be members of the knowledge society who can change and promote student outcomes. There is a need for focus upon individual, collegial and organisational improvement. Such approaches need to be aligned with what we know about the research on effective teaching, adult learning and professional learning communities.

- The above implies a redefinition of the attributes of in-service training. For example, there would need to be less focus on replication and knowledge transfer and more attention given to the strategic selection of content, structures and processes of learning, namely,

    - the use of the best available research and practice ideas in teaching, learning and leadership;

- the ongoing identification of teacher needs and support for the development of abilities;
- attention to training quality and trainer characteristics;
- teacher involvement, decision-making and collaboration on in-service training;
- differentiated, accessible, professional programmes (e.g. teacher research, peer coaching, self directed learning) that are coherent, long-term, planned and embedded in the daily life of the school;
- a recognition that time is needed along with resources to make gains;
- the development of higher level thinking skills (such as reflection, analytical learning, problem solving) as critical components of teacher in-service programmes;
- the improvement of subject content, along with the associated teaching strategies and technology skills;
- the development of cooperative/collaborative, experiential and interactive activities;
- the development of wider partnerships with external agents (subject experts, business, parents, etc); and
- an accountability for outcomes in terms of transfer of the training to the classroom;

• More concern with student well-being (personal, moral, social development);

• More in-service to be undertaken within the school setting although acknowledging that the traditional off-campus courses do have a place. There needs to be a balance between classroom learning, out-of-class learning and out-of-school learning. Guskey (1985) noted however that off-campus courses can facilitate a wider sharing of ideas;

• Principal leadership in planning and development of professional development infra-structures;

• School/team participation but balancing of individual and school needs;

• More adequate linking of theory and practice but tied to the realities of classroom life;

• Linking of appraisal performance systems with in-service developments; and

• Viewing in-service as a process that commences at completion of initial training.

Clair and Adgar (1999) emphasised that for these developments to occur there need to be certain prevailing conditions, viz., supporting district and school policies, principals assuming a coordinating function for the student, teacher and organisational learning and sufficient time for in-service to occur. In the past few years there have been a range of professional development and in-service models developed to achieve many of these requirements. There

are three interrelated aspects to consider – the structural issues (e.g. as outlined by Sparks & Loucks-Horsley, 1990), organisational aspects (e.g. the norms of collegiality and continuous improvement as detailed by Little, 1982) and the processes associated with teacher learning (e.g. as outlined in the model advocated by Joyce & Showers, 1980). The following discussion outlines a range of these models.

In-Service Education – Structural Issues

Butler (1992), in commenting upon the effective structural approaches to in-service, identified the characteristics as:

- Designs based on principles of adult learning and a full understanding of the process of change;
- Programmes conducted in school settings;
- Development taking place in more than one incident, and incidents being spaced over time: that are conducted long enough and often enough to assure that participants progressively gain knowledge, skill and confidence;
- Training conveniently scheduled to avoid interfering with ongoing job requirements of participants;
- Development activities taking place at a convenient location;
- Trainers having credibility with the participants; and
- Participants being involved in the planning, development and presentation of the training programme

As a means of providing a wider variety in focus, duration and intensity of professional development structures, Sparks and Loucks-Horsley (1990) outlined five different structural models. *Individually guided staff development* (e.g. reading of professional journals; experimenting with new initiatives), which was based on the assumption that individuals can best judge their own learning needs. With *observation/assessment,* peers engage in collegial observation in order to provide feedback on behaviours that are consistent with individual or school goals. *Involvement in a development/improvement process,* another form of teacher development, is based on the assumption that teachers work effectively when there is a real problem to solve and this is particularly true when working together with peers. Traditional staff development programmes, often termed *training*, include activities such as lectures, demonstrations, role-plays, etc. The fifth means of professional development, *action research,*

involves an inquiry approach whereby teachers study their own classroom, develop new understandings and then make decisions about practice.

The most widely used of the above mentioned models was the training approach and there is considerable evidence to suggest that this approach can be effective under certain conditions (Butler, 1992). Gage (1984) found, for example, that in eight out of nine experimental studies, in-service education was fairly effective – "not with all teachers and not with all teaching practices but effective enough to change teachers and improve student achievement, or attitudes, or behaviour" (p.92). Fullan (1992) suggested that inquiry will become more utilised in the future as the reflective approach is better understood and accepted.

Organisational Context of In-Service

Considerable discussion has occurred with regard to the organisational context for professional development of teachers, although the emphasis has been upon school-based programmes (Butler 1992). Little (1982) identified the norms of collegiality (with supporting organisational structures) and continuous improvement as two major characteristics of schools that contribute to effective staff development. In acknowledging that collegiality was insufficient for high rates of innovation and commitment, Little also recognised the value of a collaborative culture for staff development. Fullan et al. (1990) added to Little's two key ideas - a shared purpose and a set of structures (e.g. roles and policies) that would facilitate school change and improvement (e.g. new roles and policies). Sparks and Loucks–Horsley (1990) identified five important aspects of organisations where staff development was most successful, viz.,

- A collaboratively developed coherent set of goals and objectives;
- Strong leadership that minimises authority distance;
- High priority placed on staff development opportunities;
- Monitoring of progress; and
- Knowledge, expertise and resources used judiciously.

In recent times there has been importance placed upon schools developing their own professional development structures and organisation to meet teacher and community needs as well as promote change (Butler, 1992). A number of different terms have arisen to describe

this development, namely, 'community of learners,' 'professional learning communities' and 'professional development schools' (e.g. Darling-Hammond, 1998; Hord, 1997; Larrivee, 1999; McCaleb, 1995; Myers, 1996; Sergiovanni, 1994). Hord (1997) identified the characteristics of professional learning communities as:

- Supportive and shared leadership;
- Collective learning;
- Shared values and vision; and
- Supportive conditions in human and physical resources

In this approach, the principal has a key role to play in developing a culture of collaboration as well as facilitating accountability procedures that link the educators to one another, the students, parents and wider community (Southwest Educational Development Laboratory News, 1999).

Teacher in-Service Processes

Overall, the processes emphasised for achieving professional development are based upon a systematic approach to developing behaviour change (Butler, 1992). Other characteristics include:

- Participant involvement and responsibility for learning;
- Recognition of the different needs of participants;
- Content presented via a variety of training methods;
- Adequate time allocation;
- In-course and post-course learning reinforcement;
- Collaborative learning;
- Needs assessment;
- Modeling of approaches; and
- Opportunities for practice and experimentation (Butler, 1992).

The staff development model of Joyce and Showers (1980) was one of the earliest and has been one of the most widely discussed approaches to teacher in-service. It stated that behavioural change arose from in-service that consisted of the following steps: a presentation of theory, a demonstration or modeling, practice in a protected or simulated situation, and feedback. In a similar vein, The North Central Regional Educational Laboratory (n.d.) also developed a five phase model that promoted ongoing professional development viz.,

- **Building a knowledge base** e.g. goal setting, assessing needs, workshops, study groups;
- **Observing models and examples** e.g. class visits, peer observation, instructional artifacts, co-planning, videos;
- **Reflecting on your practice** e.g. teacher journals, teacher authored materials, collegial discussion;
- **Changing your practice** e.g. action research, peer coaching, support groups, curriculum development;
- **Gaining and sharing expertise** e.g. team planning, mentoring or partnerships, networks;

There have been two widely acknowledged models of teacher development in New Zealand (Bell & Gilbert 1996; Cardno, 1996). The Cardno holistic model of professional development is based upon the understanding that in-service not only emphasises change but that it is a shared responsibility between the school and the individual. It stresses the importance of integrating the personal and management development of the individual with the curriculum and the strategic direction of the school. These factors are seen as interacting with the school's strategic management planning and leadership qualities. Performance appraisal of the teacher then becomes the focus for these activities. Figure 3.1 is a display of the model.

Another widely acknowledged model of teacher development in New Zealand, developed by Bell and Gilbert (1996), arose from a three-year research project on the teaching of science. It is a model that highlighted the importance of staged interactive, personal, social and professional developments that constitute effective teacher professional growth. The teacher
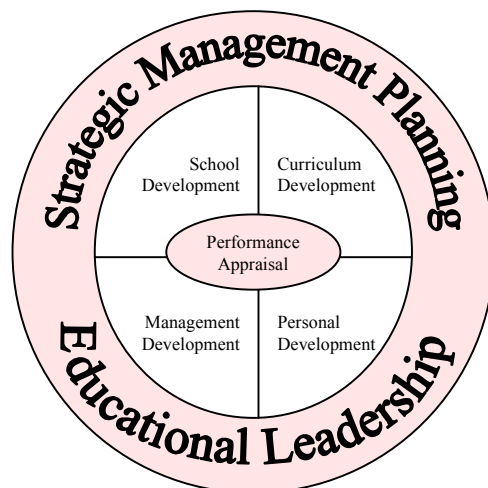
Figure 3.1. Holistic Model of Professional Development (Cardno, 1996)

educator's role was to ensure that stage 1 to stage 3 key components were developed to assist the teacher achieve the outcomes. Figure 3.2 outlines this model.

Transfer, Change and Culture

As indicated above, the teacher in-service literature has made constant reference of the need to develop strategies to enhance teacher performance in the classroom; and considerable attention has been directed toward change theory to account for this process (Craft, 2000). But as a number of educationalists (e.g. Veenman, et al., 1994) note, there have been only limited attempts to relate in-service training practices specifically to transfer theory and coherent explanatory transfer models. A survey of the transfer literature indicates clearly that much of the literature on transfer of training has been related to organisations/industry/business (eg., Broad & Newstrom, 1992) and, although many of the findings may be applicable to education, there have been calls for more consideration to be given to it as an educational issue, particularly with regard to the in-service training of teachers (eg., Veenman et. al., 1994).

The main purposes of in-service training are to stimulate professional development and development of teachers, to improve school practice, and to implement agreed-upon innovations in the school (Sparks & Loucks-Horsley, 1990). Accordingly, it would follow that the incorporation of transfer of training strategies should become a significant element in the planning of teacher development courses. Veenman and van Tulder in a series of studies (van

SOCIAL DEVELOPMENT	PROFESSIONAL DEVELOPMENT	PERSONAL DEVELOPMENT

Social development 1: Seeing isolation as problematic

Professional Development 1: Trying out new ideas

Personal development 1: Accepting an aspect of my teaching as problematic

Social development 2: Valuing collaborative ways of working and reconstructing what it means to be a teacher of science

Personal development2: Dealing with restraints

Professional development 2: Development of ideas and classroom practice

Social development 3: Initiating collaborative ways of working

Personal development 3: Feeling empowered

Professional Development 3: Initiating other development activities

Figure 3.2. Model of Teacher Development (Bell & Gilbert, 1996)

Tulder, Veenman & Sieben, 1988; van Tulder & Veenman, 1991; van Tulder, van Vegt, & Veenman, 1993; Veenman et al., 1994) concerned with the development of "best practice" in-service, noted that the transfer of training issue was important and more research was required to develop strategies that encourage transfer to the classroom (particularly for off-campus programmes).

Veenman et al (1994) noted that changing instructional and management practices in schools often involved confusion, self-doubts, setbacks, new procedures and considerable uncertainty; therefore support and encouragement strategies were needed to reduce the intensity of the change demands. Bolam (1987) identified numerous transfer barriers - information and experiences being too general, theory unrelated to practice, and an over-use of the lecture and discussion methods - which have often resulted in teacher in-service programmes being ineffective in changing teacher behaviour.

There have been some attempts by educationalists however, to identify and develop an understanding of the in-service strategies that promote transfer. Bush's (1984) research on the Joyce and Showers model clearly identified coaching as the most powerful component for obtaining transfer, although Joyce and Showers indicated that all the steps needed to be implemented to gain maximum benefit. Both Little (1986) and Fullan (1982) recognised follow-up and shared collaboration as important components impacting upon transfer.

> *A series of several sessions, with intervals between in which people have*
> *the chance to try things (with some access to help or some other resources)*
> *is much more powerful than even the most stimulating one-shot workshop.*
> (Fullan, p.286)

Sparks (1986) noted though, that it was peer observation with feedback that was more effective for transfer than workshop attendance or trainer coaching. Bennett (1987) found that for the implementation of training content there needs to be an environment of frequent talk, experimentation in the school, feedback, support and reflection. Where there is, for example, norms of collegiality, continuous involvement, a range of professional interactions and involvement of the principal, change is more likely to be successful in schools (Leithwood & Montgomery, 1982; Little, 1982; Rosenholtz, 1991). To assist the process van der Vegt & Knip (1988) suggest that there needs to be a very close fit between innovation and daily classroom/school practice whilst Doyle and Ponder (1978) stressed the importance of the practicality ethic - instrumentality (appropriateness), congruence (the 'fit' with the teacher's behaviour) and cost (time, resources) - for the teacher to validate change.

Showers, Joyce and Bennett (1987) noted that transfer was not obtained easily. "For a complex model of teaching (to reach implementation), we estimate that about 25 teaching

episodes during which the new strategy is used are necessary before all the conditions of transfer are achieved." (p.86)

Thus the specific literature on teacher in-service transfer, although somewhat limited in nature has to some extent reflected the findings related to the general transfer literature and has highlighted such issues as the context for change, the roles of the stake-holders, the teaching-learning processes and the relevance and practicality of the training. However, what has been lacking, according to Bellanca (1996), is the development of a systemic approach to transfer in education. This approach would need to accommodate the prevailing view of the teacher as a reflective practitioner (Simmons & Schuette, 1988), who was attempting to define transfer contexts for student learning and the (sometimes competing) organisational demands for change (Hargreaves & Dawe, 1989). As Bellanca (1996) noted, for effective systemic change, organisational and individual change priorities need to be in harmony if transfer is to occur.

Given that Bellanca (1996) related transfer to successful organisational and individual change in schools and that knowledge transfer alone is an out-dated practice, he argues for a systemic approach. He has based this on the constructivist learning transfer paradigm. Embodying three interactive elements:

- Establishing a transfer promoting organisation – both students and teachers need to view learning as preparation for life and hence policies and activities reflect this ethos;
- A professional development programme that is transfer promoting – there is an expectation that the programme requires transfer of ideas to the classroom; and
- Learning tasks for students and teachers that are designed to be transfer focussed (e.g. relevant knowledge, authentic tasks, application projects, etc.)

Bellanca's (1996) discussion on systemic reform has related transfer of training theory and individual change to school change. He noted individual change and organisational change were woven like a fine rug – pull one thread and you damage the whole carpet. In doing this, he has aligned the key features of both processes. This ensures a clearer understanding of what constitutes innovation in the school setting. There is indeed a considerable literature outlining the nature of the change process in schools and this can provide an understanding of the institutional processes and contexts that need to be considered for transfer of training (e.g. Fullan, 1991; Willis & Bourke, 1998)

Ellsworth (2000) has stated that change efforts can only be understood if the context for change is identified and he has formulated a framework of models from the literature that account for the process. Overall his framework can best be understood in the following terms. The change agent communicates the innovation to 'another' and this is accomplished via a change process within a particular context which may contain resistances that disrupt or modify the innovation. By utilising a systemic approach the chances of a lasting effective change can be optimised. He outlines these as a number of recursive steps and draws upon the existing literature as resources for the change, namely,

- Initialising the change and understanding the overall process (e.g. Fullan, 1991);
- Understanding the operation of the systemic components inside and outside the organisation to appreciate its needs (e.g. Reigeluth & Garfinkle, 1994);
- Plan and guide future efforts related to the change process (e.g. Havelock & Zlotolow, 1995)
- Commit to a plan and act (e.g. Hall & Hord, 1987);
- Identify the resistances (e.g. Zaltman & Duncan, 1977) and deal with them (e.g. Rogers, 1995) and/or rectify deficiencies in the change environment to more readily accept the change (e.g. Ely, 1990).

Fullan has been one of the most notable writers in the area of educational change (Craft, 2000) and he has identified four main insights in the change process (Fullan, 1992). He states that change requires some active initiation and participation (i.e. an individual or group needs to start a change), pressure and support for the change needs to be evident, changes in behaviours will often precede belief changes and ownership of change will develop slowly. Given this, it is understandable that change does not always readily occur. For example, Fullan, et al. (1990) reported that teachers initial enthusiasm following a course often waned when they returned to the school and classroom. The training and the follow-up may have been adequate but the school environment can so readily mitigate against the changes.

Fullan (1992) has also identified three major categories of factors which influence implementation of innovation in schools and classrooms: (a) characteristics of the change (e.g. need and relevance of the change); (b) characteristics at the local level (e.g. local support and involvement, school climate); and (c) characteristics external to the local system (e.g. role

of the government, external assistance). From these factors he distinguished the key theme characteristics of schools and classrooms that engage in successful improvement efforts as: vision-building (e.g. vision of the future), evolutionary planning (e.g. plans can be adapted to improve the `fit'), initiative taking and empowerment (e.g. developing a collaborative work culture), staff development and resource assistance (e.g. support given during implementation trials), monitoring/problem solving (e.g. using implementation information to get additional assistance), and restructuring (e.g. time provision for individual and team planning).

He then extended these ideas into eight basic lessons for harnessing the forces of individual and organisational change, viz.,

- You can't mandate what matters – the more complex the change the less it can be forced;
- Change is a journey not a blueprint – it is loaded with uncertainty;
- Problems are our friends – these are the route to deeper change and satisfaction;
- Vision and strategic planning come later – ready, aim, fire is a more fruitful option;
- Individualism and collectivism must have equal power – both have advantages and weaknesses;
- Neither centralisation or decentralisation works - both are needed for effective change;
- Connection to a wider environment is critical for success - need to learn externally as well as internally; and
- Everyone is a change agent – experts <u>and</u> personal mind set and mastery are essential for meaningful and effective change.

A considerable literature base has developed around the importance of the notion of a school culture, and its importance for change (Sarason, 1996). The overall physical and psychological atmosphere of a school is a most pervasive influence but is often least acknowledged (Waugh & Punch, 1987). Firmly entrenched traditions often subvert innovations, and hence as Purkey and Smith (1983) note, proposed changes in schools imply changes in attitudes, norms, beliefs and values associated with the school culture. Schein (1985) warned however that the cultural norms that facilitate improvement (e.g. critical enquiry, continuous improvement, shared vision and shared involvement in decision making) are the very activities that threaten the status quo. Schlechty and Cole (1991) and Sergiovanni and Corbally (1986) suggest that collegial relationships can help with this process however and facilitate change in attitudes and beliefs.

They believe the principal of the school has a particularly important role here to encourage collegiality and to develop a culture of collaboration.

Summary

This section on in-service training and change has outlined the importance of effective in-service and the demands for a new professional development paradigm. A range of structural in-service components were outlined and the importance of the move toward collaborative shared in-service was discussed. The systemic behaviour change processes for in-service have emphasised the individual and organisational responses as well as the importance of the social component. There have been some attempts to link transfer with school change processes. Mostly however the literature has not been synthesised. The importance of understanding school culture when instigating change was discussed in the latter section.

The Cook Islands: Culture and Schooling Context

> *Although it might seem that the use of individual instances would be restricted to novel situations, there is evidence that particular events may be tremendously important in people's lives and may condition their responses to a number of different situations.* (Read, 1983)

Cook Islands Culture

It is generally accepted that culture is a body of learned behaviours that is common to a given society. People learn culture – it shapes behaviour and consciousness from generation to generation in that society. It consist of systems of meaning (language being the primary source of meaning), ways of organizing society, from kinship groups to states and multi-national corporations, and the distinctive techniques of a group and their characteristic products. Culture is reflected in the society - a relatively self-sufficient group of people who have interdependence and continuity through successive generations (Miraglia, Law & Collins, 1996)

The Cook Islands' culture is unique but has common threads with other Polynesian cultural groups. Even each island within the Cook Islands has proud traditions and cultural differences. They are part of Polynesia and the indigenous population is Maori, distant

relatives of the Maori of New Zealand. In much of the literature and mass media, the Polynesian society has been romanticised with descriptions of uncomplicated, simple and relaxed lifestyles, a populace characterised by contented dispositions and traditional folkways, white sandy beaches, coconut palms and an abundance of provisions. Even the early scientific accounts of the Polynesian lifestyle (e.g. Beaglehole & Beaglehole, 1946; Mead, 1928) had considerable invalidity and were somewhat naïve descriptions of life in Polynesia. Although such accounts heralded a scientific interest in the Pacific, they masked the realities of life in the Pacific in the minds of many people and this understanding has persisted until the present day.

Traditional Polynesian cultures, such as found in the Cook Islands, were very complex, highly specialised and diversified.[15] The recent scholarly accounts (e.g. Aiono, 1992; Connell & Lea, 1995; Graves & Graves, 1978; Keesing, 1981; Linnekin & Poyer, 1990; Metge, 1976; Oliver, 1989; Ritchie & Ritchie, 1979; Ritchie & Ritchie, 1985) present a more accurate representation of both the earlier and contemporary lifestyles and have recognized the intricacies of past and present culture.

Examining the Cook Islands culture as an example of a traditional culture enables distinct differences to be defined in relation to western culture. Drawing upon the research studies of Cushner and Brislen (1996), and Hall (1973) a number of essential variables can be identified and categorised into traditional (e.g. Cook Islands) or non traditional cultures (e.g. western nations). Refer to table 3.1. According to Broekhuizen and Dougherty (1999) this differentiation of variables needs to be taken into consideration when working with diverse groups of teachers. These sets of variables are not inclusive of any one particular group but simply illustrate the contrasting ways of knowing and believing.

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[15] It is acknowledged that the cultural characteristics of each nation, within Polynesia, varies. However there are a range of common themes that are typically Polynesian.

Table 3.1

Cultural Variables of Traditional and Non-Traditional Cultures

Cultural Variable	Non-Traditional Cultures	Traditional Cultures
Participatory structures	Whole group, competitive	Small group non-competitive
Decision-making process	Individual	Collective
Concept of time	Linear (concrete)	Circular (abstract)
Task completion	Task orientation	Process orientation
Leadership roles	Democratic	Autocratic
Roles of participants	Active	Passive
Knowledge acquisition	Theoretical	Experiential
Gender roles	Non-prescriptive	Prescriptive
Individual expression	Vocal, non-conforming	Reserved, conforming
Mode of interaction	Direct	Indirect
Protocol	Informal	Formal
Recognition of excellence	Overt praise, singled out	Private recognition, group oriented
Modes of learning	Theoretical, inquiry-based	Practical, didactic

Thaman (1996a)[16] notes that Pacific cultures are characterised by: the spiritual, rank and authority, importance of specifics, conformity, interdependence, others' feelings, all blood ties and restraint. Whereas, Western cultures emphasise: the secular and scientific, equality, universals, individuality, independence, individual rights, the nuclear family, and critical judgment. Pacific society is a society in which the community interests and kinship of the extended family are highly valued for these not only provide for basic needs but also enable an individual to be identified. Within this context it is important to understand: humility, respect for others and those in authority, a hierarchical status system, the uniqueness of the individual and community being 'one', the significance of the peer group for socialisation, the value of consensus and distaste for criticism, the expectation of community participation, the importance of the past and present, appreciation for privileges received, church attendance, the values of friendliness and emotional spontaneity (Crocombe, 1983; PIERC, 1982; Rere, 1976; Rere, 1977; Ritchie & Ritchie, 1979; Ritchie & Ritchie, 1985; Thaman, 1996a).

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[16] This author sometimes uses the name Helu-Thaman

There has been considerable concern expressed however, about the over-whelming influence and domination of western culture. Power (1992) stated for example –

> *'Culture,' says Carlos Fuentes, 'is a sea shell where we hear voices of what we are, what we were, what we forget, and what we can be.' Without this seashell, individuals and groups have great difficulty in finding their way. Indeed the relentless and overwhelming technology and worldview of the west, together with the problems of economic survival, have precipitated a cultural crisis in most parts of the non-western world. It is a crisis of the legitimation of the existence of smaller cultures and their claim for a place in the future world. (p.15)*

Others have been more optimistic. Crocombe (1983) observed that the Pacific cultures were still very much alive. Although maintaining a traditional quality, change has been present within the Polynesian culture and the more recent contact with Western culture has brought considerable change. Crocombe termed it a 'bruising.' Nevertheless, with regard to the maintenance of traditional norms and values, and acknowledging there are national cultural differences, the Polynesian culture remains a pervasive cultural force (Linnekin & Poyer, 1990).

Professor Hau'ofa (e.g. 1993; 2000), a Tongan anthropologist and Director of the Oceania Centre for Culture and Arts at the University of South Pacific, has broadened this discussion about cultural imperialism. As a consequence of his own voyage of discovery, in his satirical and academic treatises he has urged that a wider and more desirable perspective of the region be adopted. He has rejected the demeaning notion of 'islands in the far seas' in preference of 'sea of islands' or Oceania. He has outlined how this vast area is not a collection of isolated undeveloped nations, dependent upon foreign aid, but an area that is united in many ways – it shares rich natural resources, has talented inhabitants utilising the environment, has a familial, economic, socio-cultural interdependence, and a population that has spread throughout the Pacific rim. It is a region 'with' an identity, an all inclusive 'Oceania'. He believes that this more promising perspective will encourage its inhabitants to reawaken a pride in their people, culture and history and provide a more positive context for future endeavours.

According to Ritchie and Ritchie (1985), understanding the culture of Polynesia rests upon appreciating the interaction of four key themes: kinship, status and respect, sharing and caring, and unity through consensus. It is 'the Polynesian way'. It embodies a comfortable means of communicating with each other, a consensus in manners, attitudes and values

including respect for parents and elderly, generosity toward others and an acceptance of Christian ethics. Also implied is feasting, dancing, games and sport.

Ritchie and Ritchie (1985) have identified a number of key principles that determine psycho-social behaviour in a Polynesian setting. Firstly, one must learn to live in a bi-lateral status system whereby one's role position is respected and valued by others but is dependent upon one's role performance which implies that the needs of others have to be taken into consideration. Secondly, although the individual and community cannot be separated, there is a dynamic tension between the two forces and it is through consensus that this is expressed and resolved. Ritchie and Ritchie note: "To learn the techniques of balancing individual and community interest for oneself by respecting and acknowledging the strategies of others in the same dimension requires both a complex and precise socialisation and continuous learning throughout the life-span." (p.23).

Another important process impacting upon development is the avenue for innovation and change within the tradition of consensus. After all, Polynesians have over the centuries managed considerable change, such as migration, and continue to do so but within a framework that has ensured survival of community values and norms. Innovation and change can be dysfunctional and unsettling but within Polynesian society the consensus mechanism functions to stabilise any changes. Fourthly, the stratification system is not rigid and does tolerate change in status. For example, there are opportunities for those with a lower status, either achieved or ascribed, to be socially mobile and assume higher role positions (e.g. appointment of women to political office).

Within this framework that regulates behaviour, there are two key behavioural responses (PIERC, 1982). *Aroha* (Cook Islands Maori) refers in a narrow sense to love but it is more than this – it generally refers to a concern for the welfare of others. It signifies kindness, mercy, greetings, farewell and it shows itself in the way Polynesians say things, what they do and the things they give. It functions to bring rewards in terms of close personal relationships facilitating trust, respect and loyalty and, accordingly, represents a way of life. The other central concept, which can be contrasted with *aroha*, is *akama* (Cook Islands Maori). This implies shame and shyness of others as a consequence of a perceived wrongdoing. It is a sanction that brings shame on oneself (and sometimes family). It may for example, result from others (peers and those in authority) laughing at an individual's mistakes or non-

conformity. This ridicule at times is so strongly encountered that it can result in a withdrawal of the person from activity and social interaction. The distaste for criticism can therefore act as a powerful form of control.

> *Thus, the ideal person would be one who expresses a strong sense of independence while acknowledging community consensus, who can deal with the politics of status differentiation and process, who can tolerate the strains of remaining in the community and who will pay the 'debts' of membership with generosity and humility, who accepts authority (but also knows how and when to use and manipulate it) and who can tolerate conflict and ambiguity while adapting to change.* (Ritchie & Ritchie, 1985, p. 34)

Learning, Teaching and Schooling

Considerable folklore exists about the Polynesian learning style. It has been accepted for a considerable time however, that it is unlikely there are significant cultural differences in cognitive processes (Scribner & Cole, 1973), and more recent literature (Irvine & York, 1995) has indicated the cautions that must be exercised in ascribing learning styles to cultural groups. What can be ascertained is that all people have the potential to perform the basic cognitive functions such as memorisation, concept formation, reasoning, etc., and that there are cultural influences that may create a predisposition for an individual's learning. Socio-cultural factors can significantly impact upon and influence learning processes (refer to Cole & Scribner, 1974; Ratner, 1997; Scribner & Cole, 1973), but this is an insufficient reason to ascribe a learning style to a group of individuals from one cultural group. Cultural determinism is difficult to defend, for all of us have the potential to develop a multiplicity of learning processes (Anderson, 1995; Gardner, 1993; Irvine & York, 1995); mega-grouping implies that there is homogeneity within a broad, diverse group of people and denies intra-group differentiation. Anderson (1995) suggests that it is of value however, to study the interplay between the diverse group characteristics and then define how such factors can impact upon learning preferences. For example, some cultures place emphasis upon collaborative styles of interaction and accordingly, it would be imprudent for a trainer to overlook the strengthening of these teaching approaches. Incorporating this concept with the maintenance of a varied approach to learning, to meet the needs of all individuals in that group is favoured by many (Gardner, 1993).

If the above thesis is accepted, then within each culture it is likely that there will be a preference for a set of learning strategies/contexts and learning approaches that will probably be influenced by these forces. Little (1990) refers to this shared learning system as the 'base learning culture'. In a research study, Moli (1993) examined how beliefs impacted upon student teachers' behaviour and, although it was undertaken in Samoa, it has implications for Polynesia[17]. She outlined how teachers construct their ideas and beliefs from a range of sources including personal experiences, their experiences of being taught and the culture. Typically what occurred, in a traditional sense, was that a 'teacher' would directly transmit knowledge, skills etc., via talking/demonstrating and the learners would observe and then practise or imitate the behaviour. The 'teacher' was accorded courtesy, respect and obedience and the questioning of authority (or mana) would be a violation of cultural norms. Often the learning occurred in a group setting. In detailing how the Samoan cultural perspective can be employed to examine beliefs about teaching and learning, she identified transmission learning, learning through observations, learning by doing, learning in groups and the links between the indigenous language and thought (and hence behaviour) as critical determinants. Moli also explained how the language and thinking were linked and how this impacted upon what Samoans considered teaching and learning to be. For example, in both the Samoan and Maori languages there is only one word for teaching and learning and this can readily imply that the two processes are the same.

In a similar vein, Ritchie and Ritchie (1985) noted that there is an emphasis on learning through traditional approaches of observation, imitation and participation. In traditional Polynesian society there was little interaction or feedback between the teacher and learner but because many tasks were repeated, there were frequent opportunities for learning and hence cognitive rehearsal. There was unreserved respect and *aroha* for the 'teacher' and the learner was of a lower status. According to PIERC (1982) acknowledging these factors was most important if successful outcomes in learning were to be achieved.

It is has been inevitable, however, that western thought would impact upon the culture of Polynesia. The predominance of western ideology that is manifest in aid, the mass media, the demands of returning locals, etc., has impacted upon many areas of life and created tensions within the existing cultural order. Fitzgerald (1993) for example, in exploring the

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[17] There is acceptance in the literature that there are a range of cultural norms, values and customs that impact upon teaching and learning in the Polynesian area (Ritchie & Ritchie, 1985).

development of the concept of disability in the Pacific noted a discontinuity between the western egocentric philosophical approach, which has identified 'special individual' needs, and the traditional socio-centric cultural values. Traditionally, in many of the Pacific nations, the disabled have been accepted and accommodated within the society, providing normative behaviour predominates. Furthermore, as for all individuals, they remained highly valued, performing many social roles within the community, although their difference was frequently acknowledged. In comparison, in western society, special provision and recognition has been assigned to the disabled individual to ensure, as far as possible, an independent, economically sustainable unit. Thus, the need for specialised education has been recognised as particularly significant in the western world, whilst in the Pacific this has not always been considered necessary as an individual's value is pre-determined by his/her membership in the community. From this analysis, in one sense, it could be predicted that change through the traditional response to those with disability may not necessarily serve the disabled whereas the western cultural approach identifies difference and remediation approaches. Interestingly, in the Cook Islands there has been no Maori term for the educational concepts of 'disability' or 'student with special teaching needs' although colloquial terminology (e.g. *upoko moutini* – pumpkin head) has often been used in a jocular, and not necessarily derisive manner).

The reality is, that learning, teaching and schooling remains somewhat different in Polynesia despite the impact of western philosophy and systems. BELS (cited Singh, 1997) for example, identified a range of problematic characteristics of primary education that is typically Pacific in nature, viz., lack of adequately trained teachers, high costs associated with in-service training, difficulties of following up in a sustained manner, lack of skills in management staff, inadequate distribution of reading materials, curriculum imbalance and irrelevance, unsatisfactory school-community links, the difficulty of collecting adequate data and managing data systems. Furthermore, as Singh (1997) notes, physical conditions are often over-looked in the literature, despite them having significant implications for schooling - room conditions, glue, paints, scissors, science equipment, etc., can not be taken for granted.

One of the major distinctive features of the Pacific region relates to the ambiguities of a dual learning system (Thaman, 1996). The home culture and the formal education system are very different. For example, both Singh (1997) and Thaman (1996b) noted the challenge that many teachers have in relating the home culture to the formal and hidden curriculum of the

school and the difficulties of language acquisition when both English and the local language are used as the medium of instruction.

The utility of maintaining and reinvigorating the traditional Polynesian learning approaches has been explored by some researchers as a means of making learning more meaningful. Thaman (1996; 1999; 2001) noted how the culture and life-style of the dominant group could usurp the power of the indigenous groups and she emphasised the need and importance of the local culture asserting itself. To her, there was an inherent conflict between the socialisation of the individual and the training as a teacher. She has called for the creation of culturally inclusive learning environments with traditional views of teaching and learning to be incorporated into theory, practice and research with teachers given a central role in this development.

A growing number of Pacific writers have commented upon the relegation of Pacific cultures. Ratuki (cited Thaman, 1996b) noted that in the Polynesian island of Rotuma western ideology was embedded in education (e.g. a direct form of schooling emphasising individualism, competitiveness, materialism) and was discontinuous with the local culture. Watson-Gegeo and Gegeo (1994) in a critical analysis of schooling in the Solomons, reported how the students' culture was kept out of the classroom whilst colonial teaching practices dominated within. Increasingly, there are calls for 'local' cultural theory to be incorporated within the learning curricula (e.g. Bakelevu, 1996; Durie, 1994; Hunkin-Tuiletufuga, 1996; Pere 1998; Tangaere 1997; Tupuola, 1993, etc). A Pacific education symposium held in Fiji in 2001 endorsed the metaphoric notion of a *Tree of Opportunity* whereby values, rooted in Oceania cultures, should be firmly embedded in the structures and processes of formal education to provide a foundation for local schooling (Taufe'ulungaki, 2001).

However some writers have urged caution. Moli (1993) for example, considered the predominant view of learning in the Samoan education system today as basically transmission learning which encouraged conformity and could potentially limit inquiry methods of learning. She noted how the culture influenced learners behaviour and at times thwarted learning opportunities. Her paper was particularly significant because it highlighted the culturally conflicting views of learning and teaching within a Polynesian context.

Obviously the ambiguities have implications for teachers' performance as well, as it presents a dilemma (a cognitive dissonance) – the processes and goals of the formal education system are frequently in conflict with the prevailing attitudes, knowledge bases and learning styles of the culture. As Thaman (2001) noted, this had implications for the teachers' determination of the educational processes and outcomes.

> *…..teachers were generally left out* [of educational reforms] *because of our various countries' heavy dependence on overseas aid donors and their foreign consultants, most of whom brought with them their own educational philosophies and ideologies which, together with the absence of clear national educational visions, resulted in the uncritical acceptance of educational theories and ideas by their Pacific counterparts.* (pp.1-2)

Schooling then, for teachers and students alike, could be culturally alienating. The theories, practices and activities of schooling, although part of the work-place ethos, may in many cases, be irrelevant and somewhat foreign to the realities of their daily lives. Emphasis in western educational systems is upon the cognitive development of the individual, whereas the Polynesian approach emphasises social development within a cultural context. It is a cultural system in which there has been a traditional emphasis upon patrilineal authority, gender role expectations, group responsibilities, affective considerations and respect for authority and expertise (Pasikale, 1996). The western educational philosophy promotes individual responsibility, equality, technicality, democratic relationships between learner and teacher and an inquiring critical approach.

Interestingly, Thaman (1996a), in commenting upon Tongan educational practices, considered the issue of transfer of learning as it related to traditional Polynesian culture. She noted that context specific learning was common within an extended family kinship system and this frequently prescribed behaviour. In western society, because most people were 'strangers', rules about behaviour were often created. Because in many societies in the Pacific conformity is important and deviant behaviour disapproved of, the learning of behaviours that enabled an individual to question, be critical, extrapolate beyond the situation-specific, etc., was problematic, particularly, if this involved questioning of authority. Hence, Thaman's thesis is that non-conformist thinking is not likely to be encouraged because maintenance of good relationships depends upon normative behaviour. This can mean that higher level thinking, along with the creation of new knowledge, for the development of far transfer can be problematic for Pacific Islands' learners. She notes that this does not deny creativity and

innovation providing it is undertaken within the normative limits and because questioning and critical reflection within a peer group are acceptable. Haskell (2001) noted, however, that in traditional societies there had been less need for far transfer because the pace of change had been slow – there was less need, in comparison to technological societies, to generalise from the familiar to the less familiar.

This research project has as its context the Cook Islands. The above discussion relating to the characteristics of Polynesian and the Cook Islands culture, with a particular reference to learning and teaching, has outlined pervasive influences that impact upon individual and organisational behaviour. Accordingly, these forces become relevant factors in the planning, implementation and evaluation of the research project.

Chapter Summary

This chapter has examined four important areas of literature relating to the study. Firstly, it discussed the importance of acknowledging the status of the learner as an adult. An important conclusion related to the significance of meeting the needs of the adult learner and not assuming that there were a set of teaching/learning processes that could be invariably related to adults. Secondly, the in-service education literature stressed the importance of moving beyond the current conception of training and developing a new paradigm that facilitated understanding and skills that would impact in the classroom. Thirdly, it has been recognised that educational change does not always occur in a systematic or planned manner. Importantly and fourthly, any educational change programme needs to consider not only the individual but also the contextual factors such as the organisation and the culture of the school. Impacting significantly upon this moreover, are the national cultural norms, values and beliefs.

CHAPTER FOUR

METHOD

Transfer of learning is universally accepted as the ultimate aim of teaching. However achieving this goal is one of teaching's most formidable problems. Researchers have been more successful in showing how people fail to transfer learning than they have been in producing it, and teachers and employers alike bemoan students' inability to use what they have learned. (McKeough, Lupart & Marini, 1995, p.vii)

Research Approach

Perspective of the Researcher

This section is a personal statement. It is pertinent because it not only assists the reader to locate the researcher's position in relation to the study but it also provides a context for addressing the validity issues in terms of the choice of paradigm (Tsoi Hoshmand, 1989).

The researcher is a lecturer and psychologist working in the training area, hence the interest in instructional psychology and the in-service training of teachers. He has worked as a teacher in both regular education and special education, and for a considerable time as a psychologist in the education system. In recent years, he has worked as a lecturer in teacher education programmes and in the university context in various departments. He has degrees in sociology, education and educational psychology.

In working with students from the Pacific region and in making observations made on the numerous trips to the region, it became apparent that some aspects of training were responded to differently. Furthermore, because of the researcher's experience in the area of special education and his observations about the need for professional development training in this area in the Pacific a genuine interest in working there was developed. This lead to a contract for work in the Cook Islands to develop a teacher in-service programme on inclusive education strategies.

This work in the Cook Islands was an exciting venture as it was a small country and gave significant scope to develop programmes that could readily have a national impact.

The research project was developed recognising these factors but also because on numerous occasions the researcher was involved in discussions about the number of courses that had been perceived to have little impact. The intention was of course, that the programmes would impact on the work of the teachers, but there were questions about how this could best be accomplished in the different cultural setting. The research objectives centred on these very issues.

The researcher's training in sociology, education and psychology facilitated the development of the study. Interest in developing effective in-service strategies for teachers had a personal investment – not only did the researcher have a passion for teaching adults but was convinced of the importance that in-service training had for developing the professional skills of teachers and improving learning outcomes for students. The sociological background provided an understanding of the forces in society that shape individuals' behaviour and in particular how these interact with in-service, the teaching profession and the change process. Of late, the developments in the area of cultural psychology have impacted upon the researcher and created another perspective through which he can reflect upon his worldview. Instructional psychology developments have also had considerable impact – the burgeoning data arising from the cognitive school and, in particular the social constructivists, have provided a wealth of information on effective teaching strategies. These disciplines have nested together very conveniently for the researcher to develop an approach to his work.

The phenomenological approach has immense value for the researcher. It is based upon how the key players perceive and experience their world. It is an empowering approach and was chosen because it gives the respondents in the research study the opportunity to 'voice' their views. It was hoped that we would get more value from this line of research than one based solely on quantitative approaches. Being in a cross-cultural research setting it was considered to be the most appropriate approach to take – in many ways it helps to legitimise the respondents, limits the dangers of the researcher making faulty assumptions and interpreting from his cultural perspective, when data is being gathered. There are however two potential dangers in adopting this approach. Firstly, the respondents' interpretation does not necessarily equate with reality/truth. This is of course the very substance of phenomenology and is at the same time its strength. It is the participants (key players) perception. Secondly, the researcher's subsequent

interpretation of the data is subjective and/or biased but procedures can be developed to minimise this happening.

The researcher was acquainted with many of the respondents as a colleague and lecturer. For the course participants he was also an evaluator of their work, determining their eligibility for credit. In working as a researcher the nature of this relationship can create difficulties as well as advantages. He was close to the content of the study and this provided an advantage for identifying issues and understanding complexities of the training programmes. Being well known was particularly valuable as it facilitated an acceptance and *aroha* (concern for welfare) and helped with the delivery of the courses. Being in an evaluative role had its difficulties however – judging colleagues is never easy and doing this at the same time as gathering research data could impact upon the validity of the information. Efforts were made at all times to separate the roles but it would be unwise to assume that this was necessarily accomplished on all occasions.

The above outlines the researcher's background and perspective of his intentions. It is acknowledged that this is a significant aspect of the study and needs to be contemplated when the findings are being considered. Ethical guidelines governing this research project are located in appendix A.

Choice of Approach

The research objectives of this study were concerned with locating 'local' transfer strategies, the identification of the patterns of understanding about the transfer process, the features of a model in-service programme, and making some contribution to transfer of training theory as it relates to culture of the Cook Islands. The views and experiences of Cook Islanders were a priority and the importance of establishing a relationship to gather this data defined the importance of the approach. Hence a research approach was selected that would best accomplish these goals.

There is always the potential, with traditional research approaches, to highlight the unequal power relationship between the western social scientist and the people of a colonised nation thereby jeopardising the reliability and validity of the data. Furthermore, cross-cultural research in adult education settings, although not new, does have a number of perils (Sparks, 1997). Sparks notes that there are likely to be a range of social, political,

economic and gender differences between the researcher and the participants and this requires careful understanding to increase the effectiveness and relevancy of the study. Hence the careful preparatory and implementation aspects to this research project.[18] However there are advantages to be gained from cross-cultural research – many social scientists, feminists, educational critical theorists and post-modernists have made calls to not only recognise differences but also to acknowledge the significance of it for generating new theory. (Refer Sparks, 1997).

The pivotal research phases of this project (phases 2 and 2B) were essentially grounded in an interpretivist paradigm and used a phenomenological methodology.[19] Accordingly, emphasis was placed upon the collection of qualitative data but quantitative data was also collected.[20] The qualitative data collection strategies were particularly important as in providing opportunities for the richness of substantive responses to be analysed (Miles & Huberman, 1994) and they are recognised as particularly valid and valuable sources of data in developing countries (Vulliamy, Lewin & Stephens, 1990). However quantitative data was also generated for, as Strauss and Corbin (1990), and Patton (1990) have noted, the linking of qualitative and quantitative approaches broadens and increases the options available to the researcher and assists with the interpretation of the data. Patton suggested that the "paradigm of choices" which was based upon methodological appropriateness should be the basis for determining the approaches. Adherence to one paradigm will not permit "situational responsiveness" (p.39). Furthermore as Swanson, Watkins and Marsick (1997) note, qualitative data when combined with quantitative data can provide fuller meaning to understanding causal factors. Chen (1997) recommended the use of mixed methods because not only do they compensate for the inherent weaknesses of quantitative research approaches but they can also work together to provide triangulation of data. Gephart (1999), in discussing positivism's evolution to post- positivism, has highlighted the degree to which the

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[18] For example, consider the incorporation of ideas from the associated prior research undertaken by Sweeney (1994), the needs analysis prior to the implementation of programmed courses, Willis and Evaroa (1995), findings that were actioned and the 'hanging out' (Kellehear, 1993) of the key course participants from New Zealand. Refer to McDonald and Willis (1998) for a full description of actions taken to ensure that there was consideration given to considering the cross-cultural complexities of programme implementation and research design.

[19] Phenomenology is a methodology, as distinct from methods of data collection (Harding, 1987), and has gained considerable respectability in educational research in recent years (Lester, 1999).

[20] Positivistic paradigm data collection approaches used included – interviews, questionnaires, artefacts and observations (as outlined in subsequent sections). Phenomenological designs are increasingly approaching the research question from a more eclectic perspective (Lester, 1999).

approach uses qualitative methods in an attempt to rectify the difficulties that have been inherent in the radical positivism approach.

The empirical positivistic approach was used essentially to support the collection of qualitative data. There was a range of data collection methods used and some of these were used within small-scale research design formats during the impact evaluation phase. Pre-experimental and quasi-experimental formats were used to collect data on course participant satisfaction, changes in thinking (in terms of concepts, attitudes and knowledge) and use of strategies. Refer to table 4.1 and the specific sections in the different phases of the research for an account of these strategies.

Phenomenological Design

The phenomenological design focuses upon the participant's perspective with an emphasis upon data being collected from the participants themselves (Hoepfl, 1997). It is a natural- istic, context-specific approach using the intuitive experiences and perceptions of the participant and hence value is placed upon personal knowledge, subjectivity and interpretation. It is an approach that has been recognised as being valuable for gaining insight into the motivations and actions of the participants (Lester, 1999). Although the pure phenomenological approach was based upon description free of hypotheses (Husserl, 1970), in more contemporary times it has become accepted that the preconceptions of the researcher do impact. Hence, it has become important to delineate the frames of reference and the meanings placed upon the research, as well as the researcher's subjectivity (Plummer cited Lester, 1999; Stanley & Wise cited Lester, 1999). A variety of methods can be used with phenomenological research but those commonly used are interviews, observations, action research approaches, and focus meetings (Lester, 1999). The interactive quality of each of these methods is significant. In phenomenological research importance is attached to the establishment of rapport and empathy with the participants and such methods are more likely to engender this relationship dimension (Lester, 1999).

There are a number of advantages to phenomenological research that were deemed to be particularly pertinent for this research project, viz.,

1. It can be used to better describe phenomena about which little is known (Strauss & Corbin, 1990). In this present study, it has been acknowledged that considerably more needs to be known about transfer of training in teacher professional development

(Veenman, van Tulder & Voeten, 1994) and there have been no research reports concerning transfer of training in the Cook Islands.

2. Phenomenological inquiry is best suited to complex issues, whilst quantitative approaches can so easily minimise the richness and meaning of data (Hoepfl, 1997; Miles & Huberman, 1994). Transfer of training is a very complex multi-faceted issue for which the qualitative approach is most suited. (Refer for example to Baldwin & Magjuka, 1997; Taylor, 2000).

3. Phenomenological research is readily understood by scientists and non-scientists – it best describes phenomena as it is experienced. Lincoln and Guba (1985, p.120) noted "If you want people to understand better than they otherwise might, provide information in the form in which they usually experience it." It is a meaningful experience to the participant and accordingly, more likely to be understood by the reader. The narrative form is one example.

Consideration also needs to be given to the limitations of a phenomenological design. This is necessary because interpretation of data can be fraught with difficulties and if a balanced view is to be attained one needs to understand the potential threats to truth. Kale (1987a; 1987b), for example, noted that there are major validity issues that need to be addressed in such designs. Subjectivity and the indeterminateness of meaning between individuals are potential difficulties. The small number of subjects and the possibility of leading questions in the interview can also create problems. Reliability in phenomenological research can present further difficulties – in essence, little attention has been given to it for researchers have tended to concentrate upon validity issues (Hoepfl, 1997).

It follows that there are issues in phenomenological designs that necessitate a thoughtful approach when examining the findings. Nevertheless, procedures can be adopted to overcome many of these potential problems. In specific terms, a range of procedures (Ratcliff, 1996) can be used to ensure that validity and reliability are addressed. Field notes and the degree to which these impact upon initial assumptions is one good means of ensuring validity. Extensive quotations, the use of other data to verify, independent checks and member checks are also useful approaches. Reliability is best approached via multiple considerations of the data (e.g. code and re-code data). Giorgi (1983) explains that by ensuring the researchers intentions and thinking processes are made explicit many of the problems can be overcome. Furthermore, as Kvale (1986; 1987) argues, reality is forever

changing anyhow and the issue of indeterminateness is somewhat meaningless. He further proposes that the issues relating to interviewing are really issues in the analysis of the data. Miles and Huberman (1994) state that this is one of the central tasks of the qualitative interviewer and have documented numerous analytic procedures for this purpose. Another strategy is the use of quantitative data which can assist with replication of data and hence validity problems. Tsoi Hoshmand (1989) noted that with the increasing trend for phenomenologists to explain their methods of access and interpretation, and to make actual samples of descriptive data available, evaluation of it is more readily undertaken.

Research Process

The research process is outlined in figure 4.1. During phase 1, general ideas and strategies
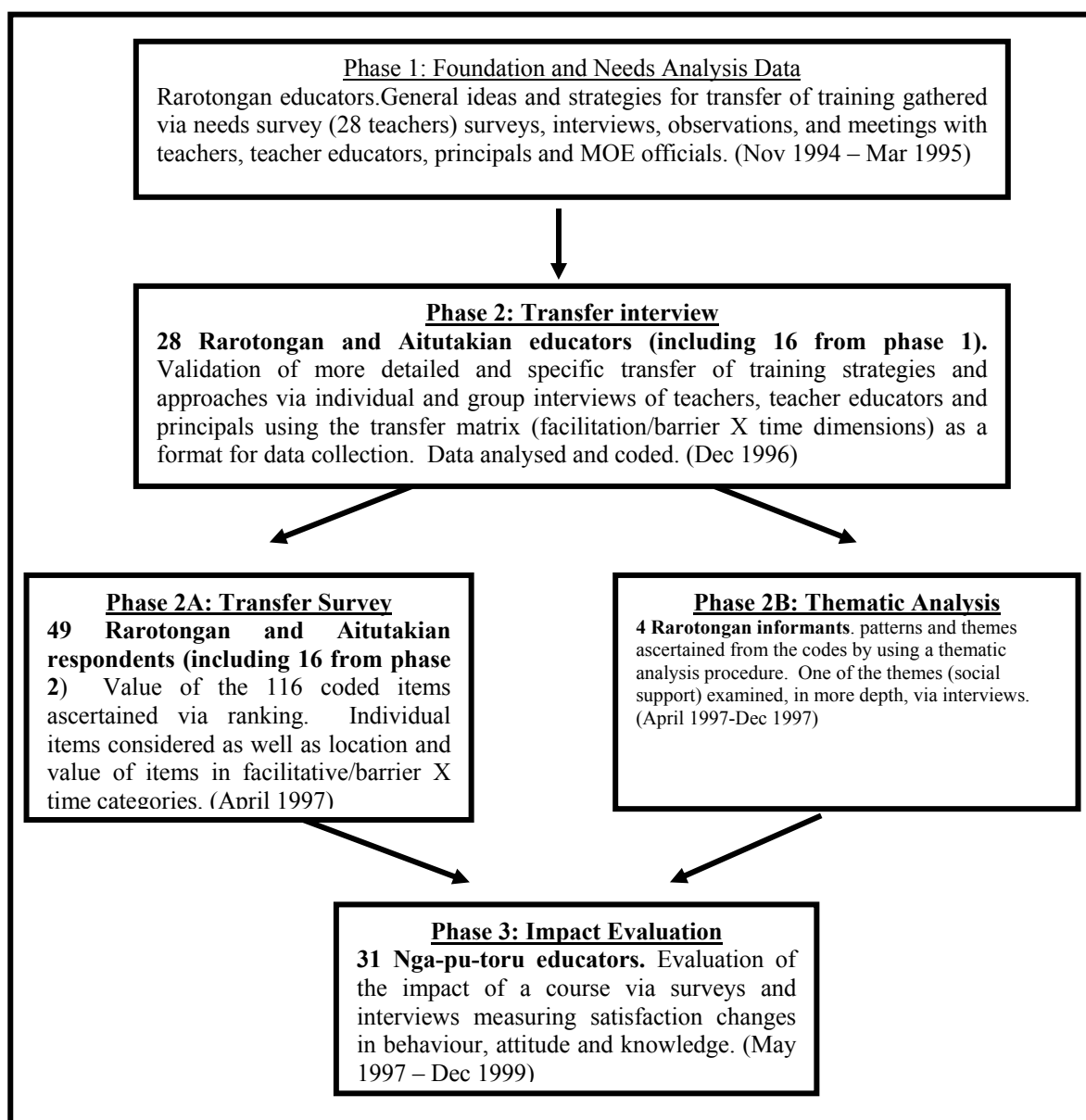
Figure 4.1. Outline of the Major Methodological Phases of the Research Study.

that shaped the initial development of the courses and research were acquired. Quantitative and qualitative data was collected via interviews, observations, meetings and surveys. During phase 2, the substantive research period, which investigated participants' experiences about transfer of ideas to the classroom, qualitative data via interviews built upon the previously collected data. This was then followed-up in two ways. Firstly, a quantitative analysis of the facilitative and barrier suggestions was undertaken (phase 2A) and, secondly by thematic analysis of the interview data (phase 2B).[21] Follow-up interviews investigated one of these themes in more detail. Phase 3 was concerned with impact data (qualitative and quantitative) arising from an in-service course and were measurements of the effectiveness of the transfer strategies, etc., that were incorporated into the course. Purposeful sampling techniques were used.

As indicated, this research project is best understood in terms of three phases – identification of general ideas and strategies, validation of specific transfer of training strategies and barriers by participants, and impact evaluation data. This describes a directional development of data gathering but it is important to note that a rigid, inflexible, sequential development was not possible (or even desirable) for a number of reasons. Practicality was one important reason - the timing of the visits to the islands was by negotiation and this determined course programming, access to respondents and the sequencing of events. On other occasions participants were unavailable and so data could not be collected until the next visit. Furthermore (and most importantly) ideas evolved and developed from the researcher's interaction with the participants, the investigation techniques and the effectiveness feedback data. Accordingly, opportunities were taken to explore additional issues. Consequently, the sequencing of the data collection, as detailed in figure 4.1, should be regarded as the directional flow of data gathering - but - evolved via an interactive and recursive process. This flexible, reality-based approach is analogous to the curriculum development interactive models of Taba (1962) and Cohen (1974) generated in response to the more rigid linear model of Tyler (1949).

Research Objectives and Questions

In drawing upon data obtained from courses that had already been completed, the research literature, findings from studies related to this research project (Hynds, 1997;

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[21] This strategy of data analysis is similar to the grounded theory approach,

Sweeney, 1994; Tufue, 1998; Willis & Evaroa, 1995), and the researcher's experiences of working in the Cook Islands, a research project plan was established.[22] It was the intention to build upon existing theory and also to develop ideas that would have application value.

This research revolved primarily around the issue of the impact of national culture on transfer of training. What was being sought then, was an understanding of how the context impacted upon transfer so that some comparative analysis could be made with international findings. Specifically, the following objectives directed the course of the study:

1. The identification of appropriate and specific strategies for transfer of training that would provide a basis for teachers, trainers and other significant people to work together to plan for effective in-service training.

   Research Question: *What were the specific transfer of training strategies recognised as being important for developing an in-service training programme?*

2. The identification of patterns of understandings about transfer, which would provide a framework for an explanatory model.

   Research Question: *What were the patterns arising from the data that best explain the transfer of training process?*

3. The development and delivery of a model in-service programme.

   Research Question: *To what extent did the transfer of training model impact upon a teachers' in-service course?*

4. To contribute to transfer of training theory with particular reference to an explanatory model and how culture impacts upon transfer.

   Research Question: *What understandings could be added to transfer of training theory, particularly with regard to how culture impacts upon transfer?*

Methodological Procedures

A range of methodological procedures was used to gather and analyse the data. This section outlines in summary form how this was undertaken (refer to table 4.1) and also describes the thematic analysis procedure. In later sections, specific information is

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[22] Hynds, Sweeney, and Tufue were graduate teachers undertaking a specialist post-graduate course at the Wellington College of Education and each developed a research project that made contributions to our understanding of the preliminary work in the Cook Islands.

Table 4.1

Summary of Data Collection and Analysis Procedures

PHASE	DESCRIPTION	DATA COLLECTION	DATA ANALYSIS
1: Foundation 1: Foundation 1: Foundation	Informal interviews with principal of CITTC Meetings with various MOE personnel Informal observations.	Interview data recorded in written form. Interview data recorded in written form 'Hanging out' at venues, etc.	Simple thematic analysis Simple thematic analysis Field notes
1: Need Analysis 1: Need Analysis	Needs Survey Interviews with teacher educators	Audio recorded then written Written	Simple thematic analysis, ranks and percentage. Simple thematic analysis
2: Transfer Interview 2A: Transfer Survey	Transfer interviews of teachers, teacher educators and principals. Transfer survey – teachers, teacher educators and principals	Audio recorded Written responses	Coding Item scores: Rank, inter-quartile range, frequency and means, mean scores for each group and variability of group scores. Category scores: Frequency of items, probability of group scores, frequency distribution of item scores, mean ranks of categories.
2B: Transfer Interview	Identification of themes	Audio-recorded	Coding, categories, pattern codes, themes.
3: Impact Evaluation	Short Term Assessments (Self-report) Satisfaction measures Conceptual changes Attitude changes Knowledge changes Lesson planning Artefacts Long Term Assessments (Self-report and principal) Survey (4 months after course) assessing frequency of use of ideas and problems. Survey (2 years 4 months after course) use of strategies, attitude changes and value of knowledge. Artefacts	 Written responses Written responses Written responses Written responses Written responses – lesson plan presented Photographs Interviews Written responses Photographs	 Likert scales and narrative Responses categorised and narrative comments Responses categorised and narrative responses Responses categorised and narrative responses Lesson plan categorised Comments Narrative and frequency of use of ideas Likert scale, frequency and narrative responses. Comments

provided about each of the methodological procedures used in phases 1 – 3 of the research. Interviews have become a common qualitative method for gathering data. Thematic analysis was a particularly important methodological procedure used in this research for analysing the transfer interviews. A simplified version of it was used for analysing many of the other interviews.

Thematic analysis has been described by a number of researchers (e.g. Benner, 1985; Lieninger, 1985; Miles & Huberman, 1994; Taylor & Board, 1984). Thematic analysis is valuable because it makes sense of the ideas that are presented by the respondents. It was particularly important for this study because it could deal with naturally occurring events and could provide 'thick descriptions' about the real context of teacher inservice. Furthermore, causality was being sought and thematic analysis can often provide information leading to answers (Huberman & Miles, 1994). The thematic analysis used for the transfer interviews involved the following steps:

1. Interview data was collected and transcribed.

2. Codes were identified for all data relating to the question about transfer strategies and barriers. This involved examination of over 150 pages of interview transcript, location of specific ideas as transfer strategies/barriers, and the identification of any other significant ideas related to transfer. Once specific ideas were identified, a reduction in items was attempted by collapsing them into other items. However specificity of item meaning remained a priority.

3. Audit trail quotes were related to each code whenever that was feasible. Memos and notes in the form of follow-up questions, potential issues for investigation, uncertainties, possible aggregations, etc., were detailed on the transcript sheets for follow-up by the researcher and/or queries to ask of respondents at a later date.

4. These codes were then arranged into categories and rearranged (as codes were re-coded and aggregated) to ensure clarity for each category. These became the pattern codes

5. The pattern codes were then linked together to assemble a 'bigger picture'. Strauss and Corbin (1990) termed this axial coding. These became the themes of the findings. Audit trail quotes were also related to the component parts of the themes.

A simplified thematic analysis was used to analyse many of the other interviews. This involved the following steps:

1. Interview data was collected and transcribed.

2. Repetitive ideas were located in the interview data.

3. Ideas were combined providing a specific meaning could be maintained.

4. Audit trail quotes were related to each key idea.

Phase 1: Identification of General Strategies: Foundation Planning
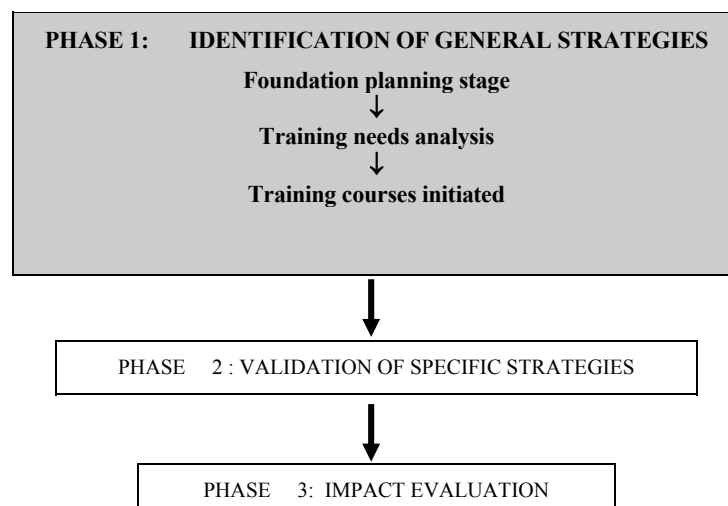
Figure 4.2. Phase Flow Chart (Phase 1)

Foundation Planning

Prior to the commencement of the research project, considerable foundation planning was undertaken to initiate the teacher in-service project and to prepare for the research study. The following is an outline of this phase, and although some of it was not technically part of the research project, it was a prerequisite for the successful implementation of the courses and the associated research project that followed.

This was the formative stage of the project. In 1993 the researcher had a number of informal discussions with a Cook Islands lecturer on the staff of the Wellington College of Education (WCE) concerning mutual interests in the education of Pacific Island teachers. As a consequence of these meetings a formal approach was made to the

executive of WCE to seek support and approval to contact the principal of the Cook Island's Teachers Training College (CITTC) who had expressed concern about teachers' level of skill in dealing with students who had learning difficulties.[23] The researcher visited Rarotonga on a number of occasions and met numerous educational personnel and discussed the proposed project with them.

Project proposals (McDonald & Moetau'a, 1993) were presented early in 1994 to the educational personnel and the Cook Islands' Government for approval. Later that year approval was obtained and more specific planning to implement the courses and the research was undertaken. In November of that year, a further visit to the Cook Islands by the researcher (accompanied by three research assistants) was undertaken to gather data from teachers and other educational personnel on their needs for in-service training programmes. (Refer McDonald, 1995b.)[24] In 1995, funding from NZODA (New Zealand Official Development Assistance) was approved for the implementation of the courses. The first teacher in-service course began in April 1995.

During this stage of the research, two base documents (McDonald & Moetau'a, 1993; McDonald, 1995a) were produced that laid the foundation for the project. The data in these reports was collated from a number of sources. The issues being pursued during this introductory phase were concerned with the broad picture relating to the needs of the teachers and the identification of an effective in-service methodology. Three related tasks were the focus of this part of the study, viz.,

- Identification and development of a collaborative relationship with key stakeholders;

- Establishment of a training partnership that emphasised joint responsibility and ownership; and

- In general terms, the identification of the current provisions/skill levels of the teachers, the dimensions and nature of training required/considered valuable for the Cook Islands teachers, particularly as it related to effective teaching strategies.

Numerous individuals were involved in the preliminary stage of the project. In New Zealand advice, guidance and information was obtained from WCE and NZMFAT

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[23] The WCE and the CITTC had a long-standing association involving student visits, teacher training and staff cooperation.
[24] This initiated the research process in the Cook Islands and is described in the next section.

personnel and in the Cook Islands, although most data was obtained from the principal of the teachers college, others (lecturers, inspectors, minister of education, teachers and principals) also contributed. Data was also gathered from a number of sources external to the Cook Islands. Early on in the project, library research was undertaken but although there were a number of references concerning Cook Islands education and teacher training (e.g. Cook Islands Department of Education, 1989; Mara, Foliaki & Coxon, 1994), there was limited information on teacher professional development. Densem's (1990) report indicated the need for teacher training in special education. Considerable preliminary advice and information on - teacher training, standards, and cultural practices, was obtained from the Cook Islands' WCE lecturer who frequently returned to her homeland with WCE students to supervise teaching experience placements.

During the researcher's first two visits to the Cook Islands an informal interview formed the basis of contact with the principal of the CITTC. There were four in-depth interviews and this approach was adopted because it was not known what issues would assume importance and previously set questions could well have been invalid. Additional data was obtained from informal contact with teachers, inspectors, ministry officials, etc., and observations arising from the researcher `hanging out' (Kellehear, 1993). Collation and analysis of this data formed the substance of the first project report (McDonald & Moetau'a, 1993). The issues explored included the purpose and need for training, funding, certification, training administration and organisation, personnel involvement, training format/philosophy and training principles/approaches, needs analysis, training venues, teacher selection, inter-institutional partnership, course content, budget, evaluation and accountability, implementation steps and resource development.

Specific technical-procedural guidelines (incorporating a logical framework analysis), and detailed information on the proposed project implementation were the basis of a second planning document (McDonald, 1995a). WCE course documentation, the initial project report (McDonald & Moetau'a, 1993), and the needs-analysis data (refer next section) were important sources of information for the development of this plan.

The data obtained from the various sources detailed above was tabulated in note form and, for both reports (McDonald & Moetau'a, 1993; McDonald, 1995a) simplified thematic analysis procedures assisted with the organisation of the material. These documents, in their draft form, were examined by the CITTC principal to ensure that there was validity of documentation. The advisory group associated with the project at this stage also considered the material. Triangulation of data sources was an important part of this data collection. This foundation planning was the basis for the development of courses as well as the research project. Phase 1 of the research project is described below.

Phase 1: Identification of General Strategies - Training Needs Analysis

Background

A needs analysis survey was considered to be particularly important if emphasis was to be given to the local cultural context of the Cook Islands and the participant-collaborative nature of the project. It would provide considerable data not only for the planning of the courses but would also provide more information about what factors were important for transfer of training. Consequently, in November 1994 (during the negotiation stages) when it became apparent that there was a likelihood of courses being implemented, the researcher with a team of three research assistants visited the Cook Islands to undertake an in-service needs-analysis. During these ten days over 60 individuals were consulted with regard to their perceived needs for teacher in-service training. The teacher in-service research model developed by Katz, Raths and James (1985), and the data already obtained in the foundation stage of the research (McDonald & Moetau'a, 1993; McDonald, 1995a), were used as starting points to develop an interview schedule for teachers.[25] Earlier related project studies (Paterson, 1994; Sweeney, 1994), by two of the research assistants concerning the importance of interaction/approach strategies and the development of a needs analysis schedule, provided significant background information for this phase of the research. Prior to the visit each of the assistants was fully briefed on the purpose and methodology of the interviews and was also provided with background information on the Cook Islands. Practice in interviewing techniques was undertaken by using simulation strategies.

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[25] A focus group (Anderson, 1990) comprising a group of experienced teachers undertaking post-graduate study at WCE provided additional ideas for the interview questions.

Both qualitative (data from meetings and observations) and quantitative data (needs survey) were collected.

Methodology

This research phase was concerned with obtaining detailed and specific information to implement the in-service training programmes and provide information about transfer strategies. The data was obtained from teachers, teacher educators, and educational administrators/specialists by interviews and a formal meeting. To complement this data the researcher and research assistants undertook observational studies in the local classrooms and the descriptive findings of the Paterson (1994), and Sweeney (1994) contributed additional data that was relevant to this phase of the research. Sweeney's research with Cook Islands' educators (resident in New Zealand) highlighted the importance of establishing a valid researcher-respondent relationship whilst Paterson developed a model in-service needs analysis questionnaire that was readily adapted for the Cook Islands context.

Research questions. Following on from the foundation planning stage, a more specific consideration of the in-service needs of the teachers in relation to course impact became important. There were two major research questions that needed to be addressed viz., `What specific instructional in-service features were favoured by the Cook Islands teachers and authorities?' and, `What areas of the classroom curriculum/teaching/ learning (including inclusive education) were considered important to be incorporated within an in-service training programme?'

Settings. The teachers and teacher educators were all interviewed at their place of work - at schools, CITTC, Ministry of Education, and the National Library. The meeting for educational administrators and specialists was held at one of the local schools. Observations were also undertaken in four classrooms, each in a different school.

Participants. Thirty Rarotongan primary teachers from six schools were interviewed and all contributed information via a group interview procedure whilst twenty-six of these participated in individual interviews as well. There was a range of teaching experience, ages, positions held, and qualification levels but it was not a randomised

group. The CITTC principal was particularly keen to survey those teachers who were to be included in the first training programme. Criteria for selection were based on the principal's perception of the teachers' capacity to implement change-programmes. Table 4.2 details the characteristics of the 26 individually interviewed teachers. Seven teacher educators (four teachers' college staff members, two curriculum advisers and one National Library staff member) were identified by the principal of the CITTC as sources of valuable information on teacher training/development and the local-cultural aspects of training. Each of these participants was interviewed individually. In addition to this, a meeting (voluntary attendance) of 24 Cook Islands educational leaders (teachers college staff, curriculum advisers, inspectors, MOE staff and principals) was organised to gather perceptions of what constituted effective in-service methodology. This meeting was publicised via a letter distributed by the CITTC principal.

Table 4.2

Characteristics of the 26* Teachers Participating in the Individual Interviews

CLASS SIZE	Range	7-35 students in class			
	Mean	20 students in class			
AGE	Range	20-30	31-41	41-50	51-60
	Freq	15	5	5	1
	%	58	19	19	4
CLASS	Level	Preschool	Remedial	Primary	Form 1-2
	Freq	1	3	19	3
	%	4	11.5	73	11.5
POSITION	Level	Teacher	Senior teacher	Deputy Principal	Principal
	Freq	22	3	1	0
	%	84	12	4	0
QUALIFICATION	Origin	*Cook Is Cert*	*Non Cook Is Cert*	Cert + Tertiary	
	Freq	13	4	9	
	%	50	15.5	34.5	

* 2 male and 24 female Cook Islands ethnicity[26]

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[26] In the Cook Islands women comprise 72% of the teaching service but with more men being proportionally located in the secondary classrooms. Hence, by far the majority of participants in the teaching project and the research programme were women.

Instruments. There were two informal schedules developed for phase 1 of the research – a teacher needs-survey (CI-ITIS) and an interview schedule for teacher educators (Needs Survey – Teacher Educators). (A copy of each of these instruments is included in appendix B). Content validity was important. The Katz et al., (1985) model for in-service training research, the experience of the researcher, his research assistants and graduate teachers (completing a post-graduate specialist course) and the data collected from the initial visits to the Cook Islands provided data for the development of these schedules. The needs survey was adapted from a similar needs survey used in New Zealand which had provided useful and reliable data in that setting (Patterson, 1994).[27] The In-service Training and Professional Development Questionnaire (McDonald & Paterson, 1994) was trialed in a pilot study in New Zealand and fully reported by Patterson (1994). Instructional, cultural and evaluation procedures for in-service training were specific aspects considered in the teacher educator interviews.

Data Collection. The purpose of the interviews was to ascertain the teachers preferred in-service training programme features, the priorities for content emphasis, attitudes toward inclusive education including their perception of existing skill development and resource/training needs. Data collected via the needs survey involved one researcher and three research assistants (working in pairs) interviewing 30 teachers in various schools in Rarotonga. All teachers participated in pair interviews on the more difficult/sensitive items and 26 participants had follow-up individual interviews to gather more data. The interview schedule was a mixture of open response, forced choice and Likert scale items. Paired interviewing, a strategy recommended by Vulliamy, et al., (1990) was likely to enhance validity - the individuals were encouraged to check each others' understanding of the questions (using Cook Islands Maori if necessary) as the more conceptually difficult items (as assessed by the researchers) were included in this section of the interview. It was considered that the language and the conceptual difficulty of the items would be largely overcome by adopting this technique but checking procedures were implemented to ensure that individual responses were recorded.

Specific biographical teacher data was collected, as well as information on preferred in-service strategies and organisation (viz., goals and planning, trainer characteristics, in-

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[27] The 'In-service Professional Development Questionnaire' was developed by McDonald and Patterson, (1994).

service group characteristics, training approaches and techniques, timing, site location, facilities, resources and materials, evaluation techniques and accreditation preferences) and course content/issues relating to special education and transfer of training.

Seven teacher educators were also interviewed using a semi-structured format where information was gathered on the nature of their training courses, typical pre-course and introductory course organisation strategies, preferred training activities (with special reference to the specific local-cultural ideas) and the evaluation procedures that had been successful.

A formal meeting of 24 Cook Islands educational leaders (teachers college staff, curriculum advisers, inspectors, Ministry of Education staff and principals) was organised to obtain feedback data from the educational community on the intended teacher in-service programme. Guidance and advice was also sought from these leaders about the implementation of the programme and during `question and answer' an exchange of information between the educational leaders and the researchers identified many salient aspects of the proposed project. A record of the meeting was documented by two of the research assistants and these two sets of notes were compared following the meeting to ensure reliability.

Each of the four researchers undertook observation in one of the local primary schools with the principals selecting the classroom for observations. The purpose of this observation was to familiarise each researcher with Cook Islands' classroom environment features and to gather some data on the organisation and management of classroom instructional/learning approaches. Each of the researchers had been a successful primary or secondary classroom teacher but an informal observation guide also assisted them to note the resource availability, physical and environmental aspects, student-student and teacher-student interaction patterns, classroom management procedures, timetabling, teaching styles and learning opportunities. These observations were used to develop the research groups' understanding of the local classroom practices and culture.

Data analysis. The teacher interviews via the needs survey were at first audio - taped then documented in written form. Responses were then thematically coded using a

simplified technique, ranked or converted into percentage data and tabulated. Data obtained from the teacher educator interviews and the educational leaders meeting was also coded using simplified thematic analysis procedures. Information obtained from the observations undertaken in the classrooms was not formally tabulated although it did provide some important orientation experience for each of the researchers and for ongoing planning of the project.

Validity and reliability. For all phases of the study, content validity for each of the data gathering strategies was determined by surveying the existing literature research on teacher in-service, utilising the experience of the researchers and by seeking confirmation from key personnel (e.g. principal of the Teachers' College). This triangulation of information assisted with the validation of response data. A range of procedures ensured reliability of data collection. Each researcher's partner undertook `spot checks' of the interviewing techniques and checked the data that had been collected. The documentation from teacher educator interviews was read and then presented to the participants to ensure the correction of any errors or misunderstandings; and the minutes relating to the educational leaders meeting were considered by the research team and the principal of the teachers College to add / delete / modify the account, so that it became an agreed upon document.

Phase 2 Inquiry: Transfer Interviews and Surveys
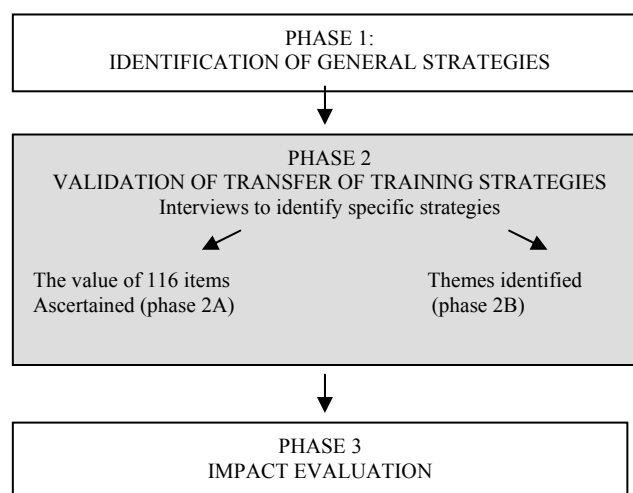
Figure 4.3. Phase Flow Chart (Phase 2)

Background

This phase of the research was a pivotal part of the investigation as it sought to identify transfer strategies and issues that were particularly important for 'on-the-job' application. Using the Broad and Newstrom (1992) matrix model as a general framework for devising the interview questions, educational personnel (teachers, teacher educators and principals) were interviewed firstly to identify and, at a later date, with a wider group, to prioritise transfer strategies/barriers via a survey[28]. This interview data was further analysed to identify themes which were then followed up by three in-depth open-ended interviews (and a follow-up focussed interview) to examine issues surrounding one of the themes. Emphasis was upon qualitative data collection although quantitative data was also collated. Apart from a methods triangulation, the quantitative data also enabled priority values to be placed upon each of the strategies/barriers.

Methodology

During the latter part of 1996, and after six courses had been completed with Cook Islands' teachers, a number of teachers, principals and teacher educators were interviewed via an open-ended structured format interview schedule to identify preferred transfer of training strategies and barriers (phase 2)[29]. All of these participants had either been course members or were, at least, involved in the administration, organisation or professional supervision of the participating teachers. By this time it was assumed that the respondents had developed attitudes towards many of the strategies used on the course and this would provide some context for their suggestions, although responses were not limited to these specific courses. Their comments were transcribed and coded (Miles & Huberman, 1994) and an oral summary reported to the participants for their consideration, with revision if necessary. Secondly, the agreed upon suggestions were then tabulated and these then formed the basis of a three point Likert scale structured questionnaire which was designed to measure the priority value of each item.[30] This questionnaire was administered to 20 of the individuals from phase

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[28] The matrix of Broad and Newstrom was expanded to include an additional role. An 'other' category was added to cover external influences (e.g. family, MOE)

[29] This has been referred to as the 'transfer interview'

[30] A three point Likert scale was selected because this enabled an easier assessment by the respondents. It is acknowledged however that this limits the choice options (in comparison to a five point scale) and the consequent interpretation of the data needs to be understood in light of this. For example, did this create scores that were overly inflated or depressed?

1 of the research as well as additional groups of course teachers, principals and teacher educators (phase 2A). Thematic analysis of the interviews was also undertaken (phase 2B). This information along with incidental comments made during the courses clearly indicated the importance of social support. Accordingly, in-depth, unstructured interviews with three critical informants were undertaken. Additional brief focussed interviews with the key education personnel validated these interviews.

Research questions. During the transfer interviews, the teacher, teacher educator and principals responded to one focus question - `what are the strategies, activities, ideas, suggestions, situations, etc., that promote or act as barriers to transfer of training? In particular, consider this in relation to before, during and after the course.' When necessary, probes were used to expand upon the roles of the trainer, teacher and any other stakeholders as well as to identify any particular issues considered to be important by the respondents. [31] Once this data was collected and analysed, the ideas were incorporated into the transfer survey. The thematic analysis generated questions relating to the nature and value of social support that were followed up during the subsequent interviews.

Settings and Participants. The teachers, teacher educators and principals were all interviewed at the CITTC or in a school setting. To identify the pool of strategies that facilitated/discouraged transfer of training, 28 educators (7 principals; 5 currently or previously employed CITTC teacher educators; 16 Rarotongan/ Aitutakian teachers) agreed to take part in these interviews. The teacher educators were interviewed individually whilst the teachers and principals presented their ideas in group interviews. Fifteen females and one male teacher were randomly selected by choosing every third teacher on the current course rolls (the fourth being delegated as an alternative for unavailability, etc.) and accordingly four groups were interviewed. Two teachers in Aitutaki were unavailable and the alternative respondents were interviewed. In Rarotonga one teacher did not arrive for interview whilst in another group five members

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[31] The participants were asked to identify transfer of training strategies. It was **their** perception of what constituted successful strategies (or barriers) that was important. To limit the chance of obtaining in-service strategies that were simply enjoyable or favoured approaches, considerable written and verbal data was presented to the participants to inform them about the transfer of training process. Refer appendix E. The suggestions obtained from the respondents indicated they understood the task in terms of the definition of transfer of training and many of their suggestions were consistent with the literature on transfer strategies.

were interviewed as one of the alternative respondents had also arrived to take part in the interview. Apart from two teachers in Aitutaki all were primary teachers. Four of the five teacher educators were male and there were seven male principals in the group of nine, including one from a secondary school. All of the 16 primary and secondary Rarotongan principals were invited to attend the meeting but due to sickness and other commitments this was not possible.

In the second part of this research phase, all of these respondents completed the questionnaire, as did the remaining 21 Rarotongan and Aitutakian enrolled course participants. As a follow-up to this questionnaire three of the respondents (male teacher educator, male principal and one female teacher) were selected as critical informants to individually interview with regard to the importance of social support for transfer of training. The principal of the Teachers College was also interviewed, but briefly. Two individuals, not immediately associated with the courses, were used as member checks for this data – they were chosen because of their extensive experience and knowledge of the local educational setting.

Instruments and Documentation. The following schedules and documentation were developed for the three steps of this phase of the study.

1. *Pre-transfer Interview Information Forms* (for Teachers, Teacher Educators and Principals) to identify strategies and barriers. These were distributed to individuals/groups prior to the interviews. This material provided information on the background to the study, outline of the ethical procedures, interview consent form and a section detailing the nature of transfer of training and the research question. (Refer to appendix C for a copy of this material)

2. *Contact Summary Form*. This form, adapted from Miles and Huberman (1994), was completed after each transfer interview. It was used to detail significant observations and impressions not recorded on the audiotape. Such observation can at times provide significant insight into the findings (Miles & Huberman, 1994). Refer to appendix D for a copy of this form.

3. *Transcripts of the teacher, teacher educator and principals transfer interviews.* Each interview was audiotaped and then transcribed, making it more readily able to be analysed.

4.   *Post-Transfer Interview Feedback Form* (Miles & Huberman, 1994). This was a summary sheet detailing the analysis of the above interview data and was used to structure an oral summary presentation to the respondents for their verification. Refer to appendix D for a copy of this form.

5.   *Survey of Preferred Transfer of Training Strategies (transfer survey).* This three point Likert scale questionnaire itemised the 116 transfer ideas identified via the transfer interviews and respondents were asked to prioritise each item. Refer to appendix E for a copy of this questionnaire.

6.   *Social Support Interviews.* These interviews were transcribed and the information concerning the findings were presented to each of the respondents for their comments and feedback.

Data Collection and Analysis. A range of data collection and analysis procedures was used to gather and interpret this data. The individual and group transfer interviews assisted with the identification of a pool of transfer strategies and barriers whilst the quantitative data from the survey provided information concerning the perceived value of transfer strategies and barriers.

Transfer Interviews. The first step involved either group or individual interviews with teachers, teacher educators and principals to identify strategies, activities, events, and information that would encourage/discourage the use of the course ideas/skills, etc., in the classroom. Following each interview, the 'Contact Summary Form" was completed by the researcher and this along with the transcripts, provided a basis for feedback (using the 'Post-Interview Feedback Form'). Details of the identified codes were related to the respondents. Codes were then established and included in the transfer survey. Definitions of codes are located in table 6.1. These procedures also assisted with the search for the main themes, issues, concepts, etc..

Pattern Codes and Themes. Based upon the approach advocated by Miles and Huberman (1994), the thematic analysis procedure was used to identify codes (e.g. teacher flexibility), pattern codes (e.g. teacher's personal attributes) and the more abstract propositional explanations (e.g. If support is available there is likely to be more

commitment to implement ideas).[32] Researcher annotations, reflective comments, and memos were detailed on the transcribed interviews as the coding process was undertaken and this information, along with the contact summary information, was used to link the coding data and feedback to the respondents. The coding also facilitated the development of a thematic analysis (Miles & Huberman, 1994).

Transfer Survey. A larger group of educators (teachers, teacher educators and principals) were asked to prioritise each of the 116 items included in the transfer survey. A score of 2 was allocated to the items deemed to be 'very, very important,' a score of 1 allocated for items deemed 'very important' and a no response was to be given to those items deemed to be 'not so important'. The questionnaire was divided into three sections - before, during and after - each of these had items relating to the trainer, teacher, school personnel, others and barriers. The respondents' scores for each item were summed to provide a total score for each item. This data was analysed and the following quantitative measurements were calculated:

Items
1. The rank for each of the 116 items;

2. The inter-quartile range of item scores;

3. Frequency and means of item scores;

4. Mean item score for each respondent group; and

5. The variability of respondent group mean (on each item) in relation to other group means.

Categories ('facilitative/barrier X time')
1. Probability of group scores for each category; and

2. Frequency of items in each category;

3. Frequency distribution of category item scores;

4. Mean ranks of categories.

This procedure enabled each of the 116 items to be evaluated and considered as supplementary data to the qualitative findings.

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[32] On a few occasions, codes were developed from general ideas gained from the phase 1 part of the research and accordingly, quotes were not available. A few ideas considered important by some of the respondents in phase 1 had not been identified in phase 2.

<u>Social Support Interviews.</u> Three critical informants were interviewed at length using an unstructured interview format to provide information on the role, function and value of social support to transfer of training. During these interviews a situational analysis approach was utilised and considerable in-depth probe questioning was necessary to identify the role of social support as it related to the transfer process. Explanation concerning the general findings of the study to-date was given to each respondent and then their views on the role and function of social support were gathered. A follow-up brief interview with the principal of the Teachers College was also undertaken. A simplified thematic analysis procedure was adopted to analyse the data. Responses were detailed as narrative data and were used to validate the findings from the transfer interviews. Two key informants were then interviewed briefly to comment on these findings.

Validity and Reliability. A range of procedures was implemented to ensure validity and reliability. Triangulation of data sources was a significant component of the data gathering procedures and content validity was ensured as the respondents' suggestions were checked for consistency with the major categories of transfer strategies suggested by the research literature. Following the initial interviews with the principals, teachers and teacher educators, a summary of the data was relayed to them in oral form for their comments, revision, confirmation, etc.. Any additional issues raised or unanswered questions/queries identified via the Summary Contact Sheet and feedback form were attended to and incorporated into the findings. Check coding of the transcripts was undertaken by the researcher (after a two-week interval) and a code - re-code consistency rate of 96% was achieved. Following this, 15 post-graduate teachers (Dip. ESSTN) completing a unit on qualitative analysis for a research paper at the WCE were each given three randomly selected transcript pages. They were asked to label and identify codes and these were then matched with the researchers identification of codes and definitions. In each case agreement with the researcher's findings was achieved although for two codes (i.e. 2BT motivation of teacher; 1DT teacher organisation of self) there was further elaboration of the definitions required to differentiate them clearly. When the survey was administered to the teachers and principals the researcher read each item to assist with the participant's comprehension of it, but this did not occur with the teacher educators. In a few instances, one of the members of the group would translate the item into Cook Islands Maori to help some of the other participants to more fully understand it. Clerical accuracy of the survey

scoring was achieved by a research assistant check scoring before entering the data onto a broadsheet.   Validity of data was enhanced by the incorporation of qualitative and quantitative data sources.

Phase 3: Evaluation
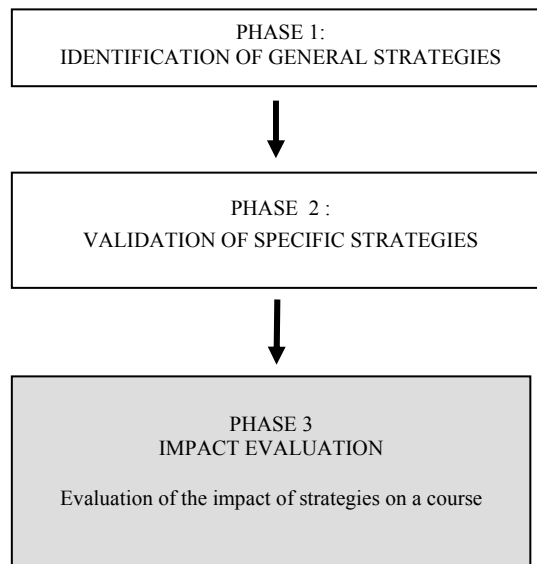
Figure 4.4 Phase Flow Chart (Phase 3)

Background

A range of situations was used to assess the utility of the transfer of training strategies and opportunities were taken to gain feedback/evaluative data on their effectiveness.   Of particular significance was one of the courses implemented in 1997 with teachers from Nga-pu-toru - the collective name given to the islands of Mauke, Mitiaro, and Atiu. Where it was appropriate, many of the transfer of training strategies identified by the interviews were incorporated into the course and a range of assessments to measure the transfer effectiveness during and after the course were implemented. Whenever possible the high ranking strategies were part of the course programme. It is important to note however, that on any course some strategies that are appropriate can readily be implemented (e.g. provision of prior information), whilst others are deemed to be more difficult to implement or are less modifiable. (e.g. trainer personal qualities; participant flexibility). Still other strategies (e.g. increase in salary) could not be implemented.[33] As there were courses

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[33] A detailing of the transfer strategies implemented in this course can be located in the results section.

before and after the first Nga-pu-toru course (under consideration here) other sources of data have also been informative about the value of transfer ideas. Indeed many of the transfer ideas identified via the survey had been implemented in previous courses in Rarotonga and Aitutaki and again in more recent courses in Mangaia and Rarotonga. Evaluation data from these courses, course completion and certification, tutor/ lecturer/ MOE staff visits to the classes, MOE documentation and informal comments from individuals provided additional data concerning the transfer of course training.[34]

Methodology

During and after the 1997 Nga-pu-toru course a range of data was gathered to measure its impact. This involved collecting data from teachers and principals to assess learning, changes in attitude and application of some key ideas/skills as well as course participant satisfaction. Some photographic evidence was also collected.

Research Questions. The purpose of this phase of the study was to ascertain the impact the course had upon teacher satisfaction, attitudes, learning and application of ideas/ skills.[35]

Settings. The data from the teachers and principals was collected during the workshop period, at the conclusion of the course, at 4 months and 2 years after the course. The course classroom and principals' offices were locations used for the assembly of this data.

Participants. Data was collected from enrolled course participants. There were 31 teachers/principals on the course but on some occasions not all of them were able to participate in the data collection procedures. The course involved almost all of the staffs of the four schools for the islands of Mauke, Mitiaro and Atiu. All were Cook Islanders apart from two, one born in Tokelau and the other, an Australian *papa'a* (Westerner)*,* undertaking voluntary teaching service abroad. There was a wide age range (22 – 64 years) and experience (2 – 44 years). Three of the group were men. Of the group only three had completed their teacher training outside of the Cook Islands (two in New Zealand and one in Australia). One Cook Islander had an undergraduate degree.

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[34] Because other subsequent courses were being offered in Nga-pu-toru during the data collection it is possible that these courses had some impact upon informants responses about the first course.
[35] These are all ideas suggested in the literature (e.g. Kirkpatrick, 1994) as being measures of course effectiveness and transfer of training.

Data Collection and Analysis.   A range of qualitative and quantitative data was collected at the commencement of the course, during the course and after it had been completed.   Using Kirkpatrick's (1994) model as a basis for assessing performance effectiveness, evaluation data was collected on three of the impact levels – participant evaluation, learning and application of ideas.   Assessments undertaken to ascertain transfer effectiveness included course participant satisfaction measures, participant attitudes, transfer of procedural and declarative knowledge, transfer of conceptual knowledge, and transfer of strategies to the classroom.   Both short-term and long-term measures were used, and self-report, principal feedback and artefact evidence were the sources for this information.

1.   Course participant (N = 29) satisfaction measures (collected on the last day of the course) consisting of Likert scale measurements of:

   - the degree to which the participants were satisfied that the course met the stated aims and objectives as outlined in the course description (1, not very well; to 5, very well);

   - the participants' satisfaction with the presentation methods (1, not effective; 5, very effective); and

   - the overall satisfaction level (1, very dissatisfied; to 5 very satisfied).

   Course participants also had the option of providing additional data on the ideas that were `most useful'/`not so useful' and topic omissions as well as the opportunity to add `any other comments.'

2.   Pre- and post-tests of the participants' (N=29) perception of the nature of learning and teaching.   (Refer to appendix L). The two questions asked were:

   - What does learning mean to you and how do people learn?

   - What does teaching mean to you and what are some effective ways of teaching?

   The purpose of this data collection was to ascertain if there had been any conceptual developments relating to the course participant's understanding of the learning-teaching process. The transfer literature suggests change in declarative knowledge is an important part of transfer of training – in this course there was no direct teaching of these two concepts and so the intention was to ascertain the impact of the effective strategies knowledge upon the teachers' thinking. The ideas of Saljo (1978) and others (Van Rossum, Deijkers & Hamer, 1985) were used as a basis for considering the data on interpretation of the concept of learning. With regard to 'learning' each

pre- and post- course comment about the concept was classified into one of six levels and then two comparisons were undertaken.[36] Firstly the frequency of all individual's responses were detailed (pre- and post-) and secondly, each individual's statements were surveyed for the belief closest to deep learning and then comparisons were made pre- and post- the course. The data collected on the nature of teaching was summarised and reported as a trend change.

3. Attitudes to mainstreaming/inclusive education were assessed pre- and post- the course. The responses were summarised into pro- and anti- mainstreaming positions, the number of changes noted and some in narrative reported to illustrate the ideas.

4. A pre- and post-measurement of course participants (N= 29) existing knowledge and quest for knowledge concerning students with special teaching needs. Course participants identified:

- Information that was already known (i.e. 'What are some things I know about teaching the child with special teaching needs?');

- New information that was sought (i.e. 'What are the things I would like to know about how to teach the child with special teaching needs?'). This information was summarised, categorised and tabulated.

A summary of findings is presented but the specifics can be found in appendix F.

5. A sample of the teachers' lesson plans (N = 20), written after the workshop part of the course, was examined for transfer application. During the course, participants had three assignment tasks to complete and the first cluster of lesson plan assignments received for assessment were selected and analysed for transfer application into curriculum planning tasks. These plans detailed the use of Bloom's (Bloom, Englehart, Furst, Hill, & Krathwohl, 1956) levels of thinking strategies within a programmed lesson that had been implemented in the teacher's classroom. Each plan was compared to the lecturer's model lesson plan, which had been trialed with the course participants during a workshop session. On the basis of this comparison, each teacher plan was categorised into one of four levels of transfer using a Lesson Plan Transfer Rubric, viz.,

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[36] Saljo (1978) identified six categories of learning and outlined them in a hierarchical manner. These were increasing one's knowledge (A), memorising and learning (B), applying (C), understanding (D), interpretive processing (E) and change as a person (F).

- Overlooking – many of the important ideas necessary for the effective use of ideas were overlooked <u>or</u> many inappropriate teaching ideas used;

- Duplicating and replicating – copying of the model lesson plan or minor changes to the lesson plan to meet the teacher's own classroom needs;

- Integrating and associating – integrating the model lesson plan ideas with new/different ideas/situations <u>or</u> using the strategy with new subject content or with authentic activities;

- Innovating - using the model lesson plan ideas in an innovating, divergent, insightful or novel manner.[37]

6. Artefact evidence – a number of photographs were taken as evidence of the course approaches, etc.,

7. Long-term impact assessments. Reports from principals and teacher self-reports of implementation of course ideas in the classroom were also collected twice after the completion of the course. Four months after the completion of the course 13 teachers and a principal, from one of the islands, were interviewed and data was gathered on the following:

- Principal – were the course ideas being implemented and how frequently? (Reported in narrative form);

- Principal – were there any problems in the implementation of ideas? (Reported in narrative form).

- Principal – any other comments? (Reported in narrative form).

- Teacher – what were the strategies and activities being used now and have any changes been made? (Frequency of reported use was noted and narrative comments reported).

- Teacher – was there any other course information or experiences you gained that are being used in the classroom? (Reported in narrative form).

- Teacher – were there any problems encountered in the implementation of the ideas? (Reported in narrative form?)

- Teacher – any other comments (Reported in narrative form).

Two years after the first impact survey the majority of the Nga-pu-toru course participants (26 teachers and 4 principals) took part in another survey (postal) to

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[37] This was an adapted classification of the levels of transfer from the work of Fogarty, Perkins and Barell (1991a). For the purposes of this assessment levels 2 and 3 were combined as were levels 4 and 5.

ascertain transfer of training. Data on the following questions was collected via teacher and principal report:

- Teacher – which techniques were still being used? Do you have any other comments? (Responses were detailed on a three-point Likert scale for each of the major course strategies that had been introduced).

- Teacher – have you developed an IEP since the course (or some type of planning for students with special teaching needs?) Has this planning been useful if developed? Do you have any other comments? (Reported in narrative form and frequency of forced choice of yes/no).

- Teacher – did your attitudes to students with special teaching needs change? Do you have any other comments? (Reported in narrative form and frequency of forced choice of yes/no).

- Teacher – how useful was the information presented on the course? Do you have any other comments? (Responses were detailed on a three-point Likert scale for the major categories of course information including the knowledge and skills components).

- Principal – did the teachers become more knowledgeable and did they retain the knowledge? Any other comments? (Responses were reported in narrative form)

- Principal - are many of the teachers still using some/any teaching strategies from the course? Are they using many of the ideas? How frequently are they using these ideas? (Responses were reported in narrative form).

- Principal – did you notice a change in the attitude of the teachers towards students with special teaching needs? How many teachers had a change of attitude? (Responses were reported in narrative form).

One teacher also provided artefact evidence in the form of photographs to demonstrate she was still using the ideas. A selection of these photographs has been included in the result section.

Reliability and Validity. Triangulation of data sources, methods and type provided considerable certainty with regard to the stability and meaningfulness of the collected data. A research assistant re-checked the calculations and ascertained clerical accuracy of the satisfaction measures and all other measures. The reliability of the lesson plan categorisation was monitored by asking a research assistant to re-check the

categorisation of six lesson plans – in each case; the original categorisation confirmed the lesson plan categorisation. Another research assistant at the time of final drafting of the report re-checked the validity of the narrative reports and only minor changes were made to the summarising of ideas.

Chapter Summary

This chapter has outlined the phases and methodology of the research project. The research was associated with a teacher development programme designed to enhance the teachers' knowledge and competencies in the area of inclusive education practice. Although essentially a phenomenological approach, both qualitative and quantitative data gathering techniques were used. During phase 1 of the research 'broad-sweep' data gathering strategies were planned and interviews, observations and meetings were scheduled. Particularly important was the teacher needs analysis data gathering. During the next phase, the substantive part of the research, strategies to identify specific facilitative factors, barriers and themes were detailed. A transfer interview enabled the identification of strategies and provided data for a thematic analysis. Some key informants were interviewed to follow-up the support theme. During phase 3 an impact evaluation of many of the transfer strategies incorporated into the course was undertaken. Both during and post-course assessment data gathering procedures were used to assess the transfer of training.

CHAPTER FIVE

PHASE 1 RESULTS AND DISCUSSION

Although we have a reasonable bias for hope that we may find ways to make learning processes more efficient, we should not expect to produce the miracle of effortless learning. (Larkin, McDermott, Simon, & Simon, 1980, p. 1342)

Introduction

There were four research objectives. Firstly, within the context of teacher in-service courses, the study was concerned with recognising facilitative and barrier transfer factors and their relative importance. Secondly, the generation of a set of understandings about transfer of training was being sought. The third was concerned with the development and delivery of a teacher in-service programme based upon the information gleaned from the data relating to the first and second objectives. The final objective was concerned with making a contribution to the theoretical body of transfer knowledge, in particular, the impact of culture upon transfer.

In meeting these objectives there were three distinct, but inter-related, data collection phases planned around ongoing courses. The following three chapters will deal individually with the results of the three phases (Refer to figure 5.1 for a summary of the key result areas. See chapters six and seven for phases 2 and 3.

1. Well before the introduction of the course programme, there was an identification of the preferred broad approaches to effective course development (phase 1). This preliminary background data concerned effective course implementation and was collected via needs analysis procedures, observations, informal discussions, participant evaluations and meetings.

2. A follow-up and detailed exploration of the most significant background factors was then undertaken (phase 2). This was the inquiry stage, the substantive research period, where attention was directed to the collection of additional data. Emphasis was placed upon participants identifying specific in-service approaches/methodology that were perceived to facilitate or inhibit transfer. Interviews were used to collect this data and follow-up surveys assessed the value of specific in-service strategies. This resulted in a descriptive grouping of specific facilitative/barrier factors related to transfer of training. From these groupings, a number of themes were identified relating to the individual characteristics of the participants, training effectiveness factors and the
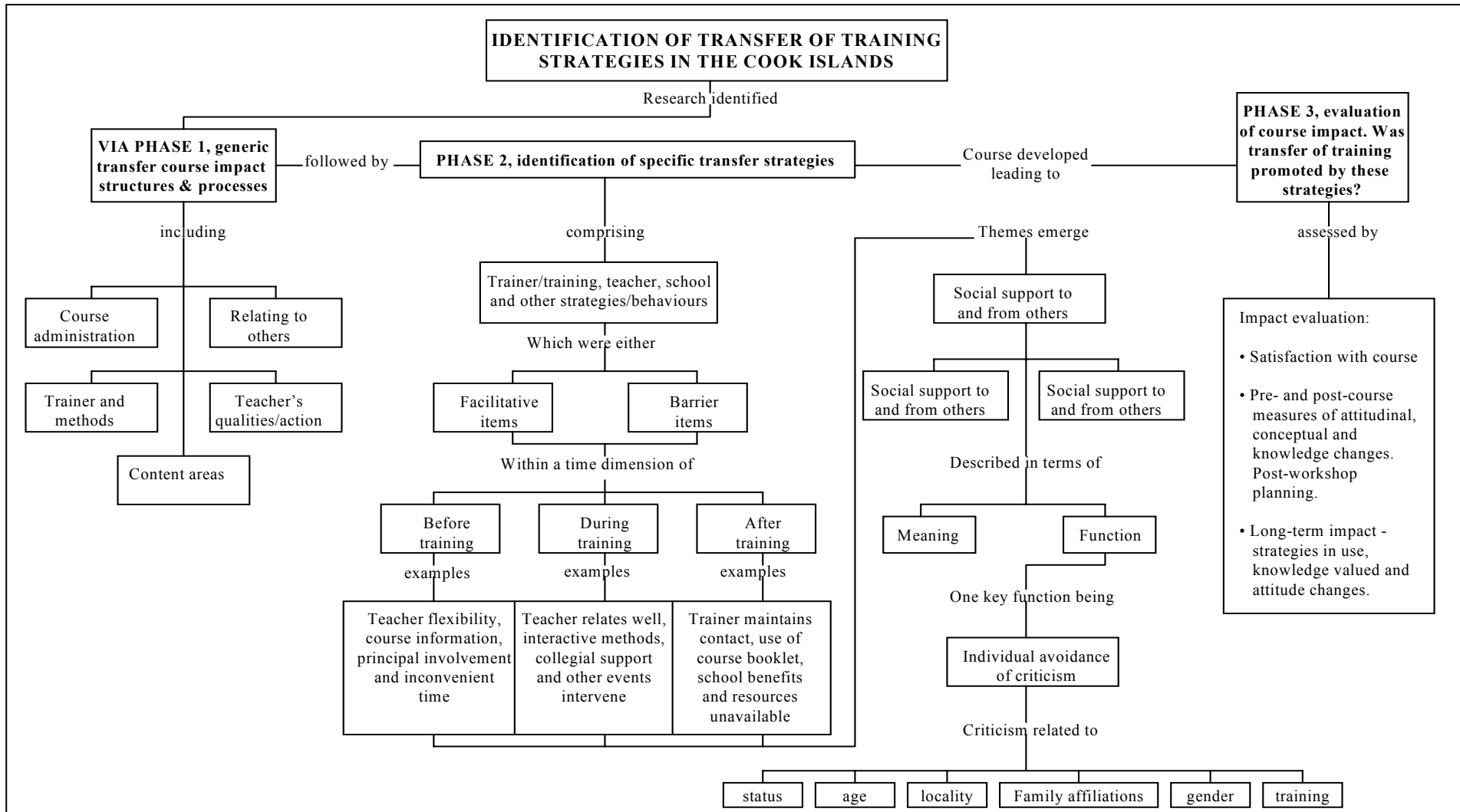
Figure 5.1. Concept Map of Key Result Areas

value of support on the course. Because of the cultural significance of relationships and group orientation, the issue of support was then examined further to identify its nature and function in relation to transfer of training.

3. In the third phase, effectiveness data was collected to assess the transfer of training via the strategies that were implemented as a consequence of the findings of the earlier two phases. That is, at the time of the first outer island course, a formal evaluation of the course impact was undertaken and interviews, surveys and artefact evidence (photographs) provided data for this evaluation.

Hence the findings from this study were cumulative – many of the ideas arose from preliminary meetings and background studies (McDonald, 1995a; McDonald & Moetau'a, 1993; McDonald & Paterson, 1994; Paterson, 1994; Sweeney, 1994; Willis & Evaroa, 1995) and these were subsequently investigated through the needs analysis (McDonald, 1995b), interviews and surveys (i.e. phase 1 and 2). The third phase assessed the utility of these ideas.

Phase 1: Identification of the Generic Training Requirements

This phase of the research was concerned with the research question '*What are the specific transfer of training strategies recognised as being important for developing an in-service training programme?*' However in this first phase, it was general and broad data that was being gathered.

Beginning in 1994, a number of preparatory studies were undertaken that became the basis for the programme implementation and this research project. These studies were considered particularly important by the course planners as it enabled them to facilitate a preferred programmatic approach and to ensure emphasis was given to the cultural context as well as the participant-collaborative nature of the project. These factors were considered basic for effective transfer of training. Paterson's (1994) pilot study in New Zealand trialed an in-service needs assessment tool which was subsequently refined for the Cook Islands context. This provided the needs assessment to initiate the programme and accompanying research. Sweeney's (1994) findings, on the importance of the relationship variables, provided a context for the use of this instrument to gather data from Cook Islands teachers. This research indicated the importance of the researchers establishing

meaningful relationships with the participants to enable the gathering of valid data. Subsequently, additional and supplementary data was gathered by the research team from teacher educators (via interview), a number of senior educational staff (via an open meeting) and classroom observations.

Much of the data collected by the researcher (and assistants) was consistent with the literature on effective teacher education in-service training programmes and a number of consistent and interesting findings (McDonald, 1995b) emerged in the needs analysis to provide a basis for the development of an effective programme for the Cook Islands. Although teacher comments and opinions were sought, in the main the collected data was quantitative. Refer to appendix B for a copy of the needs analysis survey-protocols.

There was a general consensus that the course needed to be a well-planned, collaborative venture with a sharing of ideas to upgrade their teaching (Q. 26, 27, 28, 37[38]). One teacher's comments were typical – it ...'should be well prepared, some introductions - should cover everyone's ideas, tell us what we need, tell us about the course.' Importance was attached to sharing of ideas by course organisers and participants to upgrade the teaching skills. One teacher noted the following:

> *I might be doing things in the classroom, when there might be other ways to do things, to approach them,..... I might learn something to help me, ... after each day I think I've approached something wrong but who is going to help me learn? ...... I do some things wrong but the children can't say 'Mrs ..... you're wrong.'*

Another teacher, commenting on the relevance of shared goal setting, stated it was very important to " ask the people that come to the course.... sometimes the ideas that you (i.e. the trainer) give to us are not going to be used over here." Almost every teacher noted the relationship of the course to improved classroom practice.

Participants valued professional development opportunities that focussed on working with one another, which is consistent with Cook Island cultural practices. Collaborative, group-training in-service approaches were favoured with a strong preference for peer/staff collaboration and workshop practical sessions (Q. 14, 29, 30). The preferred specific techniques emphasised activity, practical knowledge and skills, observational learning

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[38] These numerals refer to the question items contained in the needs analysis survey

approaches and reading material. Lecture-type presentations were the least favoured. A summary of the findings is presented in tables 5.1 and 5.2.

Table 5.1
Rank and Scores of Teachers Preferred Training Approaches (N=30)

IN-SERVICE APPROACH	SCORE*	RANK
Peer assistance	84	1=
Shared staff development	84	1=
Workshop	83	3
Action research	73	4
Individual professional development	52	5

* A three point Likert scale was used. Each respondent's choice for a specific approach was given a score (i.e. very favoured = 3; OK = 2; not favoured = 1) and the total score for each training approach was calculated by summing the score.

Table 5.2
Rank and Scores of Teachers' Preferred Training Techniques (N = 30)

TRAINING TECHNIQUES	SCORE*	*RANK*
Use of games	90	1=
Producing resources	90	1=
Small group work	88	3=
Learning centre	88	3=
Simulations	87	5
Natural setting observations	86	6
Panel discussion	84	7
Arranged demonstration	83	8
Case study	82	9
Reading	81	10
Interview resource person	78	11
Lecture	51	12

* A three point Likert scale was used. Each respondent's choice for a specific technique was given a score (i.e. very favoured = 3; OK = 2; not favoured = 1) and the total score for each training technique was calculated by summing the score.

Importance was attached to the worth of collegial relationships, working together and support for course participation (Q. 18, 19). Many teachers, for example, noted the value of a supportive network, principal support and the significance of other teachers' attitudes

toward the training. With regard to desired in-service group characteristics (Q. 9), self selection and the ability to work together were particularly important to many teachers. Table 5.3 summarises the data collected concerning the teachers' favoured training group characteristics.

Table 5.3

Rank and Scores of Teacher Preferred In-service Group Characteristics (N = 26)

GROUP CHARACTERISTICS	SCORE*	RANK
Relate effectively	71	1
Self selection	68	2
Choose to work together	63	3
Similar responsibility	47	4
Similar class level	46	5
Experienced teachers	44	6
Similar culture	42	7

*   A three point Likert scale was used. Each respondent's choice for group characteristics was given a score (i.e. very favoured = 3; OK = 2; not favoured = 1) and the total score for group characteristics was calculated by summing the score.

A number of trainer qualities and characteristics were also identified as being particularly valuable for course success (Q10). A trainer who was a qualified teacher with local and expert knowledge was more favoured (Refer table 5.4 for additional data).

Table 5.4

Rank and Scores of Teacher Preferred Trainer Characteristics (N = 26)

TRAINER CHARACTERISTICS	SCORE*	RANK
Local knowledge	75	1
Trained teacher	73	2
Expert knowledge	70	3
Practicing teacher	59	4

*   A three point Likert scale was used. Each respondent's choice for trainer characteristics was given a score (i.e. very favoured = 3; OK = 2; not favoured = 1) and the total score for trainer characteristics was calculated by summing the score.

A number of preferences relating to course administration were identified (Q. 9, 15, 16, 17, 18,19, 32, 39). The majority of teachers preferred to attend morning courses in term one and seven of the teachers were very opposed to holiday courses. Over half preferred a distributed

format in preference to a block course although a few favoured a mixture of both approaches. There was a clear preference for self-selection of course participants and to locate the course away from the school site, but access to equipment, resources, food and drink was an important consideration in the choice of the venue (Q. 31). Many teachers noted the value of brief daily course handouts and the availability of resources to implement ideas. Most believed that certification and/or pay increases were suitable rewards for course participation.

It was also agreed by most of the teachers that course evaluation was the responsibility of trainers <u>and</u> participants and that both formative and summative evaluations were important. Feedback on the evaluations was requested by a number of teachers, as was the suggestion that classroom practice feedback could be obtained from the students, teaching colleagues and by using observation strategies (Q. 34, 35, 36, 38). Some of the typical comments relating to evaluation are detailed below.

> *.... presenters should come back and go into the classrooms to see for self - good way of learning.*

> [Need] *.... time for us to discuss it.*

> *Bring it all together* [i.e. the evaluation data] *and everyone looks at it, and discusses it – every course we have been on we put the evaluation sheets over there and then that's it, it's not discussed.*

To facilitate the development of the first workshop, additional data relating to teachers' preferences for content and special education attitudes/experiences was collected. This additional data related to specific course development needs and, apart from the following analysis, was not examined further in relation to transfer of training issues. Most teachers made recommendations with regard to general topics for in-service training and specific inclusive education requirements (Q11-13, 21-25). Many teachers wanted additional training in the basic subject areas (mathematics, English and language) and over half commented that assistance for teaching special needs students (e.g. resources and teacher training) was a priority. Data on experiences and attitudes toward inclusive education and special education students was also collected. Most agreed that they had some skills and knowledge to work with the special needs students (gained via experience) and a favourable attitude toward the inclusive education approach. The majority of teachers could not recall having any training in the area of special/inclusive education however. A number of teachers requested skill development in the areas of interactive teaching and classroom management-discipline issues.

In addition to the above data, teacher educators and senior education staff from the schools and Ministry of Education were asked to contribute suggestions to enhance course impact. Most of this information corroborated and supported that collected from the teachers. The following list identifies the components of training that were considered to be of most importance:

- local teachers' input and management on the course;

- a venue where food and drink could be readily accessed;

- clearly specified requirements with regard to attendance, hours, and expectations;

- the involvement of the principals;

- practical training with games and fun activities with a model of the learning-teaching process that highlighted the teacher as a facilitator of learning;

- a teacher in-service model of theory/content followed by demonstrations and discussion with consolidation in groups via practice and group report back procedure;

- displaying of the teachers' work;

- the establishment of warm relationships between the tutors and participants with attention given to confidence building and raising the esteem of the participants;

- classroom practice with an emphasis upon the new curriculum;

- use of prayers being a part of each day's programme; and

- creating outcomes that had a bearing upon human resource capacity building (i.e. so that there were personal, social, community and economic gains for the individual and the nation as a whole.

Further information was gained from the research team's observation in the classrooms. Although the primary objective was to orient the team to local school conditions and to assist them to understand the context, the data collected also contributed to the knowledge of effective course design in the Cook Islands. It was noted that there was a paucity of teaching resources and what did exist was often inappropriate for the local context. For example, in a number of classrooms reading materials were being used that were suitable for other cultural contexts. Class and school facilities and amenities were basic but much in need of repair or replacement. Students were frequently seated individually in rows whilst teachers were often observed to talk 'at' the students with little student group work undertaken. Little interactive teaching was observed. Most teachers related well to the students, although minor management problems (e.g. students off task) with students were noted.

The data collected from the teachers, teacher educators and education community members did have a number of common elements relating to course objectives, development, implementation, relationships, support, feedback and recognition for participation. Although the phase 1 findings were not markedly different in many respects to the existing literature and research on effective in-service training, there were specific local needs and priorities identified. For example, there was a preference for active, group-oriented and collaborative approaches to in-service with opportunities to work and relate effectively together. Furthermore a trainer with local knowledge was favoured. Trainers would need to be aware of these preferences to plan for an effective course that would impact in the classroom.

Discussion

This research project, consisting of three research phases, was concerned with understanding transfer of training and identifying effective approaches within an identified cultural context. In phase 1 of the research project, and prior to the introduction of the courses for the teachers, there was an identification of the preferred broad approaches to course development. A range of data collection strategies were used and included interviews, observations, informal discussions and meetings but some background preliminary data gathered prior to the inception of the research project was considered. These phase 1 findings were instrumental for the development of the teacher in-service courses that related to this research study and provided the foundation for the later research phases.

The results from this phase of the research indicated that those surveyed in the educational community had a clear perspective on what constituted effective in-service training that would have impact in the classroom. Many ideas consistent with the international literature on in-service training were identified but there was a discernible pattern of responses and findings that reflected the local needs. These findings were particularly important for not only did they emphasise the need for effective in-service but also in-service that was grounded in meeting the needs of teachers located in a specific cultural context. In this section, the discussion will consider the findings from a general point of view, as much of the data in this section will be examined in more detail in phase two.

There was a consistency of findings between the teachers, teacher educators and education community leaders. In general terms, the participants identified many of the key ideas identified as being important in the literature on in-service training. It seemed that one of the paradoxes is that the international literature in acknowledging the importance of 'culture' for in-service training reflects what in many respects is so important in Polynesian culture. There was an acknowledgment of the importance of collaboration, principal and collegial/staff support, evaluation, the effective use of expertise and resources. Sparks and Loucks-Horsley (1990) identified such practices as keys to successful staff development whilst others (e.g. Rosenholtz, 1991) have directly related such practices to change outcomes in schools. Such practices are consistent with the Polynesian emphasis upon sharing and caring, status and respect for expertise, and consensus (Ritchie & Ritchie, 1985). However, none of the meta-strategies (e.g. development of change process factors, strategic transfer plans and school climate factors) for facilitating change in schools (Bellanca, 1996; Ellsworth, 2000; Fullan, 1992) were identified by the participants. Perhaps the research participants were simply unaware of the value of these practices. Another possible explanation is that these are somewhat contrived factors that could be regarded as an imposition upon a normative cultural system that has its own means of dealing with change and innovation.

In a similar vein, the participants gave little attention to the importance of the prevailing organisational conditions necessary to achieve the in-service training goals (Clair & Adgar, 1999). This could be in part a reflection of the nature of the data gathering (i.e. the semi-structured survey format was an important data source) although ample opportunity was given to participants to contribute ideas independently of the questions that were asked. For example, the role of the Ministry of Education, policy development, the importance of the principal's coordinating role for in–service and teacher-organisational learning partnerships were not referred to at this stage of the research process.[39] The need for reciprocity between the teacher and other sub-systems for effective change to be implemented was not acknowledged. A deficit model of teacher in-service (OECD, 1998) appeared to be the prevailing view rather than an emphasis upon individual, collegial and organisational improvement.

These findings (as in phase 2) highlighted the importance of the two major issues to consider when adult learning programmes are being implemented. Individual and

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[39] In the subsequent phase, the participants identified a number of these issues as being important.

contextual issues are both significant aspects that need to be planned for in the development of a training programme (Caffarella & Meriam, 1999).

Many suggestions for motivating the effective learning of the individual teacher were given and these were consistent with what we know about adult learning approaches (Knowles, 1984). For example, an individual teacher would best learn if there were teaching strategies that emphasised self-esteem, relevance and self-selection for a course, active and observational learning, participatory and practical approaches, use of post-workshop notes, distributed learning, specific individual content/curriculum needs of each teacher and reward for course completion. As Butler (1992, p.4) noted for successful in-service "generally speaking, learners need to be interested, successful, and supported in their learning, and such intrinsic motivators are critical to programme success." Teacher educators and others from the educational community emphasised the importance of an in-service teaching model that stressed theory, demonstration, practice and feedback similar to the models outlined by Joyce and Showers (1980) and the North Central Regional Educational Laboratory (n.d). Following this, there was a need expressed for the teachers to able to practice the course ideas in the classroom and to become skilled in presenting a curriculum that emphasised learning as an interactive social encounter.

Personal growth and status issues (Craft, 2000; Joyce & Showers, 1988) have also been inextricably linked to successful in-service training. Teacher educators and community education leaders were particularly keen for a change amongst their teachers with regard to fundamental teaching beliefs. West (1992) identified a teacher's 'theory in action' as a critical component in determining attitudes and responses to learning and teaching. A change in belief structures relating to the learning process (i.e. the teacher is a facilitator of learning rather than a knowledge expert) could readily be interpreted in terms of significant transformative learning required of the teacher. Activities recommended for achieving this however were more oriented toward what could be done to achieve the process (e.g. learning via interactive means such as practical training and games) rather than a more direct emphasis upon how (i.e. higher level thinking skills) it could be achieved. In many respects, this is probably a reflection of the essence of these findings – that the social learning opportunities would best provide the means for learning to occur.

The analysis of the data in this phase clearly indicates that the participants in phase 1 of the research gave considerably more attention to the contextual significance of a course and the need for it to be considered as a social encounter. The findings emphasised the

importance of training being a collaborative, authentic and relevant venture, in terms of goal setting, planning, training approaches and evaluation. Interactive training and social opportunities and capabilities were considered important dimensions for an individual's success. Indeed, in many respects, many of the suggestions above relating to personal growth could also be interpreted from this contextual viewpoint as well.

During this phase of the research, data was collected about the technical requirements (e.g. preference for amenities, timing of the in-service course, use of resources, a curriculum that reflected the global market requirements) of course development and the nature of how best to plan for an individual's effective learning. Although these technical and cognitive components were accorded importance there were two very significant, interrelated and recurring dimensions to the findings - collaboration and the emphasis upon social behaviour.

Certainly, significant emphasis was given to the importance of social learning opportunities. The teacher professional development models well known to the participants to be socially mediated or having the potential to be so (i.e. peer assistance, shared staff development and work-shops) were more favoured by the participants. Emphasis was also upon approaches that used social and contextual constructions such as observational learning, feedback, self-esteem, relevance and reward.

Even though there was a clear need expressed for the course learning to be personally authentic and situated at the teachers' level of understanding it was assumed by many that this learning was reciprocal. Even the trainer should assume a learning role that paralleled the teachers'. As one teacher commented " …..presenters should come back and go into the classrooms to see for self – good way of learning." The research participants highly valued the social contexts for learning – there was for example, emphasis upon participatory planning, collaboration, peer assisted and shared learning, group work, games, etc., as well as the importance of relating effectively to one another on the course and principal involvement. There was also importance attached to the establishment of a warm supportive trainer-trainee relationship. Many considered it to be a particularly important component for the success of the in-service programme, that the trainer had credibility (in terms of training, local knowledge, practice and expertise) and was able to establish a warm relationship with the course participants. Being able to promote the trainee's confidence and self-esteem were considered to be important tasks for the trainer.

In essence, what the participants were saying about in-service was consistent with the multi-dimensional model of teacher development outlined by Bell and Gilbert (1996). Refer figure 3.2. This model emphasises the interaction of the personal, social and professional developments for effective teacher professional growth. The participants identified teacher personal growth (e.g. self-esteem), social opportunities (e.g. relating effectively together) and professional goals (e.g. development of teachers' skill to utilise interactive teaching-learning strategies) as being particularly important. The research participants seemed to be drawing their ideas not from a model of teacher professional development but from their understanding of how learning can be best accomplished. In traditional Polynesian society learning is collaborative, observational, imitative and participatory. The learner is an apprentice to the highly respected teacher. In this system, the individual, professional and the group are one whereas in Western cultures the roles can be more readily separated (Howard, 1990). Interestingly however, therein lies another paradox. What the research participants were identifying as important for teacher training was also recognised by many of the educational leaders as a need and prerequisite for effective learning in the nation's classrooms. Helu-Thaman (1999) believes that because there has been a downgrading of the worth of indigenous culture and its approach to learning, this emphasis upon traditional learning approaches has been diminished. She argues that more attention should be given to the traditional (Polynesian) views of teaching and learning. In Tonga, Koloto (1997) identified that education is a two edged sword, providing opportunities for people, but at the same time it has the potential to undermine the indigenous culture. She called for educators in Tonga and the Pacific to maintain a balance between education for cultural development and education for economic development.

As Imel (2001) noted, power issues are increasingly being recognised as important considerations in adult education programmes. In this research, the issue of control concerning decision-making in relation to course design and implementation were considered to be important. It could be speculated that given the nature of the values attached to the status and hierarchy of a trainer in the Cook Islands, the motivation for decision-making power may arise from a different source and its consequences perform a different function to that found in the traditional western trainer-trainee relationship. The value of collaboration and consensus in Polynesian society is paramount whereas in western society consensus is more likely to be achieved because of a 'consensus of individual aspirations' that has become understood through the expressed rights of the

individual. Whatever the motivation for power sharing in educational programmes for teachers, the value of it can be recognised because it facilitates learning. It enhances opportunities for the teachers' learning to be more efficient – it mobilises a constructivist approach to learning in valuing and building upon prior experiences, knowledge and skills. (OECD, 1998).

The above issues relate to the cross-cultural trainee-trainer model that Hofstede (1984; 1991) outlined. He noted that mismatches between the basic cultural ideals and values of a trainee and trainer can be problematic unless identified and accommodated. This is independent of the 'expert' credibility of the trainer but relates to the trainer's capacity to bridge key differences between cultures. Undoubtedly what the research participants were discussing was the need for a 'third cultural perspective' (Hammer, Gudykunst & Wiseman, 1978). The earlier comments concerning the establishment of a relationship between the trainer and the trainee assume even more relevance when this is considered.

Although these findings in the first phase of the research were a prelude to the more detailed data collection procedures, they were particularly important for they provided a context for the development of the teacher in-service programme and for the on-going research project. As indicated above, the participants identified broad issues relating to effectiveness of in-service training not dissimilar to the international literature. There was for example, recognition of the importance of the individual and contextual elements of learning and the significance that needed to be given to teaching/learning processes related to collaboration, support, interaction, motivation, theory-to-practice teaching, teacher theorising and the development of a meaningful relationship between the trainee and trainer. However, there were a number of local qualitative differences located alongside these perspectives. These differences reflected the need to understand that the cultural context was important for ensuring in-service training effectiveness and transfer. There was a need to move beyond the adaptation of content and the cosmetic changes to course design. These participants identified that the success of the training programmes rested upon collaboration and social facilitation to maximise opportunities for transfer of the training. The major benefits of training were seen to accrue from a culturally mediated, social construction of an individual's response to the learning opportunities.

Because the results from phase 1 flow into phase 2, the discussion relating to a number of issues, the theoretical implications, practical applications and future research will be considered later. Nevertheless, it is important to note that the personal, contextual and

cultural complexities of in-service training and transfer facilitation have been identified as being inter-woven. The next phase of the research identified in more detail the nature of this complexity and the particular significance that cultural issues have for transfer of training.

There are a number of restraints that need to be considered in relation to the findings. The sample size was very small and hence generalising from the descriptive data must be under-taken very cautiously. Furthermore, the team generated the research instruments and hence issues relating to reliability and validity of the data may arise. Given this, the findings remain significant if interpreted guardedly and regarded simply as being expressive of a small group representing the population of teachers and other educators in the Cook Islands.

Phase 1 Summary

This chapter has identified generic transfer of training strategies. This was accomplished through observations, interviews and meetings. A number of key training factors were detailed by the respondents and a number of these could readily be related to the cultural traditions of the Cook Islands. Collaboration and interactive training were particularly significant features related to a number of training ideas.

CHAPTER SIX

PHASE 2 RESULTS AND DISCUSSION

*We talk about "transfer of learning" when…learning is displayed in a
situation somewhat different from that in which the original learning
occurred. If the transfer situation is so different that the use of learning
encounters some barrier or difficulty, we speak of "problem solving."
When the situation is greatly different and the distance of transfer needed
is greater **still**, we speak of creativity. (McKeachie, Pintrich, Lin &
Smith, 1986, p.33)*

The Validation of Transfer of Training Strategies and Approaches

This phase of the research was concerned with the development of a framework of specific
ideas and suggestions to facilitate transfer of training and identification of common
themes. As in phase 1, the research question - 'What are the specific transfer of training
strategies recognised as being important for developing an in-service training programme?
was key to this phase. In addition to this however, another question followed - 'What are the
patterns arising from the data that best explain the transfer of training process? Specific
transfer of training strategies were being sought at this stage.

The initial undertaking was to interview teachers; teacher educators and principals in order
to identify transfer of training ideas and suggestions. Specific transfer of training
suggestions and ideas were identified from the interview data, categorised and then coded.
This data was then analysed in two inter-related ways. In the first instance, in phase 2A,
the identified categories became the basis of the survey. The resultant data was considered
for the identification of the value of specific items and how they related to the location of
these items within the 'facilitative/barrier X time' matrix. Subsequently, in phase 2B, the
identified categories were analysed in a more conceptual manner to locate any patterns and
themes in the data and this analysis was then related to the findings of the survey.[40]

Phase 2: Specific Transfer of Training Strategies

Interview Data: The Identification of the Specific Transfer Strategies

During phase 2 of this study, specific local transfer of training strategies were identified via
interviews and, together with data obtained in phase one, included in the transfer survey. The

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[40] The codes, patterns and themes were identified via the procedures recommended by Miles and Huberman
(1994) and these are detailed in the methods section.

analysis of this data revealed 116 specific factors perceived to be important (by teachers, teacher educators and principals) for transfer of training and these were categorised into 'facilitative/barrier factors X time' dimensions (before, during, after training). Refer to the codes, definitions and transcription schedule in Table 6.1 for a detailed description of these items. The purpose of these interviews was

1. to supply a pool of ideas for the construction of the transfer survey (which was used to quantify the value of ideas), and
2. to provide narrative for a thematic analysis (which was used to find common patterns and themes in the responses).

Both sets of data were used as a means of obtaining information and meaning on what Cook Island educators perceived to be important for transfer of training to occur. The survey that followed (with an expanded sample of respondents) provided data on the value placed upon the specific strategies that were identified. In-depth interviews that followed this, considered one of the common and pertinent issues (social support) identified in the initial phase 2A interviews.

Considerable discussion about the meaning and value of the specific transfer items occurs in the following sections particularly the thematic analysis of the transfer interviews. This makes the discussion more meaningful when placed in this context. Given this, the following discussion is limited to an overview of the nature of the specific pool items obtained via the transfer interviews.

Respondents identified various strategies (both facilitative and barriers) that they perceived to have impact upon implementation of course ideas into the classroom. These could be categorised into training/trainer, trainee, collegial/school and community factors within the three time dimensions (before, during and after). It was particularly evident that many of the items had commonalities – there was an emphasis on items that were concerned with support/non-support (from colleagues, school, family, community, etc.), information sharing, collegial and principal involvement, recognition of effort, trainer professional and personal qualities, trainer contact, course methodology (particularly interactive strategies), relevance and benefit to school, sharing, teacher personal qualities, course notes and use of resources and facilities. Of particular note was the number of items relating to aroha (in terms of support *to* and *from* others) and the lack of encouragement, support and recognition from colleagues, principals, family and others. This finding was considered

Table 6.1

Codes, Definitions And Transcription Examples:

CODE	DEFINITION	TRANSCRIPTION EXAMPLE
Before - trainer		
1BTr	The trainer/training course provides information to the teacher on the course content and the methods (i.e. what the course is all about and how the trainers will teach it.)	(We need information)..."*on what you are expected to do or to know and the relevancy of what you are going to do........*"
2BTr	The trainer/training course provides information to the teacher on the **course requirements** (e.g. attendance, assignments, participation, hours required).	(Teachers need to know).... *" what they may have to be involved with; whether there is anything expected of them so they are not going to be dropped in the deep end before they get there."*
3BTr	The trainer/training course provides information to the teacher about what he/she will **be able to do by the end of the course** (e.g. the new skills teachers will have).	*"I think also you have to explain the results you are going to get and the impact they may have..."*
4BTr	The trainer/training course provides information to the teachers, Ministry, principals, etc., on **why this course is useful** and what it will be able to achieve (i.e. this is marketing the course - selling it)	(You have got to have) ......*excellent salesman skills, you've got to be able to convince them, motivate them.......*"
5BTr	Before the course starts **social events** and `get-togethers' are planned so trainers and course members can all meet one another.(e.g. pre-course kai kai)	*"I think...."*(what is required is) *"....pre-course meetings and social gatherings, getting to know each other and getting to know you people."* (i.e. the trainers)
6BTr	Before the course starts **introductory course tasks and activities** are given to the teacher to get him/ her thinking about the course (e.g. some reading about one of the topics).	*"I think it is very important that we get the reading materials ahead of the course itself...."*
7BTr	Information is provided to the teacher to show that the course will be **relevant** (useful) for his/her work in the classroom.	....*the teachers have got to see the relevancy of the course.....they have got to clearly see the benefits that the course would either bring to themselves as individuals, as professionals and to the students they are teaching.'*
8BTr	The trainer meets with the teacher to gather information from him/her about **abilities, interests, needs and the teacher's requirements** for the course.	*"For example this course - before you actually launched this course you made sure you actually came here and actually observed teachers in a classroom... because it is a different environment to your environment. You've got to come to know how they react to certain suggestions and things like that before you actually start thinking about what will be the content of the course, to come to understand the local flavour, the local context, their aspirations and things like that, their problems and their difficulties and things like that."*
9BTr	The **time** of the course (i.e. when it is held) is convenient to the teacher.	*"I think one important thing is about the time, the period you are going to take the course. You have to look carefully into the period of the course- for example, when we started off it was in January. Taking our holiday period- why can't we take ...school time, school days? Rather than leaving... *(it)*... until school holidays."*
10BTr	There is a **salary increase** offered to the teacher if the course is completed.	*"They know at the end there are the benefits that will be around..... they will get increments and things like that....."*
11BTr	There is a **certificate awarded** to the teacher if the course is completed.	."...*they will get increments and things like that - a certificate recognising.....*"
12BTr	The new skills, certificate, etc., that the course is offering could **lead to the teacher gaining promotion.**	*"One is you must have something useful - salary wise, for instance. This would mean promotion"*

CODE	DEFINITION	TRANSCRIPTION EXAMPLE
13BTr	The training programme information indicates to the teacher that **improved teaching** in the classroom will result	(Time can be given to a course because of)....*"the belief that if these people succeed, ongoing benefits will come back into the classroom and into the school itself."*
14BTr	When teachers hear about the training programme, they are encouraged to enrol in the course because **other teachers are doing extra work** to improve themselves.	...."the feeling that by doing this course they are keeping up with other people who are doing other courses."
15BTr	The trainer has a **likeable and pleasant personality.**	(We want a lecturer)..... *'full of life, snappy, understandable, easy to adjust,..... being alert.... easy going... and one that can be positive. You're doing a good job of it so far. we want a lecturer like you."*
16BTr	**The trainer has background knowledge** about the culture, local teaching situation, the schools, resources, the educational system, etc.	*"I think that whoever comes here has got to have a pretty good idea of what its like in our classrooms so they don't make assumptions about teaching that are not accurate. I think they have to have some ideas of what it is like to live here...........Like difficulties in actually living here....by the time you get your planning done and cart your water from the creek and from the tank and community involvement......."*
17BTr	The **trainers (or MOE, etc.,) select the teachers** to attend the course	*"I believe there should be a selection panel...... I think there are some people unsuited for this type of course and need to be selected out."*
18BTr	It is known that the course will not only help the teacher but also **benefit his/her school and colleagues.**	(Time can be given to a course because of)....." *the belief that if these people succeed, ongoing benefits will come back into the classroom and into the school itself."*
Before - teacher		
1BT	The teacher is able to set **personal goals (to improve) and make a commitment** to complete the course.	*"Be genuine with yourself - that you are going in for something -and you set your goal that you are going to do it and do it right to the end and get good results from it. "*
2BT	The teacher has a high level of **motivation**, a **positive attitude** toward the course and is **eager** to take part.	*"I think they have got to be motivated."* *"I think one important factor is attitude - what they are doing.....before the course - whether they are interested in the welfare of the kids."*
3BT	The teacher is **confident** that he/she can do the work required to complete the course.	*"Build up self esteem, self confidence, etc., at the start. They underestimate themselves."* (CI-ITIS transcription)
4BT	The teacher is able to **relate easily** to others and is socially aware.	*"I think if we have good relationships between participants, then there is no animosity, no feelings of distrust, no feelings of fear -I think you create a better atmosphere*
5BT	The teacher is willing to **try new ideas**, is **flexible**, can **change**, and can **modify his/her attitudes** if necessary.	We need teachers who are .....*"flexible to changes"* .....able to.....*"to improve and willing to change their attitudes."*
6BT	The teacher is willing to **share ideas** with others.	*" .....we need teachers that really want to get.....involved and share ideas."*
7BT	The **teacher chooses to attend** the course (not selected by others)	It is important that "*the teachers choose to go on the course...."*

CODE	DEFINITION	TRANSCRIPTION EXAMPLE
Before - school		
IBS	**School colleagues and/or other course members** can help the teacher by **supporting and encouraging** his/her enrolment on the course.	*"Actually we want them* (non-participating staff members/colleagues/ friends) *to support us. If they don't want to join into the course we would like their support if we are to do something in the school.....because there are times when we need them, when we need to ask their opinions......"*
2BS	The school **principal**, deputy, senior teachers, school committee, etc., (officially/formally) **assist/support the teacher** to enrol on the course.	*"I think that if people came thinking that they were representing themselves and that they had the school's backup. I think that we might get a bit further than we do."*
3BS	**The school staff** (e.g. principal, deputy, other teachers) consider the **course to be relevant** to the classroom/school.	*"I* (principal) *have tried to convince people.....if you take the course it is going to help you a lot in your work in the classroom and in the long run it will benefit the school."*
4BS	The **school principal becomes involved** in finding out about the course, attends meetings about it, seeks information about it, gets involved with the teacher, etc.	*"I think the principal should be fully informed about the course and be given what the participants are to be given and the principal needs to be involved in pre-course meetings and things to make...* (him/her)... *more aware of what we are going to do and what we will be going through, so that they will be given more understanding of the course and they know what to expect."* *"If teachers are aware that the principal is supportive, they will do it well."*
Before - other		
1BO	The **community will benefit** from the course.	*" Our aim is to encourage teachers, because we know, well ahead of us, is a benefit to the community."*
2BO	**Ministry of Education support** for the course is made very clear.	*"Teachers are not willing to go out of there way to improve their work in the classroom if they are not getting support from ..... the ministry."*
3BO	The teacher's **family gives the teacher support** for enrolling on the course.	*"Yes, that's also important. The support from .....my family at home and to make sure they support me at this....."*
4BO	**Support of some sort** is available for the teacher to enrol on the course.	(Suggestion made by teacher trainer)
Before - barriers		
1BTrBr	The course is held at an **inconvenient time** (of the year, of the day)	*" The time of the course to be held......*(can prevent people from participating)*.....the best time is during school. What if the school have no break* (lunch, etc.,) *the children go home because we are learning to make their education better and more fruitful. .....if you hold it after school.....we'll go mental."* *".....having it in term 4 where there is a lot of interruptions in the school has been putting a lot of pressure on myself as well as those on this course."*
2BSBr	The teacher has too many other **responsibilities at school**.	*".....one way of stopping the staff going on to this, is load them with extra duties."*
3BOBr	The teacher has **another paid job to do** and cannot attend the course.	*"There are teachers.....* (who)*..... have their own other work* (e.g. bar work) *and there are teachers who are responsible elsewhere."*

CODE	DEFINITION	TRANSCRIPTION EXAMPLE
4BOBr	The teacher has **family responsibilities** or the family criticise the teacher for wanting to enrol on the course.	*"..... a lot of our teachers are women and their husbands don't want them doing anything extra - they think that time belongs to them, that time belongs to the family. They think that you do your school work at school and you finish it at school and you shouldn't be coming home and spending lots of time doing it, or giving up your holidays or whatever it is."*
5BSBr	The teachers' **colleagues are critical or not interested** in the teacher being involved in the course.	*" .....there is often a lack of support within the environment, within the teaching environment. There's almost jealousy - not, not really jealousy, but there is a pull-you-down* (attitude*) which actually means putting it into place is not that easy. It's not as easy as the tutor thinks it is.*
6BTrBr	There is **no reward** (e.g. extra salary) offered to do the course.	*"Some teachers may.....(say)..... I'm not getting paid, there's no money, why should I do this? So unless there's a reward offering or an increment they're not going to do it. Not just doing it for the sake of doing it."*
7BTrBr	The teacher has been on **boring, uninteresting courses previously** and expects all others to be the same.	*".....their previous history has a lot of bearing .Whether they have been to courses and the courses have been boring or don't deliver what the teacher is expecting- then I think they are reluctant to join in with it."*
8BTrBr	The **principal and/or Ministry of Education do not get enough information etc.,** about the course.	*"They need more information. They need convincing. They've got to have information*
9BSBr	The **colleagues** of the teacher **do not get enough information, etc.,** about the course.	(as above)
10BTrBr	The **teacher** himself/herself **does not get enough information, etc.,** about the course.	(as above)
11BTrBr	The **course requirements** (attendance, punctuality, and assignments) are **too demanding** on the teacher.	*"Sometimes teachers have something to do for their kids and sometimes an assignment has to be due.....they have got to shuffle.....it has to be a balance somewhere, to fix it up, sort it out.*
12BTrBr	The **trainer is too superior**, thinks he/she has all the answers and not interested in the teachers' views.	*"I think if you act as though you are superior or you are too educated, or you are well educated, you know it all, I think people are reluctant to participate in what you are going to do."*
13BTBr	The **teacher lacks confidence** to take part in the training course.	*"Some teachers are probably just too scared to take the course......it's probably an attitude problem – confidence- they don't have confidence in themselves. There's quite a few who are too shy and probably less exposed to things."*
14BTBr	People think (including the teacher himself / herself) that the **teacher is too old** to take part in the course.	(Some would say*).....*"no I can't do it - better not involve myself. Let so-and-so go they're young enough. I've got no time to study. I'm too old. That's what they are thinking in their mind."*
15TrBr	The **trainer is not known** to the teachers.	(Suggestion made by teacher trainer)
16BTrBr	The thought of having to attend a course in the **hot weather.**	(Suggestion made by teacher trainer)
During - trainer		
1DTr	The **training style** (i.e. the methods the trainers use to teach the teachers) is satisfying for the teachers.	*"The teacher must participate actively, not just this lecture type of delivery.....(It is important to consider).....the strategies, the techniques, being used and the understanding on the part of the deliverer that these guys do have difficulties and every now and then say "look if I'm going too fast please stop me'."*
2DTr	The course is **well planned and organised.**	(It has to be) ....."well planned and organised."

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CODE	DEFINITION	TRANSCRIPTION EXAMPLE
3DTr	The **course material is relevant** to the teacher's class/school.	*"Yes. Those are good* (relevant activities*). If the teachers feel they are able, they understand the things thoroughly, they know it well and they can put it across to their children, they will use those."*
4DTr	Clear information is provided to the teacher on the **specific requirements of the course** (e.g. times of each session, assignment topics and requirements, catch-up work, etc.)	(The trainer should display)*.....firmness with decisions.....for example you tell me.....*(about the)*..... date you want to see my assignment*
5DTr	The trainer **maintains contact with the teacher** during the course (e.g. visits to the classroom, tutorial help, letters, faxes, etc.)	*"I think easy access to communicating with the trainer* (is important)
6DTr	The training course **helps teachers to network**, get-together to chat about the course (i.e. during breaks and outside of the course itself).	*"I think we should have more contact and keeping up to date with each other and sharing like we have."*
7DTr	The training **encourages the teachers to interact** and work together on the course.	(Suggested by the above)
8DTr	The trainer has **pleasant personal qualities** (e.g. can be trusted, is fair, lively, interested in the teacher, helpful, etc.) important for the success of the course.	*".....you have also got to think of the charisma of the coordinator. I think that is important. You get someone up here doing a course who is boring, it can turn you right off...."*
9DTr	During the training the **teacher is rewarded** for his/her efforts (e.g. praise from the trainer/ other teachers/colleagues, etc., work put on display, etc)	*"Someone has got to do the praising and encouraging....."*
10DTr	**Additional time (if necessary) is made available** to complete tasks, assignments, etc.	*"Sometimes I wish that we could have ..... a 2 week period* (for the course workshop) *because there are so many things to learn, that by the time we get back in the classroom......."*
11DTr	The trainer **meets with the principal** and/or senior teachers to discuss the teacher's progress.	(Suggestion made by principal)
During - teacher		
1DT	The teacher has **organised himself/herself** to do the course and has put in place arrangements to make the course 'run' smoothly.	(Teachers need to have a)*" .....a timetable for themselves so that it* (the training*) won't effect their classroom.* (The teacher needs) *.....self discipline."*
2DT	The teacher **can understand what is happening on the course** (e.g. can understand the language and the ideas being presented.)	*"I think they've got to make sure themselves that they understand what is on the written papers that they see and what the teacher has said to them and how the process goes. I think they've got to understand thoroughly."*
3DT	The teacher will **try new ideas**, be flexible in thinking, change his/her approach to teaching, and change his/her attitudes.)	*"I think there should be more questions* (from the teachers*).....observe....and pay close attention to learn more and even making use of putting all the activities into use. Should be trying things in the classroom as much as possible."*
4DT	All the teachers **participate in the course** activities.	*I like the sharing but what I find sometimes is I'm the one who has the headache sitting up at night all times....we all have responsibilities..... so lets do it together.*
5DT	**The teacher keeps the handouts and takes notes** so that they **can be used later** to check out and implement ideas.	*"The notes are important for planning. The principal wants to see them."*
6DT	The teacher **interacts and relates to others** easily on the course.	*"The teacher needs to relate well to the lecturer."*

CODE	DEFINITION	TRANSCRIPTION EXAMPLE
7DT	The teacher **uses evaluation** (by self, students, colleagues, principal, etc.,) techniques to reflect on his/her new work in the classroom.	*"Self evaluation.....we say it's looking at your weaknesses and strengths.....look at the strengths that the students have seen..... it could be that it is the truth coming out.....don't look on the bright side all the time, because maybe it's the truth coming out..... always look for improvement, this is not telling you you're a rascal, it's a way of saying- improve."*
During – school		
1DS	The teacher's **colleagues** and/or course participants **share course ideas** and support one another.	*"Up to a certain point sharing between two buddies is excellent. To my point, I always ask her to come and observe me, and working sometimes she gets stuck and asks me 'why do you do that?' Then I share with her all the activities on the course I've been doing. She understands. No buddy is no good."*
2DS	The **principal supports** and/or helps the teacher during the course.	*"I think the principal needs to support them. Ask them - how did the course go? What did you learn today? Would you like to share it with other teachers here? (The principal should also) supply them with all the materials as required."*
3DS	School **resources and facilities are made available** for the teacher to use during the course.	*"The facilities and things in the school should be able to be used."*
4DS	The **course ideas** are seen to be not only **valuable** for the teacher but also for the teacher's **colleagues, the students, etc**., in the school.	(An acknowledgment from the non-course participants that)..... *you're doing it really good,* (and they ask) ..... *can they have some time to come and see this approach that you are taking in the class.....*(people can then) .....*feel good about what they are doing when they tell people.....they are doing something for the benefit of the school, for the kids and the teacher....."*
During - other		
1DO	There is **Ministry of Education support and interest** in the course and this is maintained during the course.	(Suggested by MOE official)
2DO	The teacher's **family support** participation in the course.	*"Always my first thing is the family.* (It*) always keeps me going to this course, it's their support."*
During - barriers		
1DTrBr	There is **insufficient time** to complete the assignments, tasks, etc.	*"If they know the strategies well, they will use them later on. If they don't know them well, they are likely to drop them. This is one concern I have about rushing through the thing. Now, if we gave them plenty of time to get really familiar with the strategies, then there is greater likelihood of them using it later on, whereas if we rush them through.....they do their assignments but they are still not really familiar with it, then they are likely to drop it because they don't fully understand it.*
2DSBr	The teacher's **colleagues are not interested** or make criticisms about the course.	(Some teachers will say)....*.'Oh, that's not new, we've been doing that for years.....you think that is going to work? I've been teaching for years, I know better than that."*
3DSBr	The **organisation and/or management of the school does not support the teacher** while he/she is doing the course.	*'Now some teachers, some principals discourage teachers from participating because its then a problem who looks after the class. Now, that is a logistics problem, but it can put the teachers off."*

CODE	DEFINITION	TRANSCRIPTION EXAMPLE
4DBr	The **principal is not helpful** and/or lacks interest in the course.	(The principal) *.....being harsh on teachers carrying out observations in the classrooms. One of our principals objected strongly to teachers doing their assignments in the classrooms and I know very well that teachers do sit down and make notes, but it doesn't mean to say that they are ignoring the children. I think the teachers are carrying out their activities to observe the children for their assignments and making notes in the process. They may well crib school time but we all do that."*
5DOBr	**Other events** (e.g. exams, cultural events, sports) interrupt participation in the course.	*"..... sports events going on around the island or some cultural event or some get-together.....that tends to be a big distraction......course organisers need to be aware of these things....."*
6DTBr	The teacher has **personal difficulties** (e.g. transport, sickness) that make course attendance a problem.	*'.....personal things like sickness.....and transport.....*(could act as barriers)
7DSBr	School **resources and/or facilities are not available** to be used during the course.	(It is important to consider).....*poor classroom environment - common (unfortunately) in too many of our primary schools. Non-conducive to quality learning. Lack of proper or adequate student furniture. I have suggested that some of the new furniture to be provided to schools be locally made tables which would encourage cooperative learning activities."*
8DTrBr	The **training programme is not helpful enough** (e.g. not enough information, not enough help to complete assignments).	When you don't have the.....*"whole information, we've got to really struggle through to find which is which."*
9DTBr	The course is **difficult for the teacher to understand** (e.g. can not understand the language, can not understand the ideas).	(Suggested by teacher educator)
10DTrBr	The training **course requirements** (e.g. attendance, punctuality, assignment completion time) are too difficult for the teacher.	*"Maybe the academic levels.....*(required).....*A lot of our teachers, especially the older ones, have just gone through primary school, no secondary education. Their academic level is fairly low."*
11DTrBr	There is **no contact with the trainers** during the follow-up periods between sessions.	(Suggested by teacher)
12DOBr	The **family do not provide support and/or criticise** the teacher's involvement in the course.	*"It's mainly husbands I'm talking about. They are the ones who grumble. 'Oh, look you should be doing this, this, this, this, this. You're not doing it any more because your time is being devoted to this(*the course).
13DSBr	The teacher is **over-worked** at school.	*"Putting too much responsibility on you .....(is a barrier).....the thing that bothers me is the amount of time that we need.....like, we've got an all day programme in school and then we're asked to take another 2 or 3 hours of our time on the course.*
After -trainer		
1ATr	The trainer **maintains contact** with the teacher (e.g. visits, letters etc., and provides feedback on teacher performance.)	*"I feel there is a need for some sort of follow-up, either from the trainer or someone else who can pick up if a person hasn't quite got things right......*
2ATr	The trainer organises a `pep' course (e.g. a follow-up review day after the course).	(Suggestion from teacher educator)
3ATr	The trainer provides some **reward** to the course participant (e.g. shows other teachers the work of the teacher; informs the principal about the good work the teacher is doing.)	*"I think they need feedback and I think they need positive reinforcement. They need that praise, praise, praise, praise."* *'A piece of paper and also increments,."*

CODE	DEFINITION	TRANSCRIPTION EXAMPLE
4Atr	The trainer provides a **report to the principal** outlining the new skills etc that the teacher developed on the course.	(Suggested by teacher educator)
After - teacher		
1AT	The teacher **keeps his/her notes,** handouts, assignments, etc., **to help plan future work** in the classroom and in other classrooms.	(These changes in the curriculum).....*"need to be recorded.....we are fortunate now we have computers and we can store things like lesson plans and we can retrieve....."*
2AT	The teacher **uses evaluation** (by self, students, colleagues, principal, etc.) techniques to continue **to improve upon the ideas**.	(included by researcher to match the evaluation item in the during phase)
3AT	The **teacher's improvement** (i.e. improved teaching skills) is rewarding and maintains the teacher's interest in using them.	*"If a teacher can see it. It's worth my effort to do it and also if they get feedback from others who say, 'look it is an improvement' - from one of their students, from one of their colleagues."*
4AT	The teacher **takes or is given responsibility in the school** to develop the course ideas.	*" The use in the school of retrained teachers as resource personnel, subject leaders, syndicate leaders, etc., during staff meetings....."*
5AT	The teachers on the course **develop a booklet of the course ideas, suggestions, activities, etc**., for their use and for the other teachers in the schools.	(Suggestion by teacher)
After - school		
1AS	The **benefits (**from the course) that are given to the others in the **school** (e.g. colleagues, students, etc) maintains the teacher's interest and use of course ideas.	.....*"a principal is made aware that this person can become a resource person, a resource person for other teachers."*
2AS	The **school management plan, curriculum**, etc., includes **the course ideas**.	*"The writing by the school of management documents, particularly policies for teaching/learning/ assessment which will enable retrained teachers to practice what they have acquired."*
3AS	School **colleagues** and course participants **continue to support the teacher** and be interested in the ideas.	(in the school the atmosphere needs to be one of)....*"cooperative attitude. Supportive, positive attitudes."*
4AS	**Organised visits to other teachers** and schools are arranged for the course participant and this maintains his/her interest in the ideas and use of them in the classroom.	(suggestions of teacher educator)
5AS	The **principal provides support and encouragement** to the teacher.	*"Yes, we* (the principal and teacher) *should have a get-together and probably have a long term plan, where we are heading in the future....."*
6AS	**Resources are made available** and this maintains teacher interest and use of the strategies in the classroom.	(Included by researcher to match resource item in the during phases)
After - other		
1AO	**Parent feedback/support** maintains teacher interest and use of the strategies after the course.	(Suggestion by teacher educator)
2AO	**Ministry of Education support and interest** helps the teacher to keep using the ideas.	(Included by researcher to match the MOE items in the before and during phases)

CODE	DEFINITION	TRANSCRIPTION EXAMPLE
3AO	**Evaluation of ideas and support** from community groups, and important people(e.g. Aronga Mana, Minister of Education) helps teacher to maintain an interest & use course strategies in the classroom.	(Suggested by teacher educator)
After - barriers		
1ASBr	The **teacher's colleagues are not interested** and/or criticise the course ideas.	*".....other teachers who haven't been on the course not willingly accepting what has been done by the teachers....."*
2ASBr	**School management and organisation does not help** the teacher to keep using the ideas in the classroom.	*".....you go on this course and you come back and your plonked totally to the opposite end* (of the school levels). *You're a keen teacher but you have to shut up."*
3ASBr	**School resources and facilities are not available** for the teacher to use and this makes it difficult to use the course ideas.	*"I think it comes back to the resource thing. If I want to do a programme and I don't get the resources then I start scratching my head and by the time I finish scratching my head the class is finished."*
4ATrBr	There is **no follow-up contact** from the trainers to discuss ideas and to help the teacher evaluate the ideas in use.	*"..... no follow-up from the tutors "* (would stop teachers putting things into practice).
5ASBr	There is **no reward** for the teacher to carry on using the ideas in the classroom.	*" Perhaps the most significant barrier .....is* (lack of*) financial reward."*
6ASBr	The **demands placed on the teacher** after the course (e.g. demonstrations to other teachers; other work) are too great for the teacher to maintain interest and use of the strategies.	*"It is difficult.....* (in the school environment)..... *where we train people and tell them to go back and train their staff and they find that very difficult, especially if you're the only trained one."*
7AOBr	The **Ministry of Education policies and plans do not sufficiently support the teacher** to maintain an interest and use of the course ideas.	There are no *"overall education policies and therefore it is difficult for schools to become more effective in their delivery."*
8AOBr	**Events** (e.g. sports, school trips, cultural events) are so numerous that implementing any new ideas is a problem.	A major barrier factor to the *" the continuing implementation of sound teaching practices is our current grade 6 examination."* (i.e. teaching to exams)
9ASBr	The **students in the teacher's class show insufficient improvement** when the new ideas are used and therefore the teacher loses interest in using the course ideas.	(Suggestion by teacher educator)
10ATBr	The **teacher has insufficient confidence** to carry on and maintain the changes in the classroom.	(Suggestion by teacher educator)
11ASBr	The **principal is not helpful** or shows little interest in the new ideas.	(A)..... *"non-supportive principal....."* (is a barrier)
12ATBr	The **teacher has insufficient skill and/or information** to continue to use the ideas.	*"The teacher lacks knowledge, skill, etc., to put in place the ideas."*

particularly noteworthy as it was so evident when the thematic analysis was undertaken (on the same data) as well as being highlighted quantitatively in the subsequent survey.

Phase 2A: Transfer Survey

The Characteristics of the Specific Transfer Strategies

There was a wide-ranging identification of ideas for all 'facilitative/barrier x time' factors. The value attached to the scored items was ascertained by ranking.[41] In appendix G there are lists detailing the overall ranking of 'facilitative/barrier x time' items (as determined by the scoring of the teachers, principals and teacher educators). In this survey, there was a relatively small range from 41 to 94, indicating that there was considerable agreement concerning the acceptance of these items as useful ideas for transfer of training. The dispersion of the scores for the facilitative items was particularly small and accordingly interpretation of the value of the different rank scores needs to proceed with some caution. Barrier items were more widely spread but most had lower raw scores. Many of these mirrored the facilitative factors. For example, 13BTBr (i.e. teacher lacks confidence) was mirrored by 3BT (i.e. teacher is confident). Table 6.2 details the dispersion of these scores.

Table 6.2

Inter-quartile Range of Grouped Scores for All Transfer Survey Items

Scores	*f* facilitative	*f* barrier	Interval	Quartile
90-94	6			
85-89	17			
80-84	12		Q3	82
75-79	12			
70-74	7	5	Q2	69.9
65-69	9	7		
60-64	7	11	Q1	61.1
55-59	1	7		
50-54	1	2		
45-49	2	5		
40-44	1	4		

N= 116 Q = 10.45

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[41] Participants scored each item as either 0 ('not very important'), 1 ('very important') or 2 ('very, very important'). The total score for each item was then calculated and a rank allocated to each item on the basis of its total score. Additional details are located in the methods section.

A 'snap-shot' view of the 116 strategies/barriers can be located in tables 6.3 and 6.4. It provides a multi-dimensional view capturing the wide perspective of the responses. The following paragraphs summarise this 'snapshot' view of the significant ideas (where possible, the barrier items have been incorporated into the parallel facilitative item) viz.,

- **Trainer/training** – the trainer needed to provide introductory activities and information to demonstrate to all key stakeholders the details and the nature of the course, its relevance to the individual and school, the requirements for completion, etc. The course needed to be well timed and planned, organised, meet the needs of the teachers and be interactive. Friendly interaction with the trainer who was well qualified to take the course was considered desirable. Importance was attached to trainer follow-up contact. Recognition for training was considered valuable. There was some uncertainty about whether it should be a self-selected course or MOE selection of participants.

- **Teacher** – teacher's ability to set goals, be flexible, take risks, evaluate/reflect upon performance and understand the material were considered important characteristics. Levels of confidence, motivation and prior organisation enabling course participation were also deemed important. Maintenance of course notes and development of a course book were considered a valuable idea for promotion of ideas to colleagues. The capacity to relate to others, share ideas and participate in activities was particularly important. Responsibility to implement the new ideas and finding intrinsic satisfaction in improvement also helped to maintain the use of ideas.

- **School** – school, colleague, principal involvement and support was a priority for many respondents, as was the need for the course to be considered useful for the school as a whole and the wider community. The availability of school's resources to implement the course ideas was another suggestion that was highly rated. Recognition from the school of the value of the training and not over-loading the teacher so that the new skills could be developed were also considered important. Visiting other teachers to gain additional ideas was considered worthwhile.

- **Others** – the importance of MOE, community and family support was noted frequently as being important. On the other hand some of these sources of support could also be

Table 6.3
Ranked Strategies 'Facilitative x Time' Scored on the Transfer Survey

	BEFORE	DURING	*AFTER*
TRAINER	*Content/methods information 11=(1BTr)* Course requirements specified 15= (2BTr) Course usefulness marketed 30= (4BTr) Certificate course 34= (11BTr) Course material relevant 39= (7BTr) Trainer has background knowledge 50= (16BTr) Course will improve teaching 52= (13BTr) Course benefits school/colleagues 52= (18BTr) Introductory course activities 54= (6BTr) Course leads to salary increase 54= (10BTr) Knows what skills will learn 61=(3BTr) Trainer discusses teachers needs 65=(8BTr) Course could lead to promotion 65=(12BTr) Time of course is convenient 79=(9BTr) Trainer is likeable personality 83=(15BTr) Other teachers doing extra work 87=(14BTr) Social events before the course 105=(5BTr) Trainers select teachers for course 111(17BTr)	*Course is well planned and organised 3(2DTr)* Trainer contact maintained 11=(5DTr) Training style satisfying 11=(1DTr) Interactive methods 25=(7DTr) Teacher is rewarded for efforts 30=(9DTr) Course material relevant to teacher 30=(3DTr) In-course requirements specified 36=(4DTr) Course helps teachers to network 46=(6DTr) Trainer meets with principal 61=(11DTr) Additional time available if required 73=(10DTr) Trainer has pleasant personal qualities 83=(8DTr)	*Trainer maintains contact 7=(1ATr)* Follow-up 'pep' course 36=(2ATr) Training report to principal 48=(4Atr) Reward/recognition provided 112=(3Atr) **
TEACHER	*Teacher flexibility 15=(5BT)* Teacher shares ideas 25=(6BT) Teacher sets goals 36=(1BT) Teacher is confident 39=(3BT) Teacher is motivated 41=(2BT) Teacher chooses to attend 67=(7BT) Teacher relates easily 76=(4BT)	*Teacher flexibility 1(3DT)* Keeps course notes 5=(5DT) Evaluation by self/others 5=(7DT) Understands ideas 10=(2DT) Teacher is organised 20=(1DT) Participates in activities 20=(4DT) Relates to others easily 91=(6DT)	Keeps course notes 1=(1AT) Evaluation by self / others 7=(2AT) Teacher's improvement personally rewarding 15=(3AT) Responsibility to implement new ideas 46=(4AT) Course book developed 60=(5AT) **
SCHOOL	*Principal's involvement 20=(4BS)* Colleagues support 25=(1BS) School authorities support enrolment 41=(2BS) Staff consider course relevant 45(3BS) **	*Teacher's colleagues are supportive 4(1DS)* Course ideas considered useful for whole school 7=(4DS) Principal supports/encourages 15=(2DS) School resources available to implement ideas 20=(3DS) **	*Principal supports/encourages 11=(5AS)* Course ideas etc. reflected in school planning 15=(2AS) Resources are made available for teacher use 24(6AS) Benefits for school maintains teacher interest 25=(1AS) Continued collegial support to teacher 34=(3AS) Organised visits to other teachers 50=(4AS)
OTHERS	Ministry support 33(2BO) Family support 61=(3BO) Support (unspecified)for enrolment 73=(4BO) Community benefits 102=(1BO) **	*Ministry support 25=(1DO)* Family support 41=(2DO) **	Ministry support 41=(3AO) Positive parent feedback 79=(1AO) Support from community 95=(4AO) **

Key: numerals (e.g, 11) refers to overall ranking; B = before; D = during; A = after; Tr = trainer; T = teacher; S = school, work environment; O = others; Br = barriers; ** = no further ranking available

Table 6.4

Ranked Strategies 'Barrier x Time' Scored on the Transfer Survey

	BEFORE	DURING	AFTER
TRAINER	No course reward 57=(6BTrBr) Course at inconvenient time 79=(1BTrBr) Teacher does not get information 87=(10BTrBr) Ministry & principal don't get information 98=(8BTrBr) Trainer is too superior 100=(12BTrBr) Course requirement too demanding 100=(11BTrBr) Previous courses uninteresting 107(7BBrTr) Attending in hot weather 114(16(BBrTr) Trainer is not known 115 (15BBrTr)	No trainer contact 61=(11DTrBr) Training programme is not helpful 73=(8DTrBr) Insufficient time to complete tasks 91=(1DTrBr) Course requirements too difficult 95=(10DTrBr) **	No follow-up contact from trainers 54=(4ATrBr) **
TEACHER	Teacher lacks confidence 102=(13BTBr) Teacher thinks they are too old 108=(14 BTBr) **	Too difficult for teacher to understand 57=(9DTBr) Teacher has personal difficulties 83=(9DTBr) **	Teacher insufficiently skilled 76=(12ATBr) Teacher has insufficient confidence 87=(10ATBr) **
SCHOOL	Other responsibilities at school 76=(2BSBr) Colleagues do not get information 104(9BSBr) Colleagues are critical 110(5BSBr) **	Resources are not available 67=(7DSBr) School does not support the teacher 67=(3DSBr) Teacher is over-worked 95=(13DSBr) Principal is not helpful 98=(4DSBr) Colleagues are not interested 108=(2DSBr)	School does not help teacher 48=(2ASBr) Resources are not available 57=(3ASBr) Principal is not helpful 67=(11ASBr) No reward to continue 67=(5ASBr) Colleagues are not interested 79=(1ASBr) Demands placed on the teacher 83=(6ASBr) Students show little improvement 87=(9ASBr)
OTHERS	Teacher has family responsibilities 94(4BTBr) Teacher has another paid job 112(3BTBr) **	Other events interrupt participation 91=(5DOBr) Family do not support the teacher 105=(12DOBr) **	*Ministry policies do not support teacher 67=(7AOBr)* Events (e.g. cultural) cause implementation problems 116(8AOBr) **

Key: numerals (e.g, 11) refers to overall ranking; B = before; D = during; A = after; Tr = trainer; T = teacher; S = school, work environment; O = others; Br = barriers; ** = no further ranking available

considered as barriers as personal/community commitments could reduce the time teachers had to implement ideas.

Although there was a range of scores, each of the items was considered to have merit and value. This was because all were initially identified as being important (by at least one informant) and subsequently scored by the transfer survey respondents, which indicated at least a worthiness of consideration by other respondents. No item received an overall zero raw score and there were only three items that were scored by 20 or more respondents as a 0, that is, 'not so important.' The item referring to trainer/MOE selection of teachers for a course (17BTr) and events interrupting implementation of course ideas (8AOBr) was scored 0 by 22 respondents. Twenty respondents scored the item referring to age as an impediment (16BTrBr) as a 0. An examination of the high scoring items (by examining the items that received 35 or more scores of '2') indicated that a number of the trainer, teacher and school items appeared to be particularly important to many respondents. This represented 75% of all the scores. Refer to tables 6.5 to 6.28 for the frequency of scoring for 'facilitative/barrier x time' category items.

Overall there was considerable consistency of scoring for each item by each group. The mean scores on each item for each of the transfer survey groups (teacher educators, n = 5; principals, n = 7; Aitutakian teachers, n = 14; Rarotongan teachers, n = 23[42]) on each item (1-116) are located in appendix H. There were however ten items for which group differences were considerable (as defined by a difference of at least 1.0 between any of the group scores on each item). The following is an outline of these differences:-

- The Aitutakian teacher group scored the trainer/MOE selection of teachers for a course (17BTr) relatively high (TE x = 0; PR x = 0.14; TA x = 1.64; TR x = 0.91). The Rarotongan teachers also scored high in relative terms, although not at the 1.0 difference level. An overall mean of 0.92 was obtained for this item. [43]

- Teacher educators were less likely to believe that demanding course requirements (11BTrBr) deterred teachers from participating in a course whereas most participants in the school groups had more concerns about the requirements (TE x = 0.2; PR x = 1.14;

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[42] Teacher educator = TE; Principals = PR; Aitutakian teachers = TA; Rarotongan teachers = TR
[43] There were a number of differences relating to the Rarotongan and Aitutakian data. Although speculative, it is probable that this is a reflection of the different island 'cultures.' Further research is needed.

Table 6.5
Frequency and Mean Scores for Before Trainer
Survey Items

BTr ITEMS	SCORES			
	2	**1**	**0**	x
1	38	11	0	1.78
2	39	8	2	1.76
3	27	15	7	1.41
4	37	8	4	1.67
5	12	25	12	1.00
6	28	15	6	1.45
7	33	12	4	1.59
8	24	19	6	1.37
9	21	21	7	1.29
10	31	9	9	1.45
11	35	10	4	1.63
12	28	11	10	1.37
13	30	12	7	1.47
14	22	17	10	1.24
15	22	18	9	1.27
16	29	15	5	1.49
17	18	9	22	0.92
18	30	12	7	1.47

Table 6.6
Frequency and Mean Scores for Before Teacher
Survey Items

BT ITEMS	SCORES			
	2	**1**	**0**	x
1	34	11	4	1.61
2	31	15	3	1.57
3	34	10	5	1.59
4	22	20	7	1.31
5	39	8	2	1.76
6	35	13	1	1.69
7	24	18	7	1.35

Table 6.7
Frequency and Mean Scores for Before School
Survey Items

BS ITEMS	SCORES			
	2	**1**	**0**	x
1	36	11	2	1.69
2	32	13	4	1.57
3	33	10	6	1.55
4	38	9	2	1.73

Table 6.8
Frequency and Mean Scores for Before Other
Survey Items

BO ITEMS	SCORES			
	2	**1**	**0**	x
1	17	20	12	1.10
2	35	11	3	1.65
3	24	20	5	1.39
4	23	19	7	1.33

Table 6.9
Frequency and Mean Scores for Before Training
Barrier Survey Items

BTrBr ITEMS	SCORES			
	2	**1**	**0**	x
1	21	21	7	1.29
6	30	10	9	1.43
7	14	20	15	0.98
8	20	17	12	1.16
10	21	19	9	1.24
11	20	16	13	1.14
12	22	12	15	1.14
15	9	23	17	0.84
16	14	15	20	0.88

Table 6.10
Frequency and Mean Scores for Before Teacher
Barrier Survey Items

BTBr ITEMS	SCORES			
	2	**1**	**0**	x
13	19	16	14	1.10
14	14	19	16	0.96

Table 6.11
Frequency and Mean Scores for Before
School Barrier Survey Items

BSBr ITEMS	SCORES			
	2	**1**	**0**	x
2	24	16	9	1.31
5	13	20	16	0.94
9	15	23	11	1.08

Table 6.12.
Frequency and Mean Scores for Before Other
Barrier Survey Items

BOBr ITEMS	SCORES			
	2	**1**	**0**	x
3	14	16	19	0.90
4	20	19	10	1.20

Table 6.13
Frequency and Mean Scores for During
Trainer Survey Items

DTr ITEMS	SCORES			
	2	**1**	**0**	x
1	41	5	3	1.78
2	44	5	0	1.90
3	36	10	3	1.67
4	33	13	3	1.61
5	39	10	0	1.80
6	31	13	5	1.53
7	36	11	2	1.69
8	26	10	13	1.27
9	34	13	2	1.65
10	23	19	7	1.33
11	28	12	9	1.39

Table 6.14
Frequency and Mean Scores for During
Teacher Survey Items

DT ITEMS	SCORES			
	2	**1**	**0**	x
1	37	11	1	1.73
2	43	4	2	1.84
3	45	4	0	1.92
4	38	9	2	1.73
5	41	8	0	1.84
6	23	14	12	1.22
7	41	8	0	1.84

Table 6.15
Frequency and Mean Scores for During
School Survey Items

DS ITEMS	SCORES			
	2	**1**	**0**	x
1	43	6	0	1.88
2	38	10	1	1.76
3	39	7	3	1.73
4	42	5	2	1.82

Table 6.16
Frequency and Mean Scores for During
Other Survey Items

DO ITEMS	SCORES			
	2	**1**	**0**	x
1	38	6	5	1.67
2	32	13	4	1.57

Table 6.17
Frequency and Mean Scores for During
Trainer Barrier Survey Items

DTrBr ITEMS	SCORES			
	2	**1**	**0**	x
1	19	22	8	1.22
8	24	17	8	1.33
10	21	16	12	1.18
11	24	18	7	1.35

Table 6.18
Frequency and Mean Scores for During
Teacher Barrier Survey Items

DTBr ITEMS	SCORES			
	2	**1**	**0**	x
6	24	14	11	1.27
9	27	16	6	1.43

Table 6.19
Frequency and Mean Scores for During
School Barrier Survey Items

DSBr ITEMS	SCORES			
	2	**1**	**0**	x
2	12	23	14	0.96
3	25	16	8	1.35
4	25	17	7	1.37
7	24	18	7	1.35
13	22	16	11	1.22

Table 6.20
Frequency and Mean Scores for During
Other Barrier Survey Items

DOBr ITEMS	SCORES			
	2	**1**	**0**	x
5	19	22	8	1.22
12	13	23	13	1.00

Table 6.21
Frequency and Mean Scores for After
Trainer Survey Items

ATr ITEMS	SCORES			
	2	**1**	**0**	x
1	42	5	2	1.82
2	32	15	2	1.61
3	31	12	6	1.51
4	30	14	5	1.51

Table 6.22
Frequency and Mean Scores for After
Teacher Survey Items

AT ITEMS	SCORES			
	2	1	0	x
1	45	4	0	1.92
2	40	9	0	1.82
3	39	8	2	1.76
4	28	19	2	1.53
5	28	13	8	1.41

Table 6.23
Frequency and Mean Scores for After
School Survey Items

AS ITEMS	SCORES			
	2	1	0	x
1	36	11	2	1.69
2	40	6	3	1.76
3	34	12	3	1.63
4	29	15	5	1.49
5	40	7	2	1.78
6	37	10	2	1.71

Table 6.24
Frequency and Mean Scores for After
Other Survey Items

AO ITEMS	SCORES			
	2	1	0	x
1	24	15	10	1.29
2	35	7	7	1.57
3	20	18	11	1.18

Table 6.25
Frequency and Mean Scores for After
Trainer Barrier Survey Items

ATBr ITEMS	SCORES			
	2	1	0	x
4	28	15	6	1.45

Table 6.26
Frequency and Mean Scores for After
Teacher Barrier Survey Items

AO ITEMS	SCORES			
	2	1	0	x
10	24	13	12	1.24
12	25	14	10	1.31

Table 6.27
Frequency and Mean Scores for After
School Barrier Survey Items

ASBr ITEMS	SCORES			
	2	1	0	x
1	23	17	9	1.29
2	31	12	7	1.51
3	29	12	8	1.43
5	25	16	8	1.35
6	22	18	9	1.27
9	21	19	9	1.24
11	22	22	5	1.35

Table 6.28
Frequency and Mean Scores for After
Other Barrier Survey Items

AOBr ITEMS	SCORES			
	2	1	0	x
7	27	12	10	1.35
8	14	13	22	0.84

TA x = 1.21; TR x = 0.87). It was interesting to note that the group of teachers on the outer island (Aitutaki) scored the highest on this item.

- The above result is particularly interesting when considering the item relating to teachers lacking confidence to enrol in a course (13BTBr). In relative terms, the majority of the teacher educator, principals and Rarotongan teachers did not perceive this to be a very important issue, whereas almost all of the Aitutakian teachers rated it highly (TE x = 0.6; PR x = 1.0; TA x = 1.9; TR x = 0.83).

- The perceived demands placed upon teachers to complete assignments (1DTrBr) were more highly scored by teachers in comparison with the other groups (TE x = 06; PR x = 1.14; TA x = 1.93; TR x = 1.9).

- There was a noticeable difference in scoring between teacher educators and principals on the item relating to teacher ability to interact and relate easily to others on the course (6DT). Teacher educators were less likely to view it as an important behaviour whereas all the principals considered it particularly important (TE x = 0.8; PR x = 2.0; TA x = 1.5; TR x = 1.78).

- The importance of family support during the course implementation (2DO) was more important to the teacher groups than to the other two groups (TE x = 1.0; PR x = 0.86; TA x = 1.86; TR x = 1.74). It is interesting to note that once again the highest scoring group was the Aitutakian teachers.

- Teachers on the whole were more supportive of principals being provided with a follow-up skills report from the trainer (4ATr) but teacher educators were not overly supportive of this idea (TE x = 0.6; PR x = 1.14; TA x = 1.57; TR x = 1.78).

- With regard to the development of a booklet by the course teachers to share with their colleagues (5AT), principals were less enthusiastic than the teacher educators (TE x = 2.0; PR x = 0.86; TA x = 1.07; TR x = 1.65). Teachers in Rarotonga tended to favour this idea more than those from Aitutaki.

- Teacher educators did not consider external events (8AOBr) disruptive whereas the Rarotongan teacher group considered this to be more of a problem (TE x = 0; PR x = 0.57; TA x = 0.71; TR x = 1.17).

- Interestingly, principals considered lack of support from principals to implement new teaching ideas (11ASBr) as an important issue. Many of the teachers in Rarotonga did not consider it to be a problem (TE x = 1.41; PR x = 1.71; TA x = 1.29; TR x = 0.26).

A further question relates to the variability of each group's responses to each item in relation to other groups' scoring. In other words, to what extent did groups differ on each item in relation to the other groups? Although no statistical procedure was undertaken to compare the groups' scoring, the visual display acknowledges that for many of the items there was a consistency of response between the groups (refer to appendix H). As a blunt means of making some assessment of this, a calculation was made of how many group means for each item were greater or less than the other three groups. The principals and teacher educator groups were more variable (on 51 and 66 items respectively) than the teachers in Aitutaki and Rarotonga (39 and 35 respectively).

The Relative Importance of 'Facilitative/Barriers X Time' Dimensions

It is important to note that the identification of specific transfer strategies provides only one level of analysis. Each of the items needs to be placed in the context of each of the 'facilitative x time' and 'barrier x time' categories. Locating important specific strategies has value, but then relating each of these to the relative value of its category provides an additional measure of systematic, strategic, course impact planning. For example, if only one item within a category has considerable importance its implementation utility in terms of pragmatic course design and planning may have to be evaluated beside other items from other categories that may have a high value. In other words, because items in each category are likely to be interactive (e.g. the desire for training style that is satisfying is likely to be related to interactive learning techniques, teacher networking, trainer personal qualities, etc.), a highly valued category may well indicate that planning attention should be directed to many features within that category. Apart from considering individual strategies, course planners would be interested to know which categories of strategies were important for transfer of training.

1. *Probability of group scores for each category.* This provided a measure of the probability of scores. (Refer appendix I). These measures clearly indicated that the facilitative items were more likely to be scored '2' by the various groups, whereas the barrier items were spread across the scores (2,1 and 0).

2. *Frequency of' facilitative/barrier X time' category item suggestions.* The number of transfer suggestions ascertained from phase 1 and the phase 2 interview process was one measure to consider. This data (refer to table 6.29) indicated that in terms of

Table 6.29

Frequency of Specific Transfer Suggestions for 'Facilitative/Barrier Factor x Time'

FACTOR	TIME							
	Before		During		After		Total	
	Facilitative	Barrier	Facilitative	Barrier	Facilitative	Barrier	Facilitative	Barrier
Trainer	18	9	11	4	4	1	33	14
Teacher	7	2	7	2	5	2	19	6
School, etc	4	3	4	5	6	7	14	15
Others	4	2	2	2	3	2	9	6
Total	33	16	24	13	18	12	75	41

quantification (**but not** importance) the facilitative-trainer and teacher suggestions, and to a lesser extent, the facilitative-school, barrier-trainer and school suggestions accounted for many of the transfer survey items. The facilitative-other, barrier-teacher and others suggestions accounted for somewhat fewer transfer items. Furthermore, over ½ of the trainer strategies were in the 'before' category and almost ⅓ within the 'during' category. Almost ½ of the school items occurred in the after phase. This indicates that tasks/responsibilities are spread but most are within the facilitative trainer and teacher dimensions.

With all other 'factor x time' dimensions there was a more even distribution of suggestions across categories. Consideration of the perceived **value** of each of these items cannot however be determined from this analysis but it has indicated, in terms of a quantitative analysis (and potential task time distribution and responsibility), that the following were significant:

- facilitative teacher qualities (across all time dimensions);
- facilitative/barrier school (particularly after training); and
- facilitative/barrier trainer (particularly before and during)

3.   Frequency distribution of 'facilitative/barrier X time' category item scores. An analysis of the facilitative-time and barrier-time category item **scores** within a frequency distribution array indicated a number of trends. (Refer tables 6.30 and 6.31). Over 50%

Table 6.30

Distribution of the Frequency of Item Scores for 'Facilitative x Time' Dimensions

SCORE	FACILITATIVE DIMENSIONS	BEFORE	DURING	AFTER	TOTAL
90-99	Trainer	0	1	0	1
	Teacher	0	3	1	4
	School	0	1	0	1
	Other	0	0	0	0
	TOTAL	0	5	1	6
80-89	Trainer	4	5	1	10
	Teacher	2	3	2	7
	School	2	3	5	10
	Other	1	1	0	2
	TOTAL	9	12	8	29
70-79	Trainer	6	2	2	10
	Teacher	3	0	1	4
	School	2	0	1	3
	Other	0	1	1	2
	TOTAL	11	3	5	19
60-69	Trainer	6	3	0	9
	Teacher	2	1	1	4
	School	0	0	0	0
	Other	2	0	1	3
	TOTAL	10	4	2	16
50-59	Trainer	0	0	0	0
	Teacher	0	0	0	0
	School	0	0	0	0
	Other	1	0	1	2
	TOTAL	1	0	1	2
40-49	Trainer	2	0	1	3
	Teacher	0	0	0	0
	School	0	0	0	0
	Other	0	0	0	0
	TOTAL	2	0	1	3

Table 6.31

Distribution of the Frequency of Item Scores for 'Barrier x Time' Dimensions

SCORE	BARRIER DIMENSIONS	BEFORE	DURING	AFTER	
70-79	Trainer	1	0	1	**2**
	Teacher	0	1	0	**1**
	School	0	0	2	**2**
	Other	0	0	0	**0**
	TOTAL	**1**	**1**	**3**	**5**
60-69	Trainer	2	3	0	**5**
	Teacher	0	1	2	**3**
	School	1	2	5	**8**
	Other	0	1	1	**2**
	TOTAL	**3**	**7**	**8**	**18**
50-59	Trainer	3	1	0	**4**
	Teacher	1	0	0	**1**
	School	1	2	0	**3**
	Other	1	0	0	**1**
	TOTAL	**6**	**3**	**0**	**9**
40-49	Trainer	3	0	0	**3**
	Teacher	1	0	0	**1**
	School	1	1	0	**2**
	Other	1	1	1	**3**
	TOTAL	**6**	**2**	**1**	**9**

of the items were scored 70 or above (including most facilitative trainer, school and teacher items but only five barriers items) and almost 33% of the items (all facilitative) were scored 80 or above. The bulk of the facilitative during- and after-time scores were distributed in the range 70-99 whereas the before-time items occurred mainly in the range 70-89. Overall, barrier items achieved lower scores. Almost 90% of the barrier items were in the lower ranges of 40-69 suggesting in relative terms that impediments were perceived to be less critical for transfer than the facilitative items. Almost 70% of the during- and after-time barrier items were in the range 60-79 whilst 80% of the before barrier items were in the lower range 40-59. This suggests that more importance was attached to the significance of the impediments during course implementation and follow-up.

This analysis of the data indicated that relative importance was attached to facilitative trainer, teacher and school category items, particularly for during and after categories. It was particularly interesting to note that many of the items in each of these categories were in the higher scoring ranges reflecting that the respondents attached a higher level importance across all of these categories. Barrier items were also grouped, but on the whole lower scoring and in a similar pattern (to the facilitative category items) more importance was attached to the during and after categories.

4. *Mean ranks of the 'facilitative/barrier X time' categories* - An examination of the mean ranks provides a more precise description of the relative importance of the 'facilitative/ barrier x time' categories. (Refer to tables 6.32 and 6.33). It is important to recall however that the range of scores (particularly for the facilitative items) was relatively small and the value of rank placement needed to be interpreted cautiously. Table 6.34 identifies in descending order of rank importance the specific 'facilitative/barrier x time' categories and the accompanying means. Overall means for the specific facilitative/barrier categories across all time periods ranged from 24 to 97.5.

Table 6.32

Mean Ranks of 'Facilitative x Time' Dimensions Obtained on the Transfer Survey

TIME FACILITATIVE	Before	During	After	Overall Mean
Trainer	58*	37	51	50
Teacher	42.5	21.5	26	30.5
School	33	11.5	36.5	24
Others	67.5	33	71.5	61
Overall Mean	53	28	39	41.5

∗   All mean ranks were rounded to the nearest .5

The overall facilitative means across all time periods ranged from 24 to 61 whilst the overall barrier means were more tightly contained within the range 81-97.5. In relative terms, the facilitative school (x = 24) and teacher (x = 30.5) categories, and to a lesser extent the facilitative trainer (x = 50) across all the time periods assumed considerable importance. A similar range of rankings characterised the time across all facilitative/

barrier categories (overall 28 – 97.5; all 'facilitative x time' 28-53 and all 'barrier x time' 74 – 97.5). It was noted however, that the overall during ('facilitative x during' $\bar{x}$= 28;

Table 6.33

Mean Ranks of 'Barrier x Time' Dimensions Obtained on the Transfer Survey

TIME BARRIER	Before	During	After	Overall Mean
Trainer	95*	80	54	88
Teacher	105	70	81.5	85.5
School	96.5	87	70	81
Others	103	98	91.5	97.5
Overall Mean	97.5	84	74	86.5

*   All mean ranks were rounded to the nearest .5

Table 6.34

List of Highest to Lowest Mean Rank of 'Facilitative/Barrier x Time' Categories

Facilitative school-during (11.5)
Facilitative teacher-during (21.5)
Facilitative teacher-after (26)
Facilitative school-before and facilitative others–during (33)
Facilitative school-after (36.5)
Facilitative trainer–during (37)
Facilitative teacher-before (42.5)
Facilitative trainer-after (51)
Barrier trainer-after (54)
Facilitative trainer-before (58)
Facilitative others-before (67.5)
Barrier school-after and barrier teacher-during (70)
Facilitative others-after (71.5)
Barrier training-during (80)
Barrier teacher-after (81.5)
Barrier school-during (87)
Barrier others-after (91.5)
Barrier trainer-before (95)
Barrier school-before (96.5)
Barrier others-during (98)
Barrier others before (103)
Barrier teacher-before (105)

'barrier x during' $x=$ 84) and after ('facilitative x after' $x=$ 39; 'barriers x after' $x=$74) means were higher ranked than the before categories ('facilitative x before' $x=$53; 'barrier x before' $x=$ 97.5).

These mean rank results reveal a number of interesting findings. In general emphasis was upon facilitative strategies particularly the 'during' activities. Particular importance was ascribed to 'school x during' activities which emphasised the significance of the teachers' work-place environment whilst the training was in progress. Thus, although outside the immediate, ongoing course organisation and implementation, these respondents placed a very high value upon the capacity of their school and colleagues to sustain and develop course ideas. Not surprisingly, the next highest scoring categories were the teacher strategies (across all time periods), the school (before and after training) and others (during training). What the teacher did and the response of the school prior to, and after the course were considered as being of significance, as was Ministry of Education and family support for the teacher during the course. Following on from this, the next cluster emphasised the significance of the facilitative trainer and training, as well as, the sole 'barrier trainer x after' idea (i.e. no follow-up contact from the trainer). In terms of mean ranks this grouping was still deemed to be of moderately high importance (range of 37-58) particularly the 'during' training phase (i.e. the workshop period).   The 'facilitative other x before' and 'other x after' training categories (i.e. community, MOE, and family support) were about mid-range in terms of ranking. Almost all barrier categories mean ranks were grouped together (excluding 'barrier trainer x after') in the lower mean ranges of 70-105. However, mindful of the mirroring of most of these items in the facilitative groupings and the relatively low dispersal of scores for all items, their importance should not be under-estimated.

Overall (and as previously indicated by the frequency distribution of category item scores) mean rank analysis indicated the importance of the facilitative key role (trainer, teacher and school) transfer strategies, particularly for the 'during' and 'after' phases. In relative terms, the 'facilitative x others' and all barrier categories were considered less important. Interestingly however, the 'facilitative others x during' category items (i.e. MOE support; family support) were ranked highly.

Phase 2 and Phase 2A Summary

The above quantitative and categorical analysis in relation to the identification of the specific transfer of training strategies revealed a number of significant findings. The participants identified, at each stage of a course, numerous roles, structures and activities that need to be considered and this analysis suggests an array of findings that are multi-faceted - but linked. For example, on the whole, the findings are role prescriptive (key stake-holders, need to have certain dispositions and/or be task oriented), also temporal (there are key time periods for such behaviours to occur) and interactive (key-stake-holder responses relate across time and influence one another's performance). Each factor however was deemed to have a unique quality for transfer of training; the categorical description of the findings provided a directional analysis with a more conceptual view of the meaning of the data. Furthermore, each item was ranked by a number of respondents and an analysis of this data revealed the importance of a range of specific strategies, activities, pre-dispositions, etc., for the trainer, trainee, colleagues and community members. The question arises however - were there broad identifiable themes located across the individual items and/or categories?

Phase 2B: Themes Related to Transfer of Training Strategies

An examination of the teacher, teacher educator and principal interview data items revealed a number of commonalities identified as patterns and then themes. This thematic analysis procedure identified three major themes, namely,

- the individual qualities of the course participant;
- effective training/trainer qualities; and
- the value of supportive structures.

The following section outlines these themes and relates them to the data obtained via the survey (and hence, transfer interview). Within each of these themes a number of sub-themes (patterns) were discernible. Although each of these themes had a strong foundation in particular 'facilitative/barrier x time' dimensions (e.g. support to and from others was particularly significant in the 'teacher x time' categories) each theme could be located in many categories. For example, trainer support (to the teacher) was significant in the training/trainer dimension and course teacher support (to other colleagues) was embodied in the teacher dimension. Refer Table 6.35.

Firstly, the individual qualities of the course participant were deemed to be particularly important including a range of pattern characteristics of professional-leadership (e.g. skill competency), psychological (e.g. confidence) and sociability (e.g. aware of needs of others) factors. Secondly, the need for an appropriate trainer, and programme were

Table 6.35

Themes Identified via the Interview Codes

THEME	DESCRIPTION	PATTERN CODES
Theme 1: Teachers' individual qualities	Personal / psychological and competency characteristics of course participants	Psychological/personal characteristics Social competency Leadership and professional management
Theme 2: Facilitative training structures/trainer	Satisfactory administration, design and implementation of the courses and quality trainer.	Management and administrative activities Effective trainer qualities Relevance and value of the course Course methodology and structure
Theme 3: Support to/from others	Support received from others and given to others by course participants. Resources availability	School community support External support

identified. The benefits of the participants receiving and providing support to others was the third theme with an emphasis upon school support (including resources availability) and to a lesser extent external support structures. The notion of social support was identified as being of particular significance – it featured frequently in the interview data and rank scores relating to this were high. Follow-up interviews with one teacher, principal, teacher educator and MOE official explored the nature and significance of this support with respect to transfer of training. Refer to Table 6.35 for a detailing of the themes and patterns.

Although these dimensions have been previously identified in the literature as important transfer considerations, on the whole, the level of analysis has been general and mostly researched in the USA. Minimal attention has been directed toward the examination of such factors in a developing country. In the following sections the patterns and themes of the interview data are examined and related to the survey results.

Theme 1: Teachers' Individual Qualities

An important set of ideas identified in phase 1 and 2 of the research centred around teacher behaviours and characteristics. The overall mean rank for facilitative teacher dimensions across all time barriers was 30.5 whilst the barrier dimensions were 85.5 (see tables 6.32 and 6.33). Teacher personality, cognitive skills, social competency, leadership and professional management attributes, as defined by the respondents, were important considerations related to the course impact success.[44] The maintenance of a record of course ideas, during and after the course was also an important teacher activity as was the ability (by the course participants and others) to reflect upon and evaluate the material/course ideas.

1. *Psychological/Personal Characteristics* - Many of the interview and survey respondents considered the psychological characteristics of the course participant most important qualities for the success of the course. A teacher who had positive attitudes (to the course), was able to set personal goals (for the course completion) and was organised was more likely to contribute to the success of the course.

> *I think one important factor is attitude - what they are doing.....before the course - whether they are interested in the welfare of the kids.* [2BT]77[45]

> *Be genuine with yourself - that you are going in for something - and you set your goal that you are going to do it and do it right to the end and get good results from it.* [1BT]79

> [Teachers need to have a] *.....a timetable for themselves so that it* [the training] *won't effect their classroom.* [The teacher needs] *.....self discipline.* [1DT]85

A teacher who was flexible and who had potential to change both ideas and behaviour was highly scored by many of the transfer survey respondents. Confidence to undertake the course and the capacity to understand the course content were also considered important aspects although self-selection was favoured over MOE (etc.) selection for course participation.[46]

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[44] The definition of these was of course embodied in the comments made by the respondents in the transfer interviews. The researcher detailed no technical definitions. The transcription item examples often contain the respondents view of what it meant.

[45] Although there was a range of narrative examples for the themes, a careful choice was made from the more illustrative items and those that had a better language construction were chosen. Hence this means that many of these items are also the representative items in Table 6.1 Codes, definitions and transcriptions.

[46] For the very first course, the MOE selected teachers and this caused a certain amount of ill feeling as many teachers wanted to be in the courses.

Some teachers are probably just too scared to take the course......it's probably an attitude problem – confidence - they don't have confidence in themselves. There's quite a few who are too shy and probably less exposed to things. [13BTBr]54

[Some would say].....*no I can't do it - better not involve myself. Let so-and-so go they're young enough. I've got no time to study. I'm too old. That's what they are thinking in their mind.* [14BTBr]47

We need teachers who are .....flexible to changes .....able to..... improve and willing to change their attitudes. [5BT] 86

Build up self esteem, self confidence, etc., at the start. They underestimate themselves. [3BT]78

I think they've got to make sure themselves that they understand what is on the written papers that they see and what the teacher has said to them and how the process goes. I think they've got to understand thoroughly. [2DT]88

2. *Social Competency* - Another highly regarded teacher quality identified in the interviews and confirmed via the survey was the ability to relate to, and participate well with others. This involved not only interacting with others but also an awareness of other teachers needs and a willingness to share ideas with them.

I think if we have good relationships between participants, then there is no animosity, no feelings of distrust, no feelings of fear - I think you create a better atmosphere. [4BT]64

.....we need teachers that really want to get.....involved and share ideas. [6BT]83

The teacher needs to relate well to the lecturer. [6DT]60

I like the sharing but what I find sometimes is I'm the one who has the headache sitting up at night all times....we all have responsibilities..... so lets do it together. [4DT]85

3. *Leadership and Professional Management* – Being able to assist others to change was also considered a valuable procedure. Taking a leadership role and assisting colleagues to modify their behaviour was recognised as an important variable that assisted with the transfer process.

The use by the school of retrained teachers as resource personnel, subject leaders, syndicate leaders, etc., during staff meetings..... [is to be recommended][4AT]75

Interestingly, one of the teacher responsibilities that were identified as being of particular importance concerned the maintenance of course handouts and notes. These were not only for classroom implementation purposes but because others may also want to use such notes. Some respondents thought that the subsequent development of a course booklet (containing ideas, suggestions, and activities) would be useful.

> *The notes are important for planning. The principal wants to see them.* [5DT]90

> [These changes in the curriculum].....*need to be recorded.....we are fortunate now we have computers and we can store things like lesson plans and we can retrieve.....* [1AT]94

Other important teacher qualities included the capacity of the teacher to personally evaluate performance and changes and also use the evaluations of others. Positive feedback was regarded as rewarding and likely to maintain the teacher's interest in using the ideas.

> *Self evaluation.....we say it's looking at your weaknesses and strengths.....look at the strengths that the students have seen..... it could be that it is the truth coming out.....don't look on the bright side all the time, because maybe it's the truth coming out..... always look for improvement, this is not telling you you're a rascal, it's a way of saying - improve.* [7DT]90

> *If a teacher can see it. It's worth my effort to do it and also if they get feedback from others who say, 'look it is an improvement' - from one of their students, from one of their colleagues.* [3AT]86

Additional teacher responsibilities and personal difficulties were identified as potential barriers that impacted upon professional performance. Respondents reported that being over-worked at school, family and additional job responsibilities, transport difficulties, sickness and lack of confidence, could prevent implementation of ideas.

> *.....one way of stopping the staff going on to this, is load them with extra duties.* [2BSBr]64

> *It is difficult.....* [in the school environment]..... *where we train people and tell them to go back and train their staff and they find that very difficult, especially if you're the only trained one.* [6ASBr]62

> *There are teachers.....* [who]..... *have their own other work* (e.g. bar work) *and there are teachers who are responsible elsewhere.* [3BOBr]44

..... a lot of our teachers are women and their husbands don't want them doing anything extra - they think that time belongs to them, that time belongs to the family. They think that you do your school work at school and you finish it at school and you shouldn't be coming home and spending lots of time doing it, or giving up your holidays or whatever it is. [4BOBr]59

Putting too much responsibility on you .....[is a barrier].....*the thing that bothers me is the amount of time that we need.....like, we've got an all day programme in school and then we're asked to take another 2 or 3 hours of our time on the course.* [13DSBr]58

Theme 2: Facilitative Training Structures

Many respondents identified a number of training variables as important transfer of training issues. Although, overall not as highly scored as the teacher and school dimensions, the training and trainer strategies and suggestions were regarded as being important. The overall mean rank for the facilitative and barrier training/trainer items across all time dimensions was 50 and 88 respectively; the facilitative training/trainer during phase was ranked particularly high however at 37 (see tables 6.32 and 6.33). A responsive programme that ascertained needs, marketed the relevancy of the course, outlined the approach and identified learning outcomes/requirements was considered desirable. In the during phase, a well organised, relevant and varied interactive programme was deemed to be most desirable. Follow-up was also identified as important. Continued contact with the trainer during and after the course was favoured by many interviewees and survey respondents, as was recognition for course participation and trainer-principal liaison. Many considered it important that a reward of some kind was a component part of the course.

1. *Management and Administrative Activities* - Management and administrative preliminary course activities were highlighted by a number of respondents as effective training indicators. Communication with key stakeholders (teacher, MOE, principals, school staff) to provide information was seen as important to accomplish this, and if this was not forthcoming it was viewed as a potential barrier to course implementation

   [We need information]...*on what you are expected to do or to know and the relevancy of what you are going to do........* [1BTr]87

[Teachers need to know]....what they may have to be involved with; whether there is anything expected of them so they are not going to be dropped in the deep end before they get there. [2BTr]86

I think also you have to explain the results you are going to get and the impact they may have...[3BTr]68

[You have got to have] ......excellent salesman skills, you've got to be able to convince them, motivate them.......[4BTr]82

They...[principals, MOE] *need more information. They need convincing. They've got to have information* [8BTrBr]57

Consideration of the logistics of the course implementation (i.e. training course requirements, selection, course length and timing) was of importance. Mention was made of the course timing and venue so that the needs of the teachers were met. Although there was some difference of opinion over the best venue, most favoured the teachers' college over school venues as it was away from the interruptions and demands of school life. It was agreed by many that there were certain times considered inappropriate for the course.

I think one important thing is about the time, the period you are going to take the course. You have to look carefully into the period of the course- for example, when we started off it was in January. Taking our holiday period- why can't we take ...school time, school days? Rather than leaving... [it]... until school holidays. [9BTr]63

The time of the course to be held......[can prevent people from participating].....*the best time is during school. What if the school have no break* [lunch, etc.,] *the children go home because we are learning to make their education better and more fruitful......if you hold it after school.....we'll go mental.* [1BTrBr]63

.....having it in term 4 where there is a lot of interruptions in the school has been putting a lot of pressure on myself as well as those on this course. [1BTrBr]63

A number of respondents indicated that some training course requirements could be off-putting for some teachers. There was more favour for teacher self-selection than for the teacher nomination method. Some respondents were concerned about the insufficient time available for the course implementation and urged more time be made available for the learning of skills.

Sometimes I wish that we could have ..... a 2 week period [for the course workshop] *because there are so many things to learn, that by the time we get back in the classroom.......*[10DTr]65

If they know the strategies well, they will use them later on. If they don't know them well, they are likely to drop them. This is one concern I have about rushing through the thing. Now, if we gave them plenty of time to get really familiar with the strategies, then there is greater likelihood of them using it later on, whereas if we rush them through.....they do their assignments but they are still not really familiar with it, then they are likely to drop it because they don't fully understand it. [1DTrBr]60

2. *Effective Trainer Qualities* - Many of the respondents considered the nature of the relationship between the teacher and the trainer and trainer's professional and personal attributes as important variables for transfer success. The trainer's personality and cultural knowledge were considered important qualities and it was a problem if the trainer was unknown to the teachers.

[We want a lecturer]..... *full of life, snappy, understandable, easy to adjust,..... being alert.... easy going... and one that can be positive. You're doing a good job of it so far. We want a lecturer like you.* [15BTr]62

I think that whoever comes here has got to have a pretty good idea of what its like in our classrooms so they don't make assumptions about teaching that are not accurate. I think they have to have some ideas of what it is like to live here...........Like difficulties in actually living here....by the time you get your planning done and cart your water from the creek and from the tank and community involvement....... [16BTr]73

.....you have also got to think of the charisma of the coordinator. I think that is important. You get someone up here doing a course who is boring, it can turn you right off.... [8DTr]62

I think if you act as though you are superior or you are too educated, or you are well educated, you know it all, I think people are reluctant to participate in what you are going to do. [12BTrBr]63

The importance attached to the relationship factor and the professional and personal qualities of the trainer was probably related to the preference for ongoing training. Continuing contact with the trainer was regarded as a valuable means of participant support and training.

I feel there is a need for some sort of follow-up, either from the trainer or someone else who can pick up ..[the training]…*if a person hasn't quite got things right.....* [1ATr]89

I think easy access to communicating with the trainer.. [is important].
[5DTr]87

Some thought there was value in follow-up trainer - principal/senior teacher consultancy so that details of the teacher's new skills could be discussed. A course that facilitated teacher interaction and teacher networking had considerable appeal.

> *I think we should have more contact and keeping up to date with each other and sharing - like we have.* [6DTr]75

3. *Relevance and Value of the Course* - Frequent reference was made to the relevance of the course to the classroom and the benefits it could provide to the participating teacher. Respondents wanted information about this before and during the course

> *....the teachers have got to see the relevancy of the course.....they have got to clearly see the benefits that the course would either bring to themselves as individuals, as professionals and to the students they are teaching.*[7BTr]78

> *...if the teachers feel they are able…… they understand the things thoroughly…… they know it well…… and they can put it across to their children, they will use those* [ideas]. [3DTr]82

> [One reason for coming on the course is]*....the feeling that by doing this course they are keeping up with other people who are doing other courses.* [14BTr]61

> [A principal needs to be]*…… made aware that this person can become a resource person for other teachers.*[1AS]83

Respondents also considered that more tangible recognition of the teachers' contributions would impact upon the perceived value of the course and was therefore more likely to engage the teacher in implementation of course ideas. For example, extrinsic rewards for participation were significant for a number of the respondents. Some believed that the training would impact more if there was a salary increase, a certificate awarded, promotion followed the course or improved performance was noted. It was interesting to note how important the graduation ceremony was to the teachers – family and friends attended the celebration and even on one occasion the Queen's Representative (head of state). A number believed that teacher involvement in a course would encourage others to participate in extra study. The following examples are typical of some of the interview comments.

Some teachers may....[say]..... *I'm not getting paid, there's no money, why should I do this? So unless there's a reward offering or an increment they're not going to do it. Not just doing it for the sake of doing it.* [6BTrBr]70

For some of them [teachers] *the way they can improve in the classroom is another* [reason why they came on a course]*. *[13BTr]72

they ..... [should get]..... *increments and things like that - certificate recognising course completion*. [11BTr]80

Praising and encouraging the course participants to undertake and complete the work was a strategy also mentioned by the interviewees. As one of the respondents (on the transfer survey) reported:

I think they need feedback and I think they need positive reinforcement. They need that praise, praise, praise, praise. [3ATr]44

The involvement of the participants and significant others in contributing to course development and relevance was also recommended as an effective procedure. Early in the project there was a recognition of the need for local input and this was subsequently noted by many of the respondents in phases 1 and 2. A number of the educators noted the importance of a needs analysis to assist with the definition of the course.

For example this course - before you actually launched this course you made sure you actually came here and actually observed teachers in a classroom... because it is a different environment to your environment. You've got to come to know how they react to certain suggestions and things like that before you actually start thinking about what will be the content of the course, to come to understand the local flavour, the local context, their aspirations and things like that, their problems and their difficulties and things like that. [8BTr]67

4. *Course Methodology and Structure* - A few interview and survey participants considered that there was value in participant pre-course involvement.

I think....[what is required is] *....pre-course meetings and social gatherings, getting to know each other and getting to know you people.* [i.e. the trainers] [4BTr]82

I think it is very important that we get the reading materials ahead of the course itself....[6BTr]71

It was evident from phases 1 and 2 of the study and the on-going implementation of the courses that the respondents/teachers favoured courses that were interactive, fun, group-oriented and practical. Other approaches (e.g. reading) were also acceptable to many of the respondents but it was noted that additional assistance may be necessary. The lecture method was the least favoured approach.

> *The teacher must participate actively, not just this lecture type of delivery.....*[It is important to consider].....*the strategies, the techniques, being used and the understanding on the part of the deliverer that these guys do have difficulties and every now and then say 'look if I'm going too fast please stop me.'* [1DTr]87

Almost all of the respondents in phases 1 and 2 of the study had experience with either courses or workshops and many were able to comment upon unsatisfactory methodological features that acted as barriers to transfer. In most instances these comments were the opposite of what had been identified as facilitative factors. For example, some reported that motivation had been affected because of 'boring' courses and that insufficient course information/skills etc., thwarted implementation of ideas. Some reported that the course material/requirements could be too difficult or too demanding or insufficient to empower the teacher.

> *.....their previous history has a lot of bearing. Whether they have been to courses and the courses have been boring or don't deliver what the teacher is expecting - then I think they are reluctant to join in with it.* [7BTrBr]48

> *When you don't have the.....whole information, we've got to really struggle through to find which is which.* [8DTrBr]65

> *Maybe the academic levels.....*[required].....*A lot of our teachers, especially the older ones, have just gone through primary school, no secondary education. Their academic level is fairly low.* [10DTrBr]58

Theme 3: Support To/From Others and Resources Availability

Numerous colleague and in-school support factors were also identified as being important for effective transfer. The facilitative school mean rank across all time dimensions was very high at 24 and in the 'during' phase was assessed as 11.5 (see tables 6.32 and 6.33). Barrier school items across all time dimensions were 81. School, principal and staff support/involvement and the relevance/benefits of the course to the school community were common ideas located in the 'school' dimension and were very highly ranked. School

resources available for use during and after the course were also emphasised and, after the course, school planning documents that reflected the course ideas were favoured. Some respondents suggested that arrangements to visit other classes to observe the ideas in action would be valuable to assist with the transfer process. Some teachers also identified support factors outside of the school community that were important for transfer.

1. *School Community Support* - The notion of in-school support was a very important issue for many of the participants. Professional and management support from colleagues, staff members (including the principal) and the school committee was deemed desirable. If colleagues were uninterested and critical this created a barrier for implementation of ideas.

> *Actually we want them* [i.e. the non-participating staff members/ colleagues/professional friends] *to support us. If they don't want to join into the course we would like their support if we are to do something in the school.....because there are times when we need them, when we need to ask their opinions......* [1BS]83

> *I think that if people came thinking that they were representing themselves and that they had the school's backup. I think that we might get a bit further than we do.* [2BS]77

> *Now some teachers, some principals discourage teachers from participating because its then a problem who looks after the class. Now, that is a logistics problem, but it can put the teachers off.* [3DSBr]66

> *.....there is often a lack of support within the environment, within the teaching environment. There's almost jealousy - not, not really jealousy, but there is a pull-you-down* [attitude] *which actually means putting it into place is not that easy. It's not as easy as the tutor thinks it is.* [5BSBr]46

> [Some teachers will say].....*'Oh, that's not new, we've been doing that for years.....you think that is going to work? I've been teaching for years, I know better than that.'* [2DSBr]47

> *I think the principal needs to support them. Ask them - how did the course go? What did you learn today? Would you like to share it with other teachers here?* [The principal should also] *supply them with all the materials as required.* [2DS]86

But not only was support sought from the principal - many also considered it was the principal's duty to become more directly involved, formalise course ideas through

school planning/management and ensure school resources and facilities were made available to implement the ideas etc..

> *I think the principal should be fully informed about the course and be given what the participants are to be given and the principal needs to be involved in pre-course meetings and things to make...* [him/her]... *more aware of what we are going to do and what we will be going through, so that they will be given more understanding of the course and they know what to expect.* [4BS]85

> *The writing by the school of management documents, particularly policies for teaching/learning/assessment which will enable retrained teachers to practice what they have acquired.....* [would be a good idea] [2AS]86

> *Yes, we* [the principal and teacher] *should have a get-together and probably have a long term plan, where we are heading in the future.....* [5AS]87

> *The facilities and things in the school should be able to be used.* [3DS]85

> [It is important to consider].....*poor classroom environment - common* [unfortunately] *in too many of our primary schools. Non-conducive to quality learning. Lack of proper or adequate student furniture. I have suggested that some of the new furniture to be provided to schools be locally made tables which would encourage cooperative learning activities.* [7DSBr]66

> *.....you go on this course and you come back and your plonked totally to the opposite end* [of the school levels]. *You're a keen teacher but you have to shut up.* [2ASBr]74

Furthermore, the value of the course (for the school as a whole) and its usefulness (to the teacher, students, other teachers, and the school) was important to many of the respondents for ensuring that the course ideas continued to have life.

> *I* [principal] *have tried to convince people.....if you take the course it is going to help you a lot in your work in the classroom and in the long run it will benefit the school.* [3BS]76

> [An acknowledgment from the non-course participants that]..... *you're doing it really good,* [and they ask] ..... *can they have some time to come and see this approach that you are taking in the class.....*[people can then] .....*feel good about what they are doing when they tell people.....they are doing something for the benefit of the school, for the kids and the teacher.....* [4DS]89

> *Up to a certain point sharing between two buddies is excellent. To my point, I always ask her to come and observe me, and working sometimes*

she gets stuck and asks me 'why do you do that?' Then I share with her all the activities on the course I've been doing. She understands. No buddy is no good. [1DS]92

Not only was the value of support to the teacher recognised as being important but also implied was the significance given to supporting others. For example, the course notes were not only for teacher use but were to be shared with others in the school. Furthermore respondents considered that the teacher should be given responsibility for implementing new ideas in the school. The usefulness of course ideas for the whole school was important.

2. *External Support* - Factors outside of the school were also identified as somewhat important sources that could either sustain or deter transfer. The family, Ministry of Education and other community factors were identified as important issues related to transfer across all time dimensions.

> *Our aim is to encourage teachers, because we know, well ahead of us, is a benefit to the community.* [1BO]54

> *Teachers are not willing to go out of there way to improve their work in the classroom if they are not getting support from ..... the ministry.* [2BO]81

> *Always my first thing is the family.* [It] *always keeps me going to this course, it's their support.* [2DO]77

> *..... sports events going on around the island or some cultural event or some get-together.....that tends to be a big distraction......course organisers need to be aware of these things.....* [5DOBr]60

> *There are no ......overall* [MOE] *education policies and therefore it is difficult for schools to become more effective in their delivery.* [7AOBr]66

> *A major barrier factor to .... the continuing implementation of sound teaching practices is our current grade 6 examination.* [i.e. teaching to exams] [8AOBr]41

The Function of Social Support

In the interviews, frequent reference was made to the value of social support to maximise opportunities for transfer. The survey results also highlighted the importance of support. Similarly, on a number of occasions the consequences of lack of collegial support and the

levelling of criticism at the course teacher (for using ideas; being on the course; etc.,) were outlined. Because of the methodological significance of this finding (as determined by the coding, marginal remarks procedure, subsequent interview and survey data[47]), the value placed upon group-oriented activity in the Cook Islands culture and the significance of support in the transfer of training literature, a more detailed examination of support was warranted. Accordingly, there were three in-depth interviews with a teacher educator, principal and course teacher. A follow-up brief focussed interview with a senior Ministry of Education official was also undertaken to gather additional data on social support. Two key informants commented on these findings.

Two central questions were asked of the respondents as it related to the issue of social support - what was the nature of social support for teacher professional development in the Cook Islands and what was the function of this support? A number of additional questions were asked that followed the respondents' answers to assist with clarification and elaboration of responses.

Social support was viewed as arising from a number of sources, with the potential to facilitate improved performance. It was also regarded as problematic because it was not always readily obtainable and could be interpreted by others as a sign of professional and personal weakness. The categories of support most commonly identified by these respondents were collegial (teacher and principal), community (parents and school committee) and family. In general, the support centred around the value of the approval to the individual from these sources.

> *I think the nice feeling is that they are letting you know that what you are doing is approved by other people.*

However support was more than approval – it was also a tangible commodity.

> *I think help from one another; preparedness on the part of the participants of this course and sharing material with one another is one……*[type of support]

> *There are also schools where parents know what is going on in the school and they are giving these teachers support…… XX school committee paid for the* [graduation] *meals for ……the teachers.*

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[47] Coding and marginal remarks procedures as explained by Miles and Huberman (1994).

> *……I need the support of my husband, for example helping with……home, with money, children, so I have time to actually focus my mind, especially during this time of workshops. Focus my mind on what I am doing in the workshop.*

One respondent noted the importance of being able to select supportive colleagues from a wide group. On the whole however, respondents stressed the value of support obtained from teaching colleagues and the principal. Their support was viewed as a most important component for course success.

> *I think if you've got a big group, then you can work with whoever you're comfortable with.*

> *……at school I need the support of my principal or my colleagues, other teachers. In ways, like, if I'm doing something, a lesson, they can come and observe and we can reflect on it and see which areas I need to improve on, or maybe just* [give] *assurance that I'm doing something good.*

Two of the respondents noted difficulties associated with gaining social support for achieving, implementing new ideas, etc., in the Cook Islands. One respondent noted that the seeking of support could be perceived as a lack of knowledge, skills, etc., and could shame the teacher. Seeking support could be viewed as a weakness. Another stated that support was elusive, and yet very much needed.

> *I think this is a common thing happening in Polynesia, in the Pacific Islands. We do not tell people enough that they are doing the right thing. We just do not make the effort to tell others they are doing it right.*

> *I think over here we are ashamed. Like I said it took me a while to actually go out and ask people in New Zealand to help me. But over here we don't want other people to know that we don't know or we need help…… It's hard here for teachers to ask.*

Social support was then viewed as vital, but somewhat problematic to obtain and at times overlooked as a means of achieving higher levels of performance. It was reported that sometimes it is interpreted as a personal weakness if support was sought.

The second important issue relating to support was concerned with its function. Although, at times, support was noted as being difficult to obtain and potentially indicative of personal weakness, all respondents agreed that it was of particular significance for transfer. It provided a range of structures for the individual to negotiate the implementation of ideas

into the classroom. Firstly, it provided the individual with psychological support to maintain interest, motivation and involvement in the programme.

> *I think it is causing a desire for them to continue with it, to extend more, to develop further. ……If you are getting support, you feel like carrying on with it, you are enthusiastic about it and you keep on. ……If you run out of ideas you will be looking for other ideas whereas if you're not enthusiastic, you'll just do what you know then and let it drop.*

> *I think it is just the security [for you] that somebody cares and [is] complimenting on what you are doing…… you know that your colleagues are proud of what you are doing……*

Others not only noted the benefits for the course participant but also the advantages that others gain from the support.

> *I think it brings unity amongst the teachers and also you are developing a good atmosphere in the school which helps. Happy teachers, happy children.*

> *It's giving encouragement and it's actually lifting them and giving them the assurance that what they are doing is good for the teacher as a person and also good for the family or the community as a whole.*

> *……it makes the load easier for everyone.*

One respondent, although acknowledging the value of support, also noted a potential disadvantage.

> *It could hold you back, probably slow you down. You know you have to decide on something and then you have all those people to decide……and then that slows you down because people have to talk about it……whereas if you are an individual person and you do your own thing, probably it will be done faster.*

All respondents noted the concern that teachers have when implementing new ideas. There was agreement that adverse responses and criticism from colleagues was a common phenomenon and could well prevent a teacher from developing course ideas in the classroom. The older (often senior) teachers on a staff were often in a position as gate-keepers for innovation and frequently perceived to be reactionary and inflexible. Often, criticism from them made it difficult for the teacher to implement or continue to use new course ideas.

I know islanders. Somebody goes up [i.e. teaching/outcomes improve]. We tend to pull them down. We tend to go and gossip……and that puts you down. Sometimes you have this feeling why am I doing it?

Just one single mistake you make and they jump on you and that is the fear of most teachers over here. Just to make a mistake and then everybody pull you down or criticise you. That's what it is, and that's why they need support …….Over here it's a big black mark [if you make a mistake] ……and over here you can't reason with some teachers. 'I'm right and that's it. Final!' There are no other options.

I've seen too many people climb to the top and everybody else seemed to be pulling them down again and putting them in their place…… For some strange reason, if I'm working with a group of people and I get clever and I get a certificate for this and a certificate for that, and a diploma for that, the others, my peers, look at me with suspicion and they will try their best to pull me down and put me in place.

To assist with the interpretation of these findings two further key informants (a highly respected Cook Islands based, retired, *papa'a* (westerner) university lecturer and a Cook Islands born tertiary educator based in New Zealand) were approached and asked to comment upon the validity of these findings. Both acknowledged the importance and validity of the findings. However, both also noted that it was a complex phenomenon and was subject to a number of influences. For example, it was suggested that the potency of the criticism would be mediated by factors such as degree and location of training, age, gender, status of the individual (seniority in school, position in community, etc.) receiving/giving criticism, the existence of familial affiliation bonds and geographic location of the school. Accordingly, it was suggested that criticism of behaviour was a potent factor to consider in the transfer of training process in the Cook Islands but this was likely to be mediated by the teacher's individual/familial, locational, school and training characteristics

Phase 2B Summary

The transfer interviews yielded considerable data. Facilitative and barrier ideas were identified that related to transfer of training and these could provide a basis for a framework that could be used to develop effective in-service courses. A trainer who had knowledge of the range of priority strategies and an understanding that the teacher, school and trainer roles in particular were crucial for transfer was well placed to develop a plan for successful transfer. However, the data used to develop these strategies was also used for another purpose. The identified strategies, along with the interviews from which they were extracted and the field notes accompanying these, were examined to identify themes

that were common to all of this data. Identification of these themes that transcended the individual strategies and categories was a particularly significant aspect of this research although it needed to be considered in relation to the identification of the individual strategies.

Three major themes were ascertained from the data – the course participant individual qualities, trainer/training issues. and supportive structures. Each of these themes related to the data collected from the interviews. Many of the participants noted the importance of the personal/competency characteristics of course membership and how this can impact upon participation and transfer issues.   The value of a satisfactory course and the significance of the trainer qualities were also identified as being a particular concern with regard to course members implementation of course strategies on return to the classroom. Support to and from others was considered most important if course ideas were to be transferred to the classroom.   Of particular interest were the reports of non-course participant criticism that was often experienced by course members on return to the school setting.

Discussion

There were three inter-related research activities in phase 2. During the first part of this phase, educators were interviewed to identify specific transfer of training facilitators and barriers that impact upon teacher in-service training. Secondly these strategies were placed into a survey to ascertain their value. Thirdly the coded items, in the context of the interviews, were analysed to ascertain the important patterns and themes. Also, during this part of the investigation, one of the themes (support) that had assumed considerable importance was examined in more detail by follow-up interviews.

Specific Transfer of Training Strategies and Their Value

The results obtained from the participants through group and individual interviews in phase two of the research indicated that a wide range of transfer suggestions could be identified. These 116 items were coded, categorised and then grouped into a 'facilitative/barrier X time' matrix.   Ranking of the items revealed a considerable agreement about the importance of the items as there was a narrow dispersal of scores. Barrier items were regarded less highly than facilitative items.

Factors considered important in terms of training for transfer included the provision of information about the course that had been developed to meet specific needs of the participants. This included appropriate content, methodology and recognition for participation. There was also recognition of the value in establishing a relationship with the trainer and maintaining it with follow-up visits. Teacher behaviours identified as valuable for transfer of training included being an organised, motivated, socially skilled, confident teacher who could readily engage in goal setting, risk-taking and flexible behaviours. Maintenance of course notes was highly regarded. For the school, administrative/collegial support and principal involvement, as well as an acknowledgment that the course was important for the whole school, were factors identified to facilitate transfer of training. Being able to use school resources to implement ideas and not being over-loaded with additional work were also considered important. The role of MOE, family, parents and community were also outlined as factors contributing to successful impact of ideas in the classroom.

The identification of facilitative and barrier factors is in itself not new. Undoubtedly, the participants identify an increasing range of strategies as they experience them, for they will evaluate new approaches and decide upon their usefulness. It is important to acknowledge therefore that this list of strategies represents approaches that, at this point in time, have been identified as useful facilitators or barriers for transfer as *perceived* by the informants.

Relating the Strategies to Cultural Practices. These findings have considerable relevance to the development of an understanding of transfer of training in relation to the culture of the Cook Islands. In the Cook Islands there is an emphasis upon collaboration, socially skilled behaviour, sharing, caring and interdependence of the individual with the community (Ritchie & Ritchie, 1985), and this is reflected in the data that has been gathered. The following discussion outlines how the strategies can be interpreted from a cultural perspective.

There was an importance placed upon sharing of the information with all key stakeholders to develop interdependence through a unity of understanding about the relevance of the course. The emphasis upon course information (requirements, relevance, learning outcomes, etc.) could also be a reflection of an interest in specifics and a need for certainty often associated with such cultures (Hofstede, 1991; Thaman, 1996). On-going

collaboration, relating to others, sharing, networking and visiting other teachers' classrooms to observe were other key dimensions identified to facilitate learning and transfer. Interaction with colleagues, the trainer, principal and the community were behaviours highly valued by the respondents. Methods that emphasised involvement of others, social activity, participation and group work were particularly recommended. Items regarding support to and from others (e.g. colleagues, principal, family, MOE, trainer) were highly ranked strategies. Implied in many of the items was an importance attached to positive contacts and interactive training. Interdependence, caring and support are highly valued dimension of Cook Islands culture. As identified above, considerable emphasis was placed upon activities that reflected these qualities.

 A number of the items suggested that reward for attendance (e.g. certificate, and increased salary) was important. This undoubtedly is in part a reflection of the value that is placed upon education and the consequent personal energy expended to attend the course. It is also probably related to gaining a reward that is recognised by others. Perhaps attention to reward was inflated however, for at the time of the survey it was a particularly difficult economic period and teacher salaries had been trimmed.

The emphasis placed upon course relevance is a demand that many teachers worldwide would have of their training and there were a number of items in this research emphasising the importance of relevance. However, this needs to be interpreted in light of some of the other items. For example, a trainer who understood the local conditions, culture, etc., was important and was therefore more likely to provide training that was relevant. A course that was relevant to the whole <u>school</u>, to school <u>planning</u>, the teacher's <u>colleagues</u> and the teacher's <u>own classroom</u> was important.

The respondents identified a number of personal qualities that were considered useful to facilitate transfer. For example, dimensions related to an individual who was confident, flexible, innovative, able to understand and set goals, being organised to undertake the courses were recognised as being important. Many of these have been supported by the literature as important transfer qualities (e.g. Baldwin & Ford, 1988; Ford & Weissbein, 1997). It could be argued that this emphasis upon the personal negates the notion of the importance of collaboration and relating to others. But there are alternative explanations. Firstly, the respondents were asked to comment upon personal behaviours and strategies if

they were not identified in the interview. Hence, a store of items concerning the individual qualities was perhaps deliberately developed for the survey. Secondly, and perhaps more importantly, many of the personal qualities, behaviours etc., identified relate to others. Respondents often couched their responses in terms of the value of the personal quality for others. For example, course notes were being kept to share with others, evaluation was identified as a collaborative activity, responsibility to implement new ideas would involve others, etc. Even the more cognitive behaviours (e.g. motivated teacher, flexibility of thought, confidence) could be interpreted as activities that would provide success not only for the teacher, but also for the school and others. This balance (and even tension) between the needs of the individual and group in Polynesia is well documented in the literature (e.g. Ritchie & Ritchie, 1985).

Very clearly the majority of the items in the school domain emphasised the importance of interdependence – support to <u>and</u> from others and relevancy were key notions. The involvement of the principal and the colleagues were key ideas. The use of resources was often discussed as an important issue that would support teacher behaviour in implementing ideas. In the Cook Islands there is generally a lack of teaching resources and this is reflected in the high demands for the use of them. Within the 'others' domain the key issues were related to the value of support from family, parents and MOE. Relevance to the community was also noted.

The strategies identified by the respondents provided a means of developing an understanding of how the respondents' ideas for transfer strategies were very much embedded in the culture. This is an issue of relativity (i.e. collaboration is regarded as a desirable quality in many cultures and often described as being useful for many teacher training programmes) and specific significance attached to the meaning of the strategies/ behaviours. The work of Hynds (1997), and Tufue (1998) for example indicate how different the value and function of support for training transfer can be in different cultures and how different strategies are emphasised in different settings. There is certainly an intensity of focus by the respondents in this study on many of the strategies that encompass behaviours and meanings that are consistent with their cultural practices. In the Hynds and Tufue studies more attention was directed toward strategies that were concerned with individual effort and personal gain, with an emphasis upon support to strengthen individual competencies.

In the literature considerable discussion has occurred regarding the identification and nature of the barriers (e.g. Broad & Newstrom, 1992; Foxon, 1993; Lewin, 1951; Newstrom, 1986). Lewin indicated, that from the point of view of training, priority should be given to identifying and reducing their impact whilst Foxon identified 128 potential barriers to transfer of training. Newstrom, in a corporate study, identified nine barriers in rank order that trainers considered important. The following table (refer table 6.36) outlines these barriers in comparison to the nine ranked barriers identified in this research project.

Table 6.36

Comparison of the Ranking of the Newstrom (1986) and Cook Islands Study Barriers

RANK	NEWSTROM (1986) BARRIERS	RANK	CI TRANSFER BARRIERS
1	Lack of reinforcement on the job.	1	School management and organisation not helpful following course
2	Interference from immediate work environment.	2	No follow-up contact from trainer
3	Non–supportive organisational culture.	3=	No teacher reward offered before course commences, school facilities and resources not available to use after course and course is difficult for teacher to understand
4	Trainee's perception of impractical training programme.	6	No follow-up contact with trainer
5	Trainee's perception of irrelevant training programme.	7	Principal not helpful/shows little interest in ideas
6	Trainees discomfort with change and associated effort	8=	School resources/facilities not available to use during the course, school management and organisation not helpful whilst course is operating, no reward for teacher after the course and MOE does not support teacher after the course.
7	Separation from inspiration or support of trainer.	12	Training programme not helpful enough
8	Trainees perception of poorly designed/delivered training.	13=	Teacher has insufficient skill or information to continue to use ideas and teacher has too many other responsibilities at school
9	Pressure from peers to resist change.	14=	The course is to be held at an inconvenient time and the teacher's colleagues are not interested/criticise the course ideas

Like the facilitative items in the Cook Islands study, there was considerable attention given to barriers that emphasised inadequate interaction or collaboration. Attention was also drawn to the perception of training inadequacies. Interestingly, the barriers in both settings are very similar. That is, there is in both groups an emphasis upon the perceived (real or imagined) lack of organisational/school support and limiting work climate along with

inadequate training opportunities to meet the trainees needs. Lack of reward for participating in the training was an important barrier to the Cook Islands respondents.

Examining the Strategies. Each of the facilitative and barrier items was ranked on the basis of the participants' value (Refer appendix G). From a quantitative point of view, a ranking from the most highly scored strategy to the least was ascertained. It is important to note however that the range of scores obtained from ranking was relatively small (Refer to tables 6.30 and 6.31). The potential scoring range was 0-98 but the survey resulted in a range of 41-94 with many of the lower scores representing the barriers. Hence, interpretations resulting from the ranking could mask the significance given to many of the items. Another issue to consider is that the strategic selection of items for course planning needs to take into consideration not only the value of that item but also the nature of the course, course objectives, length of course, the characteristics of the trainees, etc..

The frequency of scores (0, 1 or 2) and means for each item were also calculated (refer tables 6.5 – 6.28) to assist with the identification of how each ranking was constructed and how each item value related to all other items. In a further analysis (refer appendix H) the group means (teacher educators, principals, Aitutakian teachers, and Rarotongan teachers) for each item were calculated to identify how each group contributed to the scoring of each item. The data obtained from these analyses can provide some insight into how best to prioritise strategies for achieving transfer of training, but their most significant contribution lies in their role as 'quantitative informed' data supporting the qualitative findings. Some caution needs to be exercised however in interpreting these scores – some of the participants in the transfer interviews also participated in the transfer survey and hence the scoring on the survey may be a somewhat biased response.

Because of the relative homogeneity of scoring, the task of interpreting the importance of these quantitative findings is a reasonably uncomplicated task. The 'snap-shot' view of the identified ideas for promoting transfer (refer tables 6.3 and 6.4) provides in terms of ranking, lists that are categorised into 'facilitative/barrier X time' dimensions. These could be the basis for developing plans for implementing training and because each item in the category is rank ordered it provides a means of prioritising actions for facilitating the impact of training. Broad and Newstrom (1992) indicated that the identification of strategies that have most impact was a priority for providing a framework for ensuring

workplace impact of ideas. In many respects these tables are particularly unique because there is little indication in the literature to identify what *course participants* identified as priorities for addressing transfer of training.

In addition to the ranking of the items a range of other quantitative procedures were undertaken to further develop understanding of the value of these items. Item score analysis involved an examination of the frequency of scores for each item and how each group's scores contributed to the item. Secondly, the relative importance of the 'facilitative/barrier X time' categories were analysed by considering the probability of group scores for each category, the frequency of items in each category, the frequency distribution of item scores in each category and the mean rank score for each category.

The frequency of scores for each item provided a basis for further examining some of the items. The items that attracted high levels of the maximum score (i.e. a score of 2) provided some information relating to the choices. High rated facilitative items (i.e. for the items that received 35 or more scores of '2 ' from the 49 participants) were spread across all time periods of the facilitative items but almost exclusively within the trainer, teacher and school dimensions.[48] For the trainer most of these higher scoring items were located in the before and during categories and emphasised the provision of information relating to course relevance, requirements, certification, course planning, interactive methodologies and trainer contact with teacher. Teacher items that were at this level related to the need for teacher organisation, flexibility, capability to understand the material, sharing and participating, evaluation of performance, intrinsic motivation and use of course notes. Items that emphasised colleague/principal support and involvement, the
 usefulness of the ideas for the whole school and use of resources to implement ideas were the school approaches that were scored at the higher levels. The ministry support items in the 'other' category were the only items at this level of scoring. What this implies is that there are a number of items that many of the participants agree are particularly important and this can provide a more refined understanding of the potential usefulness of ranked items for course planning.

Although there was considerable agreement between the groups of respondents who scored each of the items on the transfer survey (refer appendix H) a few differences are worthy of

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[48] None of the barrier items achieved scores at this level.

note. Identification of these differences provides additional data for assisting with the development of a strategic transfer plan and it recognises that there are likely to be intra-group differences. In terms of this research, a 1.0 difference between any of the group scores on any of the items was considered important. There were only ten items in this category but some patterns did emerge even from this limited group of items. For example, Aitutakian teachers in comparison to the other groups identified course demands/ requirements, course assignments and teacher confidence as more problematic issues and this group also placed a higher value upon family support. Another interesting difference related to the value of a teacher's ability to relate to others and share ideas – the teacher groups identified this as a very important quality whilst the teacher educators were much less convinced of its utility.

Three items relating to the involvement of others with the course tutor had a range of different configurations contributing to the scoring. With regard to the provision of a teacher's skill report from the teacher educator to the principal, the teacher educators valued this less than the two teachers groups (although one of these groups did not quite reach the 1.0 level difference). It was somewhat surprising that the teacher educators did not rate it more highly as this could be a means of linking the course with the school. On the other hand teachers' value of it could be considered a reflection of the importance they place upon principal involvement. Another item relating to the principal, 'support to implement new ideas', in relative terms was considered most important by the principals, teacher educators and teachers from Aitutaki and yet not identified as such by the Rarotongan teachers. Perhaps because the less intimate nature of teaching in Rarotonga (due to the size of the schools, less frequent personal contact between teachers and principal and the opportunity to liaise with a wider group of people) accounted for this result. The development of a booklet to share with others was rated highly by all the teacher educators but much less so by the principals. Teacher educators undoubtedly viewed this as an opportunity for the course teacher to consolidate ideas and to raise the consciousness of schools to the work that was being undertaken. Principals were possibly being more pragmatic and using their previous experience indicated less enthusiasm to en-skill teachers from afar.

One of the particularly interesting findings related to the item referring to trainer or MOE selection of teachers for the course. For the first and second course in the programme

teachers were selected by the MOE to participate. Feedback to the researcher and others indicated that this generated considerable animosity amongst the teachers who wanted to participate but were not selected. It seems that there was considerable ambivalence about this with the teachers however for when the alternative item concerning the teacher's choice to attend was rated many teachers also placed a reasonably high value on it. The teacher educators and principals did not rate MOE or trainer selection at all high. One explanation for this was that many of the participants of the first two courses were survey participants and hence were valuing their selection and yet had a concern that teacher self-selection should receive some prominence. The remaining item for which there were major group differences was concerned with the impact of external events disrupting implementation of course ideas. The teacher educators rated this relatively low whilst teachers in Rarotonga considered it more of an issue.

Using a simple group comparative procedure there was also some evidence to indicate that the groups' responses across each item in relation to other groups' mean scores were more variable for the teacher educators and principals. Further research would need to confirm this, but if the trend was correct then it is indicative of some differences between the practising teachers and the other two groups (mostly in administrative positions) on the degree of importance attached to many of the items.

Analysis of the scoring for the 'facilitative/barriers X time dimensions' was also undertaken and hence a relative importance could be attributed to each of the 12 facilitative and 12 barrier categories. Firstly, the probability of 0, 1 or 2 score in each of the categories (e.g. 'trainer-before') for each group was ascertained. Refer to appendix I. This clearly indicated that for all groups, facilitative items were more likely to achieve a '2' score whilst the barrier items scores were more varied for each group. This provides some indication of the consistency between the groups on the scoring for the facilitative items in each category and overall, groups agreed that these category items were of considerable importance.

On the basis of a frequency distribution of item scores the relative importance of the 'facilitative/barriers X time' dimensions was investigated. In general terms more importance was attached to the facilitative trainer, teacher and school categories items, and particularly so for the 'during' and 'after' time periods. A similar pattern emerged with the

barrier items with most being located in the same time periods. The mean rank data provided a more precise picture. Overall the facilitative school category was perceived to be particularly important. Following this were all of the facilitative during categories, then the remaining facilitative items, with all of the barrier categories (except 'trainer-after') clustering together with the lowest mean ranks.

Broad and Newstrom (1992) reported an investigation in which trainers were asked to rank the priority of their categories (manager, trainer, trainee X before, during, after) in terms of likely impact. In the current research an additional category (i.e. 'other') was added and the 'manager' category was expanded to include all of the school's personnel as well as organisational and administrative elements. In table 6.37 below the mean ranks for each of the categories have been ordered from 1 to 12 (1 being the highest mean rank) and beside each of these are the ordered priority impact results identified by the Broad and Newstrom investigation.

Table 6.37

Priority of Facilitative Categories Defined by the Mean Ranked Scores of the Respondents and Compared to Broad and Newstrom's (1992) Study of Trainers' Perception of Use and Impact of Strategies.

	BEFORE	DURING	AFTER
TRAINER	10 (2)	7 (4)	9 (3)
TEACHER	8 (7)	2 (5)	3 (6)
SCHOOL	4 = (1)	1 (8)	6 (3)
OTHER	11	4=	12

∗   The bracketed numerals refer to Broad and Newstrom study

Although some reservations need to be exercised in comparing this data (which arises from different sources) this comparison presents some interesting findings[49]. In terms of impact, the Cook Islands respondents did not rate trainer strategies in the 'before' and 'during'

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[49] Broad and Newstrom had a small group of trainer respondents whilst in the present study a range of trainers, teachers and principals contributed ideas. The question of whether particular stake-holders over-emphasise their own role is also an issue that needs to be considered.

categories as highly as Broad and Newstrom, but identified teacher 'during' and 'after' strategies as somewhat more important. 'School-during' category was regarded as considerably more important (and '- before and '-after' less important) in the current study than the 'manager-during' category. The 'other-during' category (e.g. MOE and family support) in the current research also had a relatively high mean rank score. Overall these results indicate that although there are some similarities there are considerable differences. In relative terms, the 'during,' 'school' and 'teacher' course strategies were particularly important to the Cook Islanders whilst in the Broad and Newstrom study the importance of the 'before' and 'trainer' dimensions were apparent.

For the Cook Islands respondents the teacher and school 'during' strategies were particularly important. Given that, from a cultural point of view, the individual and the community are in unity and interdependent, it is understandable that the teacher and the school strategies cluster together. Success is not so much in terms of individual achievement but a responsibility that relates to the school community. The teacher's enrolment, although it is individual, embodies a sense of the school community – the teacher represents the school, ideas will be shared within the school, etc. As indicated in the data support to/from the school was highly valued. 'During' the course was a particularly important time for the teacher. It gave opportunities for interacting with one another, learning together, sharing and observing others. It was a time for *aroha*. What is more, for the current teacher education in-service programme around which this research was based, it was a critical time for learning about assignment completion. Hence it was at this time that most support was needed – from colleagues, family, principal, trainer, etc.

Summary. Consideration has been given to how the respondents identified a range of facilitative strategies and barriers that influenced transfer of training. Trainer, teacher, school and other items were identified and were located across the before, during and after time dimensions of a course. Relative priority was attached to school and trainer strategies during the course implementation although the range of differences between the scores was small. The cultural significance of the interdependence for the individual and community, the opportunities to collaborate, and the consequent support that can be given and provided through this interdependence has been outlined. It has been postulated that these results reflect these cultural imperatives. The patterns achieved in other studies outside the Cook Islands have considerable differences in priorities for strategies. These findings have

significant implications for course planners but it is often the individual trainee and the work environment domains that trainers have less control over and hence the need for careful, coordinated and integrated planning.

Patterns and Themes

Three major themes were identified from the phase 2 research data. Codes and patterns ascertained from the interviews and 'memoing' of the interviews were the primary data sources of these themes. Facilitative training, the teacher's individual qualities, and the support to/from others were key ideas that were identified.

Facilitative Training. Four components bounded these findings – management and administrative aspects, trainer qualities, course value and relevance, structure/methodology of the course. In essence, respondents had indicated that they wanted training to be informative, practical, timely, supportive, satisfying, rewarding, fun, interactive, relevant and planned with a follow-up. The point made by Doyle and Ponder (1978) about the practicality ethic seemed relevant – respondents were interested in training that was appropriate, could meet teachers needs and was efficient in terms of the teacher's time and resource usage.

Many of the identified strategies could be located in the international literature, namely, the design of the programme (e.g. Butler, 1992), performance feedback (e.g. Wexley & Thornton, 1972), relevance (Gregoire et al., 1998), trainer characteristics (e.g. Gregoire et al., 1998), pretraining experiences (Salas & Cannon-Bowers, 2001), location of the training (e.g. Analoui 1993), collaboration (OECD, 1998), need for resources (OECD, 1998), convenient location (Butler, 1992), participant involvement in course development (Butler, 1992) and the need for a training model (e.g. Joyce & Showers, 1980).

The training programme features outlined were those that were 'supportive' and responsive to the needs of the individual teacher but at the same time met the needs of the group of participating teachers. The teachers also sought interaction with schools and MOE. In many respects this is what is being sought in the new teacher in-service paradigm – an interdependence that meets the needs of all key stakeholders. Many of the process qualities of the Cook Islands society are those qualities that are being lauded as necessary to evolve more efficient in-service programmes. Collaborative, cooperative, interactive,

differentiated but integrated improvements in system components, partnerships and interdependence are all key terms in both systems. The issue of collaborative partnerships will be explored further in the theme section relating to support.

Teacher Individual Qualities. The second major theme concerned the individual qualities of the teacher. Data obtained from the respondents indicated that a range of individual attributes was considered significant for transfer of training and these were related to the psychological, social, or professional management activities of the individual. The Bell and Gilbert (1996) model of teacher development (refer figure 3.2) emphasised these factors as being significant for effective teacher in-service impact.

Although respondents noted the importance of a range of psychological characteristics that readily impacted upon transfer outcomes it was apparent that many of these factors were within a particular socio-cultural context. In the international literature considerable attention has been directed toward researching the impact of motivation upon transfer (Ford & Weissbein, 1997) but little attention directed to how the construct of motivation interpreted from different cultural perspectives impacts upon learning and transfer (Wlodkowski & Ginsberg, 1995). Although this study did not specifically emphasise the issue, it is apparent that the respondents gave suggestions that were reflective of their cultural view about what motivated people.

Ryman and Biersner (1975) noted the central importance of motivation to transfer of training and the respondents in this study placed considerable emphasis upon the value of a highly motivated teacher. A motivated teacher who had a positive attitude to training, who wanted to understand, who wanted to be part of the group, could readily set goals, was able to organise and coordinate home/school/community responsibilities to take part in the training were important qualities. Other conducive qualities identified included being confident, being flexible, trying ideas and changing them if necessary. The trainees previous experiences were also identified as being significant for the level of motivation. All of these motivational qualities have been identified in the literature – for example refer to the findings of Ford et al. (1998), Robinson (1992), Rouiller and Goldstein (1993).

The approach developed by Wlodowski (1999) has considerable merit in contributing to our understanding about how motivation and transfer are related. He takes the approach

that culture significantly influences motivation. From this point he then argues that the conditions of inclusion (being respected and connected to one another), attitude (predispositions governing how we behave to one another, ideas, events, etc.), meaning (implying purpose and clarity within a particular socio-cultural context) and competence (effective interacting with one's world) are critical for motivating people. The very conditions the respondents were reporting as being significant for transfer.

Another important individual factor, embedded in the 'Cook Islands way' and identified in this research was the importance of the teacher's capacity to relate to others. However, in the literature there is little empirical data that exists on the value of the trainee's capacity to relate to others in training and the significance of this for transfer (Analoui, 1993). The current research clearly indicated that teachers who could share ideas, relate easily to others and participate in course activities were perceived to be more likely to be able to transfer. It is interesting to note that Reissman (1965) argued that those who extend help often receive the greatest benefit. This, he postulated, arose from the desire to share ideas, the help it gives the individual in recalling and clarifying ideas and because of the dynamics of self-persuasion. Reasons given by the respondents for the value of the social competence included the sharing of ideas, the opportunity to establish a relationship with the lecturer and to ensure there was "no animosity, no feelings of distrust, no feelings of fear….." between course members.

Leadership and professional development issues were also cited by the respondents as being an important influence but interestingly many of the ideas provided revolved around meeting the needs of others. For example, acting as a resource teacher *to others,* maintenance and use of course notes *for others* and evaluating by self and *for/with others.* In a similar vein many of the barriers mentioned were focussed upon others in the school or family. The school change literature (e.g. Bellanca, 1996) emphasises the linking of personal change with organisational change processes and describing how overlooking one, disrupts the process.

Support and Resources Utilisation. The third major theme related to the value of support to/from others and the availability of resources to implement ideas. The international literature in the areas of transfer of training, adult education and teacher in-service, have all acknowledged the significance of collaboration and support for change (e.g. Gregoire, et

al., 1998; Knowles & Associates 1985; OECD, 1998). In this study there was an emphasis upon explicit support from a wide range of sources: the school authorities, principal, colleagues, MOE, trainer, and parents. The value of support from policies was also seen to contribute to the teacher directly implementing ideas – an idea discussed by Fullan (1991). But, as noted above, the importance of ensuring that support was given <u>to</u> others to understand the course ideas was perceived to be important. Undoubtedly this was, in part, a reflection of the need to have their ideas acknowledged as acceptable. Furthermore, respondents were keen to have the principal more directly involved in the training programmes and this is certainly a key factor considered in the international literature (e.g. Fullan, 1992). Another factor often discussed by the respondents was the need for consideration to be given to the physical learning environment and utilisation of resources (e.g. paper, furniture, classroom environment) to facilitate learning, a factor noted as important by Hord (1997).

The significance attached to support, interdependence and collaboration, was a factor clearly identified by this research. But to what extent is this different in other cultural settings? A study undertaken in New Zealand (Hynds, 1997) that can be directly related to these findings, provides some indication of the function and value placed upon support for in-service in a western setting. This was a small scale study, that used some of the approaches developed for this study, and specifically investigated the range of facilitative and barrier factors influencing in-service in New Zealand. When comparing the first 25 ranked facilitative items in each study a considerable difference can be noted. Activities/strategies that stressed cooperation, collaboration, sharing and interdependence with other school/other teachers accounted for 13 of the Cook Islands ranked strategies whilst only 5 of the New Zealand strategies were directly related. It is hypothesised that the significance of the differing cultural values (namely, individualism and independence versus collaboration and interdependence) is likely to account for these differences. Hofstede (1991) has located such differences as being important for training.

An important development in the area of in-service training has been the notion of a 'community of learners,' 'professional learning communities,' 'professional development schools', and considerable literature has outlined the benefits and value of such ventures (e.g. Darling-Hammond, 1998). These professional development structures are school centred and emphasise support, sharing, cooperation and the value of human and physical

resources. As alluded to previously, this arrangement is the essence of what many of the respondents are suggesting as valuable for transfer of training in the Cook Islands. It certainly is consistent with their cultural norms and the means of normative change.

Because of the importance that was attached to support and the many comments made about its importance, the issue of non-examples or discrepant cases (which were often in juxtaposition to the discussion on support comments) also became of interest. On a number of occasions the difficulty of dealing with criticism (related to the teacher's implementation of new ideas) was noted by the respondents. Tannenbaum and Yukl (1992) noted how this could impede change in the classroom. In this research, interviews with key informants followed up this issue to identify how social support functioned to maintain collaboration and interdependence and overcome non-supportive situations.

The respondents indicated that social support arose from a number of sources including colleagues, family and the community. There were some problems associated with it however – it was sometimes elusive and could be interpreted as a sign of weakness if it was explicitly sought. Support functioned not only to help a teacher implement new ideas but it also provided protection from potential criticism from those opposed to the ideas and the teacher implementing them. It was being interpreted as a mechanism to provide legitimacy to actions and thereby protect individuals from the criticism, gossip and contrary reactions of others. In the Cook Islands culture it is acknowledged that peer group influence is very strong and this is a powerful influence on adherence to normative behaviour. *Akama* (causing shame) can occur in any setting if the normative behaviour is not evident - many teachers commented on their concern about the other teachers (particularly those who were perceived to have authority) in the school who would be critical of innovation, experimentation and changes in teaching practice. *Aroha* (love, concern, and compassion for fellow being) is the counter for *akama*. Hence the importance of a collaborative, cooperative and group-centred approach to learning and the value of support given to others outside of the course - assisted the teacher to comfortably move beyond the orthodoxy surrounding many teaching practices.

Follow-up comments made by highly respected and knowledgeable informants supported these findings but added that there were a number of mediators (such as individual/familial, locational, school and training factors) that needed to be considered. The teacher's

personality and quality of training, family affiliations, geographic isolation and the school climate were likely to be pervasive influences that would determine the level and intensity of criticism.

There are significant implications here for transfer of training and further research. Trainers need to be aware of the significance of the value of support for the trainees not only for ensuring personal excellence in developing ideas. It also needs to be perceived as a means of facilitating an integrated training programme that recognises the central importance of cultural norms for effectiveness of training. In the Cook Islands there is considerable folk-lore (but not documented) about training programmes that have failed because there has been little attention directed to meet the support and facilitation needs. This then confirms the deficit model of in-service training – each individual teacher is responsible for implementing the ideas and, should this not happen, that teacher is held accountable. Trainers need to develop skills and expertise that are consistent with the new in-service paradigm and then relate this to cultural practices and normative requirements.

Summary

This latter section has considered the themes that have arisen in the research. What has been most apparent is the central focus of the individual – community sense of self. Additional research needs to be undertaken and development issues considered to add to our understanding of the complexities that surround this issue. There is also a range of other issues to consider. How can trainers be best prepared to enter into cross-cultural training programmes? What models of training are 'local trainers' utilising and are they effective in terms of transfer? Should training programme proposals be evaluated not only on content criteria but also on the basis of the appropriateness and quality of the training for the context? Would it be feasible to develop culturally appropriate techniques for dealing with resistance strategies (similar to the stress exposure training of Driskell & Johnston, 1998) as a component part of the course programming? Can the personality and training factors that protect teachers from the criticism be identified? What role would school-based courses have in over-coming resistance? How can the administrators best be given the opportunity to become more actively involved in training and recognise their central importance to its success?

CHAPTER SEVEN
PHASE 3 RESULTS AND DISCUSSION

> *There is no more important topic in the whole psychology of learning than transfer of learning .....practically all educational and training programs are built upon the fundamental premise that human beings have the ability to transfer what they have learned from one situation to another.* (Deese, 1958, p.213)

Phase 3: Impact Evaluation

Phase 3 of the research was concerned with evaluating the impact of a course which incorporated many of the transfer of training ideas identified during phase 1 and 2. The specific research question for this phase of the research was 'To what extent does the transfer of training model impact upon a teachers' in-service course?'

Table 7.1 details specific examples of strategies that were used to plan for transfer of the course ideas to the classroom. As indicated in this table, emphasis was upon provision of pre-course information, recognition for participation, group participation, support and feedback (family, principal, collegial, MOE, etc.,) facilitation of individual teacher involvement such as flexibility, a planned course programme that emphasised safe interactive training activities, trainer-participant interaction quality and trainer qualities and behaviours (e.g. follow-up visits). Emphasis was placed upon support. Appendix J ('Guidelines For Principals') is one example of how support was to be positioned for the teacher. Details relating to the general content and nature of the course (as required by NZQA) are contained in appendix K, while in Table 7.1 specific course modifications arising from the findings in Phase 2 are outlined.[50]

To assess the impact of the course upon teacher knowledge, skill development, behaviour and attitudes, a number of assessments were undertaken. Immediately following the course, participants completed an evaluation and a range of impact measurements also followed. Impact surveys, which gathered information from teachers and principals, were undertaken 4 months after the course and again 2 years

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[50] This is an outline of the NZQA endorsed course outline for accreditation but with some changes to make the course suitable for the Cook Islands context.

Table 7.1
Transfer of Training Strategies Identified via the Survey and Implemented in the Phase 3 Course.

CODE	DEFINITION	COMMENT ON IMPLEMENTATION
Trainer - before		
1BTr	The trainer/training course provides **information to the teacher** on the course content and the methods (i.e. what the course is all about and how the trainers will teach it.)	Course material (outline of course, requirements, outcomes, etc) sent to teachers, principal, MOE prior to course with recommendation that principal in each school discuss with teachers. Tutor discussed again immediately prior to beginning of course.
2BTr	The trainer/training course provides information to the teacher on the **course requirements** (e.g. attendance, assignments, participation, hours required).	As above
3BTr	The trainer/training course provides information to the teacher about what he/she will **be able to do by the end of the course** (e.g. the new skills teachers will have).	As above
4BTr	The trainer/training course provides information to the teachers, Ministry, principals, etc., on **why this course is useful** and what it will be able to achieve (i.e. this is marketing the course - selling it)	As above
5BTr	Before the course starts **social events** and `get-togethers' are planned so trainers and course members can all meet one another.(e.g. pre-course kai kai)	Atiu island planned welcome for other island groups
6BTr	Before the course starts **introductory course tasks and activities** are given to the teacher to get him/her thinking about the course (e.g. some reading about one of the topics).	Brief reading task and written response assignment sent with introductory material. The discussion of this became one of the introductory course activities.
7BTr	Information is provided to the teacher to show that the course will be **relevant** (useful) for his/her work in the classroom.	Contained in sent course material.
8BTr	The trainer meets with the teacher to gather information from him/her about **abilities, interests, needs and the teacher's requirements** for the course.	Information from the initial needs analysis (phase) as well as introductory grid exercise at beginning of course provided information on what teachers need, etc.
9BTr	The **time** of the course (i.e. when it is held) is convenient to the teacher.	The courses could only be held during school holiday times but teachers were given opportunity to decide upon the most convenient daily times for working.
10BTr	There is a **salary increase** offered to the teacher if the course is completed.	This could not be negotiated at a time of economic difficulty when teacher salaries were likely to be decreased. It was agreed by MOE that should the economic situation improve, then monetary incentives could be offered.
11BTr	There is a **certificate awarded** to the teacher if the course is completed.	NZQA approved ASTU diploma papers. A certificate for each paper was to be offered and on completion of four papers an overall certificate from WCE was to be made available..
12BTr	The new skills, certificate, etc., that the course is offering could **lead to the teacher gaining promotion.**	This was to be related to the issue of salary –each paper was to be recognised as the equivalent of 100 level university paper for qualification purposes.
13BTr	The training programme information indicates to the teacher that **improved teaching** in the classroom will result.	Contained in introductory course material.
14BTr	When teachers hear about the training programme, they are encouraged to enrol in the course because **other teachers are doing extra work** to improve themselves.	There was an emphasis placed upon school teams undertaking the course.

CODE	DEFINITION	COMMENT ON IMPLEMENTATION
15BTr	The trainer has a **likeable and pleasant personality.**	The interactive course approaches provided many opportunities for tutor and teachers to interact
16BTr	**The trainer has background knowledge** about the culture, local teaching situation, the schools, resources, the educational system, etc.	Preliminary reading about the Cook Islands, numerous visits, observations and teaching sessions had been undertaken prior to this course ensuring that the tutor was well prepared.
17BTr	The **trainers (or MOE, etc.,) select the teachers** to attend the course	This was not continued as many teachers preferred self-selection.
18BTr	It is known that the course will not only help the teacher but also **benefit his/her school & colleagues.**	Information contained in introductory course material.
Teacher - before		
1BT	The teacher is able to set **personal goals (to improve) and make a commitment** to complete the course.	Grid identified what teachers goals were in general sense and daily workshop evaluations sought teacher comment.
2BT	The teacher has high level of **motivation**, **positive attitude** toward the course & is **eager** to take part.	Course methods (eg., participatory active learning) were designed to motivate teachers.
3BT	The teacher is **confident** that he/she can do the work required to complete the course.	Use of group work on the course and almost total school enrolment facilitated teacher confidence.
4BT	The teacher is able to **relate easily** to others and is socially aware.	Use of group work and group assignment activities facilitated need to work together.
5BT	The teacher is willing to **try new ideas**, is **flexible**, can **change**, and can **modify his/her attitudes** if necessary.	This was to be emphasised throughout the course. Course booklet 'Make a Difference: Using Course Ideas in Your Classroom' required teachers to think of adaptations, etc.
6BT	The teacher is willing to **share ideas** with others.	Course approaches facilitated sharing of ideas.
7BT	The **teacher chooses to attend** the course (not selected by others)	Self-selected
School - before		
1BS	**School colleagues and/or other course members** can help the teacher by **supporting and encouraging** his/her enrolment on the course.	Principals were asked to encourage teacher enrolment on the course
2BS	The school **principal**, deputy, senior teachers, school committee, etc., (officially/formally) **assist/support the teacher** to enrol on the course.	As above. ' Guidelines for Principals' booklet gave information to principal. (refer appendix J)
3BS	**The school staff** (e.g. principal, deputy, other teachers) consider the **course to be relevant** to the classroom/school.	Course information detailed the benefits
4BS	The **school principal becomes involved** in finding out about the course, attends meetings about it, seeks information about it, gets involved with the teacher, etc.	Principal of the teachers college liaised with the three school principals
Others - before		
1BO	The **community will benefit** from the course.	Visits were made to the island leaders to explain the course prior/during the implementation.
2BO	**Ministry of Education support** for the course is made very clear.	MOE sent letters of support to the principals of each school
3BO	The teacher's **family gives the teacher support** for enrolling on the course.	Teachers were encouraged to discuss their course enrolment with family.

CODE	DEFINITION	COMMENT ON IMPLEMENTATION
4BO	**Support of some sort** is available for the teacher to enrol on the course.	School, family and community support was sought as indicated above.
Barriers - before		
1BTrBr	The course is held at an **inconvenient time** (of the year, of the day)	Refer 9BTr
2BSBr	The teacher has too many other **responsibilities at school**.	Course information detailed to the principal/teacher the course requirements and also principal was asked to facilitate teachers development on the course. ' Guidelines for Principals' given to each principal with detailed suggestions.
3BOBr	The teacher has **another paid job to do** and can not attend the course.	
4BOBr	The teacher has **family responsibilities** or the family criticise the teacher for wanting to enrol on the course.	Refer 3BO
5BSBr	The teachers **colleagues are critical or not interested** in the teacher being involved in the course.	Refer to 1-4 BS
6BTrBr	There is **no reward** (e.g. extra salary) offered to do the course.	Refer to 10BTr
7BTrBr	The teacher has been on **boring, uninteresting courses previously** and expects all others to be the same.	Pre-course material outlined what was expected and the type of activities that would be undertaken.
8BTrBr	The **principal and/or Ministry of Education do not get enough information etc.,** about the course.	Refer to 1-4BTr
9BSBr	The **colleagues** of the teacher **do not get enough information, etc.,** about the course.	Refer to 1-4BTr
10BTrBr	The **teacher** himself/herself **does not get enough information, etc.,** about the course.	Refer to 1-4BTr
11BTrBr	The **course requirements** (attendance, punctuality, and assignments) are **too demanding** on the teacher.	Clearly specified in the pre-course material; group work emphasised as a means of helping one another.
12BTrBr	The **trainer is too superior**, thinks he/she has all the answers and not interested in the teacher's views.	Refer 15-16BTr
13BTBr	The **teacher lacks confidence** to take part in the training course.	Refer to 2-3,5BTr
14BTBr	People think (including the teacher himself / herself) that the **teacher is too old** to take part in the course.	All teachers who wanted to undertake the course were encouraged to enrol
15TrBr	The **trainer is not known** to the teachers.	The tutor had been visiting the Cook Islands for some years prior to the course and was well known to most teachers
16BTrBr	The thought of having to attend a course in the **hot weather.**	Refer to 9BTr
Trainer - during		
1DTr	The **training style** (i.e. the methods the trainers use to teach the teachers) is satisfying for the teachers.	Phase 1 of the research project identified strategies, etc.
2DTr	The course is **well planned and organised.**	This was an existing course (modified) required to meet the standards of the WCE academic committee. CI Teachers' College principal facilitated course development and implementation.

CODE	DEFINITION	COMMENT ON IMPLEMENTATION
3DTr	The **course material is relevant** to the teacher's class/school.	Pre-course material; ideas, etc. related to classrooms during the course implementation; 'Making a Difference' booklet required teachers to reflect upon use in the classroom.
4DTr	Clear information is provided to the teacher on the **specific requirements of the course** (e.g. times of each session, assignment topics and requirements, catch-up work, etc.)	Pre-course introductory material outlined this and it was also discussed immediately prior to the course.
5DTr	The trainer **maintains contact with the teacher** during the course (e.g. visits to the classroom, tutorial help, letters, faxes, etc.)	Follow-up visits to the teachers school/classroom by the tutors were scheduled during the course period
6DTr	The training course **helps teachers to network**, get-together to chat about the course (i.e. during breaks and outside of the course itself).	Tutorials formally facilitated this networking and reports indicated that it was occurring informally within schools.
7DTr	The training **encourages the teachers to interact** and work together on the course.	Group work on the course was an approach frequently used.
8DTr	The trainer has **pleasant personal qualities** (e.g. can be trusted, is fair, lively, interested in the teacher, helpful, etc.) important for the success of the course.	Refer 15 BTr
9DTr	During the training the **teacher is rewarded** for his/her efforts (e.g. praise from the trainer/ other teachers/colleagues, etc., work put on display, etc)	A safe learning environment was emphasised as a significant course requirement. Group activities such as learning carousel facilitated this feedback.
10DTr	**Additional time (if necessary) is made available** to complete tasks, assignments, etc.	The principal of the teachers college was delegated authority to change hand-in dates, etc.
11DTr	The trainer **meets with the principal** and/or senior teachers to discuss the teacher's progress.	On each visit to the school, a consultation with the principal occurred. As each principal was also on the course, informal communications were frequently occurring as well.
Teacher - during		
1DT	The teacher has **organised himself/herself** to do the course and has put in place arrangements to make the course 'run' smoothly.	Principal and CI Teachers' College principal assisted teachers to make arrangements to enrol on the course (e.g. travel, accommodation).
2DT	The teacher **can understand what is happening on the course** (e.g. can understand the language and the ideas being presented.)	Frequent group work and the use of CI Maori language facilitated understanding. Minute papers and daily evaluations provided important information of level of understanding.
3DT	The teacher will **try new ideas**, be flexible in thinking, change his/ her approach to teaching, and change his/her attitudes.)	Refer 5BT
4DT	All the teachers **participate in the course** activities.	An emphasis upon group, collaborative and cooperative learning approaches facilitated individual participation
5DT	**The teacher keeps the handouts and takes notes** so that they **can be used later** to check out and implement ideas.	Folders and course notes were provided.
6DT	The teacher **interacts and relates to others** easily on the course.	Safe learning environment emphasised and established; group work training approaches.
7DT	The teacher **uses evaluation** (by self, students, colleagues, principal, etc.,) techniques to reflect on his/her new work in the classroom.	Reflection was emphasised as an important activity before, during and after implementation of new ideas in the classroom. Teachers were asked to write a formal reflective statement following each assignment task.

CODE	DEFINITION	COMMENT ON IMPLEMENTATION
School - during		
1DS	The teacher's **colleagues** and/or course participants **share course ideas** and support one another.	Working cooperatively on assignments and networking was encouraged.
2DS	The **principal supports** and/or helps the teacher during the course.	"Guidelines for Principals' provided many suggestions.
3DS	School **resources and facilities are made available** for the teacher to use during the course.	As above
4DS	The **course ideas** are seen to be not only **valuable** for the teacher but also for the teacher's **colleagues, the students, etc**., in the school.	Teachers and working assignment groups were encouraged to share progress and ideas with colleagues.
Others - during		
1DO	There is **Ministry of Education support & interest** in the course, this is maintained during course	It was arranged that the Minister of Education would open the course.
2DO	The teacher's **family support** the participation in the course.	Family members were asked to visit the course whilst in progress.
Barriers - during		
1DTrBr	There is **insufficient time** to complete the assignments, tasks, etc.	Refer 10DTr
2DSBr	The teacher's **colleagues are not interested** or make criticisms about the course.	Refer 1DS
3DSBr	The **organisation and/or management of the school does not support the teacher** while he/she is doing the course.	Refer 2DS
4DBr	The **principal is not helpful** and/or lacks interest in the course.	Refer 2DS
5DOBr	**Other events** (e.g. exams, cultural events, sports) interrupt participation in the course.	Refer 1-2BTr
6DTBr	The teacher has **personal difficulties** (e.g. transport, sickness) that make course attendance a problem.	80% + attendance permitted
7DSBr	School **resources and/or facilities are not available** to be used during the course.	Refer 2DS
8DTrBr	The **training programme is not helpful enough** (e.g. not enough information, not enough help to complete assignments).	Refer 1-2BTr; 1-11DTr
9DTBr	The course is **difficult for the teacher to understand** (e.g. cannot understand the language, cannot understand the ideas).	Refer 2DTr
10DTrBr	The training **course requirements** (e.g. attendance, punctuality, assignment completion time) are too difficult for the teacher.	Refer 1-11DTr
11DTrBr	There is **no contact with the trainers** during the follow-up periods between sessions.	Tutor contact follow-up was part of the course design
12DOBr	The **family do not provide support and/or criticise** the teacher's involvement in the course.	Refer2DO
13DSBr	The teacher is **over-worked** at school.	Refer 2DS

CODE	DEFINITION	COMMENT ON IMPLEMENTATION
Trainer - after		
1ATr	The trainer **maintains contact** with the teacher (e.g. visits, letters etc., and provides feedback on teacher performance.)	Follow-up courses (papers 2-4) permit continued trainer contact
2ATr	The trainer organises a `pep' course (e.g. a follow-up review day after the course).	End of course review implemented and prevention relapse programme undertaken with course members
3ATr	The trainer provides some **reward** to the course participant (e.g. shows other teachers the work of the teacher; informs the principal about the good work the teacher is doing.)	Certificate awarded
4ATr	The trainer provides a **report to the principal** outlining the new skills etc. that the teacher developed on the course.	Course evaluation data provided to principal via MOE
Teacher - after		
1AT	The teacher **keeps his/her notes,** handouts, assignments, etc., **to help plan future work** in the classroom and in other classrooms.	Refer 5DT
2AT	The teacher **uses evaluation** (by self, students, colleagues, principal, etc.) techniques to continue **to improve upon the ideas**.	During subsequent courses feedback from significant others and progress updates were to be considered.
3AT	The **teacher's improvement** (i.e. improved teaching skills) is rewarding and maintains the teacher's interest in using them.	Teacher networking via tutorial system and individual school support groups established..
4AT	The teacher **takes or is given responsibility in the school** to develop the course ideas.	Refer to 'Guidelines for Principals.'
5AT	The teachers on the course **develop a booklet of the course ideas, suggestions, activities, etc**., for their use and for the other teachers in the schools.	Course handout notes were kept and to be added to. A post-course booklet was developed by the principal of the CI Teachers' College
School - after		
1AS	The **benefits (**from the course) that are given to the others in the **school** (e.g. colleagues, students, etc) maintains the teacher's interest and use of course ideas.	Refer to 'Guidelines for Principals.'
2AS	The **school management plan, curriculum**, etc., includes **the course ideas**.	Refer to 'Guidelines for Principals.'
3AS	School **colleagues** and course participants **continue to support the teacher** and be interested in the ideas.	School networking and ongoing tutorials of other (papers 2-4) courses.
4AS	**Organised visits to other teachers** and schools are arranged for the course participant and this maintains his/her interest in the ideas and use of them in the classroom.	Refer to 'Guidelines for Principals.'
5AS	The **principal provides support and encouragement** to the teacher.	Refer to 'Guidelines for Principals.'
6AS	**Resources are made available** and this maintains teacher interest and use of the strategies in the classroom.	Refer to 'Guidelines for Principals.'

CODE	DEFINITION	COMMENT ON IMPLEMENTATION
Others - after		
1AO	**Parent feedback/support** maintains teacher interest and use of the strategies after the course.	Principal was asked to submit a report to the school committee
2AO	**Ministry of Education support and interest** helps the teacher to keep using the ideas.	Evaluation data given to MOE and meetings with staff. Meetings with advisers to facilitate their support as they move around schools.
3AO	**Evaluation of the ideas and support** from community groups, and important people(e.g. Aronga Mana, Minister of Education) helps the teacher to maintain an interest and use the course strategies in the classroom.	Course reports made available to island leaders, press reports and TV news items
Barriers - after		
1ASBr	The **teacher's colleagues are not interested** and/or criticise the course ideas.	Refer to 3AS
2ASBr	**School management and organisation does not help** the teacher to keep using the ideas in the classroom.	Refer to 2AS
3ASBr	**School resources and facilities are not available** for the teacher to use and this makes it difficult to use the course ideas.	Refer to 6AS
4ATrBr	There is **no follow-up contact** from the trainers to discuss ideas and to help the teacher evaluate the ideas in use.	Refer to 1Atr
5ASBr	There is **no reward** for the teacher to carry on using the ideas in the classroom.	Refer to 3ATR; 3AT; 1-5AS
6ASBr	The **demands placed on the teacher** after the course (e.g. demonstrations to other teachers; other work) are too great for the teacher to maintain interest and use of the strategies.	Refer to 'Guidelines for Principals.'
7AOBr	The **Ministry of Education policies and plans do not sufficiently support the teacher** to maintain an interest and use of the course ideas.	Refer to 3AO
8AOBr	**Events** (e.g. sports, school trips, cultural events) are so numerous that implementing any new ideas is a problem.	Refer to 'Guidelines for Principals.'
9ASBr	The **students in the teacher's class show insufficient improvement** when the new ideas are used and therefore the teacher loses interest in using the course ideas.	Refer to 1-6AS
10ATBr	The **teacher has insufficient confidence** to carry on and maintain the changes in the classroom.	Refer to 1-6AS
11ASBr	The **principal is not helpful** or shows little interest in the new ideas.	Refer to 5AS
12ATBr	The **teacher has insufficient skill and/or information** to continue to use the ideas.	Refer to 1-6AS

later. A teacher-planning document charted the teachers' ability to transfer course ideas into an effective teaching sequence that was then implemented in the classroom.[51]

Satisfaction with the Course -Teacher Evaluation

The degree to which teachers are satisfied with a course is one measure of impact, albeit indirect, of transfer of training (e.g. Kirkpatrick, 1994). Teachers were on the whole, highly satisfied with the course. Refer to Table 7.2. On each of the quantifiable measures, close to 75% of the participants scored the item at the upper end (i.e. 5) of the continuum.

Table 7.2
Frequency of Scores and Median for Items 1, 2 and 6 on the Evaluation Form

Item #	Description	# of Responses	Frequency of score					Median
			1	2	3	4	5	
1	Did the content of the course meet the objectives? (1 = not very well; 5 = very well)	29	0	0	0	7	22	5
2	Overall, was the presentation not very effective (1) – very effective (5)?	29	0	0	1	8	20	5
6	How satisfied were you with the course? (1 = very dissatisfied; 5 = very satisfied)	29	0	0	0	8	21	5

Teachers mostly agreed that the content of the course matched the stated course objectives.

> *I think the overall content of the course was met and the aims and objectives well presented.*

> *Excellent, everything met the stated aims and objectives*

> *Very much it worked to obtain the aim and objectives*

However, a few teachers had some concerns about the content of the course, although this was not necessarily related to the course objectives.

> *Some activities we did ..... did not seem practical to me, or take up too much time or were negative.*

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[51] One participant teacher's photographs of students working on activities have been included as evidence of the implementation of course ideas.

*We were not always given enough time to discuss and people were
too busy singing and laughing…..*

Notwithstanding this, it was very clear that most of the participants were very positive about the course presentation and methodology. A number of teachers were concerned, however, with the rapid presentation and felt rushed.

*I am very happy about the presentation of the methods, there were a
lot of interaction, group work and most of all I enjoyed the activities.*

Very active lectures well presented, different activities given.

*The time somehow was rushed to complete activities, especially on
the last session.*

Background material relating to inclusive education and special education, as well as a wide range of inclusive techniques, was considered on the course. It was clear that the participants valued the practical classroom activities (e.g. cooperative learning, Bloom's (Bloom, et al., 1956) questioning approach, Gagne's (Gagne, 1985) teaching/learning model and Individual Educational Plans [IEPs]) the most and did not readily identify background material as being as valuable. Nearly 2/3rds of the group wanted further information on IEPs.

Overall, the participants' evaluation of the course was very positive and much of the course content was valued for being practical and useable in the classroom.   The assignments were directly related to the course content and consisted of practical applications of the course ideas.

Pre- and Post-Course Measurements and Artefact Evidence

At the beginning and end of the course, a number of assessments were undertaken to track changes in teachers' conceptual understanding, attitudes and knowledge development. Also, toward the end of the course, an applied classroom task (assignment) was set for the teachers to test their capacity to transfer course ideas into a teaching plan for classroom implementation.   A copy of the assignment tasks can be located in appendix K.

1. *Changes in Teachers' Understanding of Concepts Learning and Teaching –*
    Although the concepts of 'learning' and 'teaching' and their theoretical underpinnings were not formally considered until later courses, an implicit

awareness was likely to have developed in this course as teachers were introduced to practical, effective learning/teaching strategies. For example, in this paper teachers were introduced to strategies such as cooperative learning and Gagne's (1985) model of the teaching/learning process and discussions centred around the characteristics and use of such approaches. To what extent the teachers changed their conceptions of learning and teaching provides an indication of knowledge changes and experience gained as a consequence of the course. Accordingly, pre- and post-course data was gathered to measure any alterations in the teachers' conceptions of 'learning' and 'teaching'. Refer to appendix L for a copy of this survey form.

Using the findings of Saljo (1978) and the subsequent research of others (e.g. Van Rossum, et al., 1985) who have described categorical differences in individual conceptions of learning, the 29 course participants pre- and post- responses to 'how do people learn?' were examined.[52] The following six categories were used as a basis for understanding the teachers' responses: increasing one's knowledge (A), memorising and learning (B), applying (C), understanding (D), interpretive processing (E), and change as a person (F). Full details of the teachers responses are located in appendix L but four examples are presented below (in table 7.3) to

Table 7.3

<u>Examples of Teachers' Pre- and Post-course Responses and Categorisation Regarding the Concept of Learning.</u>

TEACHER I.D.	PRE-COURSE COMMENTS		POST-COURSE COMMENTS	
	COMMENT	CATEGORY	COMMENT	CATEGORY
UU	*Know what is being taught*	A	*Change of behaviour and skill*	C
TC	*Getting information*	A	*Sharing ideas*	B
OP	*Knowledge is absorbed and transmitted*	A	*Change of behaviour thinking or attitudes*	C, E
KD	*Learning is increasing your knowledge and understanding – the way things work, exist, are used.*	A, D, C	*Learning is increasing knowledge, understanding. Changing the way you think or what you do.*	A, C, D, E

Key: increasing ones knowledge(A), memorising and learning (B), applying (C), understanding (D), interpretive processing (E) and change as a person (F).

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[52] Saljo's research was phenomenologically based. The changes in categorical thinking were not defined in hierarchical terms but in terms of increasing abstraction (which was not necessarily complexity of quantity of thought).

illustrate the type of responses that were obtained. Only two teachers had a pre- and post-course conception of learning that remained unchanged and many teachers' post-course conceptions moved into the C through F categories. Frequently, teachers' responses in the post-course survey noted the importance of 'change in thinking and behaviour,' 'sharing' and 'understanding' something that was not commonly reported in the pre-course survey. Figures 7.1 and 7.2 below detail the changes in teachers' conception of learning pre- and post-course in terms of these categories.
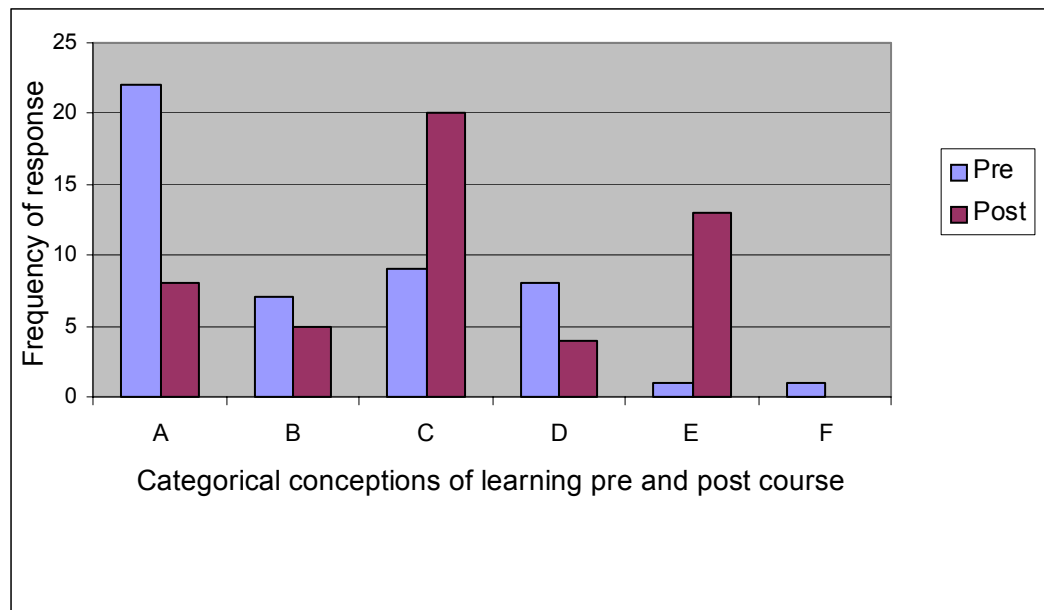

Figure 7.1. Frequency of all Respondents' Categorical Responses to Defining How People Learn

There were changes in the direction from surface to deep learning in both of the analyses. In many respects these results were interesting. Firstly, the time between the pre- and post-test was relatively brief (6 months) and yet changes in teachers' conceptions were evident. Furthermore, although no deliberate discussion of learning *per se* was undertaken on this first course, the implied characteristics of a broader nature of learning was indicated by the teachers post-course. Thirdly, these results can be interpreted as a positive measure of course impact – the nature and characteristics of effective learning (e.g. interactive student centred learning) were being acknowledged as important by many of the course participants after completion of the course.
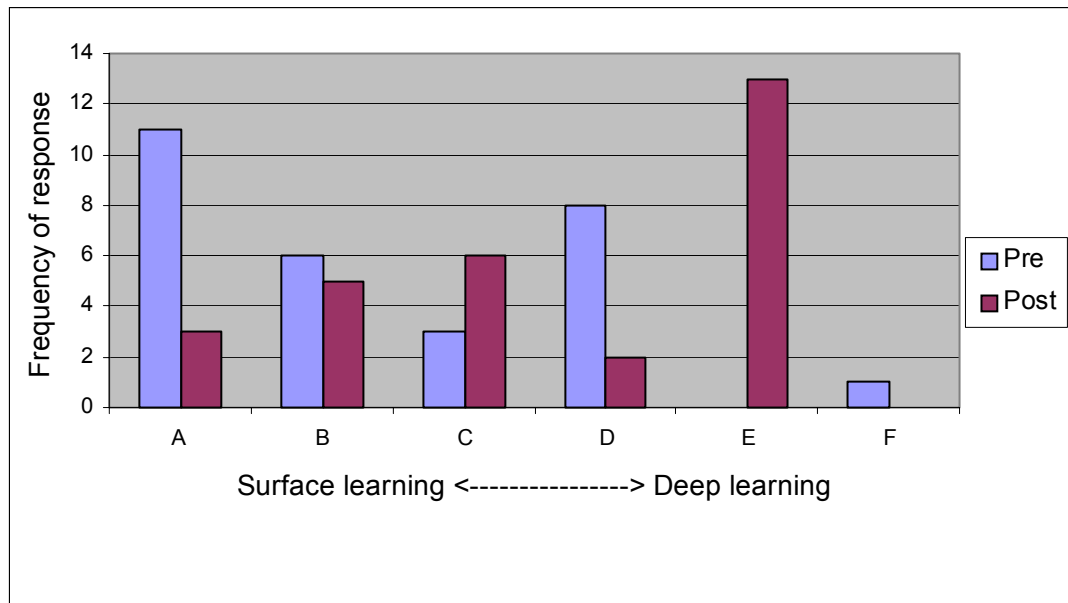
Figure 7.2. Frequency of Conceptions of Learning in Terms of Each Individual's Nearest Statement to Deep Learning.

2. *Conceptual Changes in 'what is teaching?' 'What are Effective Ways of Teaching?'* - With regard to 'teaching' the course participants were asked two questions: 'what is teaching?' and 'what is effective teaching?' Moli (1993) noted that her student teachers emphasised the importance of the centrality of the teacher for learning – teaching and learning were viewed as synonymous and the teacher was necessary for learning to occur. In this current study, the teachers' pre- and post-course responses to the inquiry about 'what is teaching?' indicated that many viewed it as an activity that had a dual function – it was a teacher centred/controlled activity and a facilitative-interactive process. Although there was more awareness of teaching as a facilitative process after the course, overall there remained a strong emphasis upon teacher control. Some typical comments included the following:

> *Using good planning* [pre-workshop]
>
> *Keeping control of the class and planning* [pre-workshop]
>
> *Teaching is when you are setting objectives and you assess, teach, assess* [post-workshop]
>
> *It is when you have good planning and use group work* [post-workshop]

Good teaching is assess, test, interview, and observation [post-workshop]

However, the teachers' notion of what factors were to be directed by the teacher, altered as a consequence of the course. This became apparent when the teachers were asked to identify 'effective ways of teaching' pre- and post-course. On both occasions there was a wide range of suggestions given and these were grouped into the following categories: teacher subject and curriculum expertise; student centred and needs based approaches (e.g. motivational considerations, enjoyment, praising, knowledge of student competencies, positive learning environment); and teacher operations (e.g. planning, organising, managing the learning, assessing, use of teaching/learning strategies). Almost all of the comments were in the two latter categories. Two particular trends were evident – prior to the course many teachers focussed on the **teacher engagin**g the student in learning opportunities. The post measure emphasis was upon **teacher** operations, and, in particular the need for careful planning and the use of specific, effective teaching strategies. This was consistent with the emphasis of the course that the teacher's role was crucial for the implementation of effective teaching. Some typical comments follow:

The teacher gets them to do the work [pre-workshop]

It's when you manage the classroom to get the results [pre-workshop]

Providing opportunities that are well planned and organised, which forces children to engage with new information of new things [post-workshop]

Some effective ways of teaching are having group work, activities, graphing and having an IEP [post-workshop]

Using cooperative learning, Bloom's [levels] *and IEP* [post-workshop]

3. *Attitudes to Students with Special Teaching Needs* - Teachers were surveyed about their attitude to inclusive education and just over 2/3rds of them had a favourable attitude towards inclusive education practice prior to the course, whilst the remainder favoured either full or partial segregation. However, by the end of the course, all (apart from two teachers who still favoured partial segregation) considered inclusive education a preferred option

The teachers who initially favoured segregation gave two major reasons: the individual could be better understood and helped by the teacher in this context and it

ensured that their peers (in the regular classroom) did not have their learning inhibited. The following statements typify the teachers' views.

Because they need your attention.

They are not able to do the work with the bright learners. Their understanding isn't the same.

It [segregation] *doesn't ignore him/her.*

[Inclusion] *..interferes with the bright kids.*

Their understanding is not the same.

In a number of ways, the rationale for inclusive education expressed by the teachers tended to parallel the views expressed by those who favoured segregation. Teachers believed that the teaching-learning process could be maximised for the individual in the inclusive setting but it was also a sound utilitarian decision - it could benefit others. For some however, it was an ethical issue which implied certain responsibilities to work with all students. The post course measures revealed that many of the teachers considered that the strategies introduced on the course, to work with the students with special teaching needs, would assist with the development of an inclusive education approach. Some example comments why teachers favoured inclusive education (pre- and post-course) are detailed below.

[students] *.....must be treated equally.*

Because it helps the child with special needs to feel 'normal'. Teaches 'normal' children tolerance, patience and gives them opportunities to reinforce their knowledge/skills by helping their peers with learning disabilities.

No one is left out. Learner, parents, teacher, principal and community all… actively involved.

I think it is the most effective way of meeting ... [the needs]... *of children with special teaching needs. I think that by removing them from the classroom it will not help so they must be made a part of each lesson, be given work that they are capable of doing. It is also the least expensive way of providing for their needs.*

It helps the child motivate his thinking, socialise with other children, enjoy and participate in all activities, feel responsible, liked and loved by others.

Teachers who changed their view and adopted a positive inclusion perspective gave similar reasons, namely,

It involves everybody without leaving anybody out. Bright ones will be able to help the slow ones and also encourage them … to feel part of the group.

Because of all sorts of ways of teaching and learning.

Teachers should be fair

4. *Knowledge Development* - Although no pre- and post-knowledge assessment was given to the course participants their knowledge development was assessed by a number of means. The assessment task (detailed in the next section) measured, along with other information, their knowledge development. The 'grid' matrix also provided information about current status of knowledge and quest for knowledge pre- and post the course. (Refer to appendix F for a copy of this assessment tool and for the specific details of the teachers' responses). There were wide ranging responses and these were categorised into four major groupings: teacher-student interaction issues (e.g. reward, encourage, praise), assessment and planning ideas (e.g. obtaining background information about a student), instructional strategies and approaches (e.g. group work) and other (e.g. teacher attitudes).

Teachers were asked what did they know about special education prior to the course and then asked again at the end of the course. In general terms the pre-course responses emphasised <u>teacher</u> behaviours (e.g. rewarding, locating activities at need level, having patience, speaking slowly, giving easier work) whilst the post-course responses also identified learning strategies and processes (e.g. Bloom, cooperative learning, Gagne) as well as planning (e.g. IEPs). This did not imply, of course, that teachers had expert knowledge or skill development in the areas but did indicate at least an awareness of the important teaching-learning approaches for the inclusive classroom.

Teachers also provided information about what they wanted to know more about. A few responses pre- and post indicated teachers interest in relationship issues and the establishment of facilitative environments. One of the significant trends however was the more wide ranging interest post-course in assessment issues and, in quantifiable terms, a 300% increase in the frequency of suggestions. Many teachers asked for

more information on IEPs and how to assess. This was consistent with the course aim which was, essentially, to introduce many ideas that were to be followed up in subsequent courses. Pre-course information covering institutional strategies was sought centred upon curriculum, low incidence special needs issues, the need for resources and effective teaching strategies. By the end of the course there had been a change. There was still an emphasis upon resource needs and effective teaching strategies but a number of teachers were now more readily able to identify specific strategies, etc., they wanted information about (e.g. Bloom, group work, cooperative learning, adaptation strategies, test-teach-test model). This can be interpreted as an indication of the importance that teachers had attached to the particular strategy. Interestingly, a number of teachers post-course identified behaviour problems as an area for which more information was being sought. This may have been related to the awareness that teachers gained on the course of the importance of facilitative, safe environments for teachers and students.

Overall these results, obtained via the grid, indicated that teachers' knowledge and understanding of appropriate approaches for inclusive classrooms altered in the direction of the course content. What cannot be determined however was the quantitative changes that occurred.

5. *Post-Workshop Teacher Planning* - Two of the course assignments (Bloom's thinking levels and cooperative learning) required the teachers to plan a lesson from the course ideas and then to use this plan for a class lesson. All of the Bloom lesson plans were analysed to assess the level of attained transfer.[53] An outline of the course notes and strategy for teaching the teachers about Bloom's thinking levels can be located in appendix M. All teachers were given a copy of these notes during the workshop and then participated as learners themselves in the lesson outlined. After the workshop a lesson plan was written by the teacher for the class level and then put to use as a lesson in the classroom. Analyses of these lesson plans (N=20) indicated that many teachers

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[53] There was a choice of assignments and accordingly not all teachers decided to complete both lesson plans. All teachers however completed at least one plan. Teachers were required to adapt the lesson plan to the chosen curriculum area and class level. The Bloom lesson plan, rather than the cooperative lesson plan was chosen for this analysis because many cooperative learning strategies/ideas were used during the workshop week and this may have impacted upon the teacher's lesson plan. Bloom's thinking levels was relatively unknown to the teachers and using this as an assessment of attained transfer was less likely to be influenced by intervening factors.

were not only able to transfer the declarative and procedural knowledge but were also able to attain higher levels of transferability as measured by a transfer rubric. Refer to table 7.4 for a display of the frequency of levels achieved by the teachers. Located in appendix M are examples of teachers lesson plans at the three assessed levels. A pass grade for this assignment required the teaching plan to be assessed at level 2 or beyond, for this provided evidence of the teachers' ability to transfer ideas into their planning and teaching. Just over ½ of the lesson plans went beyond levels 1-2 and demonstrated higher level transferability above the duplicating and replicating approaches. One teacher's lesson plan was deemed to be at the highest level (innovation, level 4) as it evidenced divergent and novel application of the course ideas (i.e. the teaching unit plan was in a different subject area and was using ideas in an analogous fashion to the lecturer's model plan).

Table 7.4

The Assessed Transfer Level Themes of Teachers' Lesson Plans

TRANSFER LEVEL	TRANSFER LEVEL THEME	NUMBER OF LESSON PLANS
1	Overlooking	0
2	Duplicating and replicating	9
3	Integrating and associating	10
4	Innovating	1

These task assignments indicated that the teachers were able to transfer ideas and strategies into their classroom planning. Indeed many teachers were able to proceed beyond the level of replication and produce planning that required higher level responses.

6. *Artefact evidence* - during the course a number of photographs were taken to illustrate features related to the study. The following six photographs illustrate teachers working together, products of the working together and the celebration of the end of the workshop week. The first two (figures 7.3 and 7.4) depict the teachers working together in a group situation. Note the closeness of the groups, the sharing of resources and, in one of the photographs, the obvious delight in working together.

Figure 7.3. Teachers Intent on Completing Their Group Task

Figure 7.4. A Group of Teachers Enjoying Their Task and Relating to One Another

The wall charts in the next two photographs (figures 7.5 and 7.6) are examples of the products of some of the teachers' group work. Each of the teachers in the group contributed to the poster and there was delight from all when each poster was placed on display. In figures 7.7 and 7.8 the teachers are spontaneously celebrating the end of the workshop week. It is a culmination of a weeks work and a display of the cohesiveness of the participants. This is *aroha.*

Long-term Impact

Following the completion of the course, impact data was collected from participants and their principals. In the first instance, 13 teachers and one principal from one of the islands were interviewed 4 months after the course and an assessment of the use of ideas and identification of problems in implementation of ideas was undertaken. All the available course participants and teachers were then sent a survey 2 years after this to assess the impact of the course on teacher knowledge, skills and attitudes. Refer to appendix N for copies of these interview and survey formats. Analysis of this data indicated that teachers and principals noted the positive outcomes of the course and the value of ideas for classroom application. It was noted that almost all teachers had made some changes, although the pace for each individual varied.

First Survey

Self-report data 4 months after the course indicated that many of the course ideas, etc., were being implemented. The following table (Table 7.5) outlines in a quantitative manner the strategies introduced on the course that teachers stated were still being using in the classroom. All of the significant course ideas were identified.

Table 7.5

Teachers' Self-report of the Frequency of use of Course Strategies in Classroom 4
Months After Course Completion.

Description of Strategy	Frequency (N = 13)
Cooperative learning lessons	13
Cooperative learning structures and cohesive activities	11
Bloom's questioning techniques	10
Gagne's teaching / learning format	2
Group work	11
Assessment/planning prior to teaching	1
IEP	6

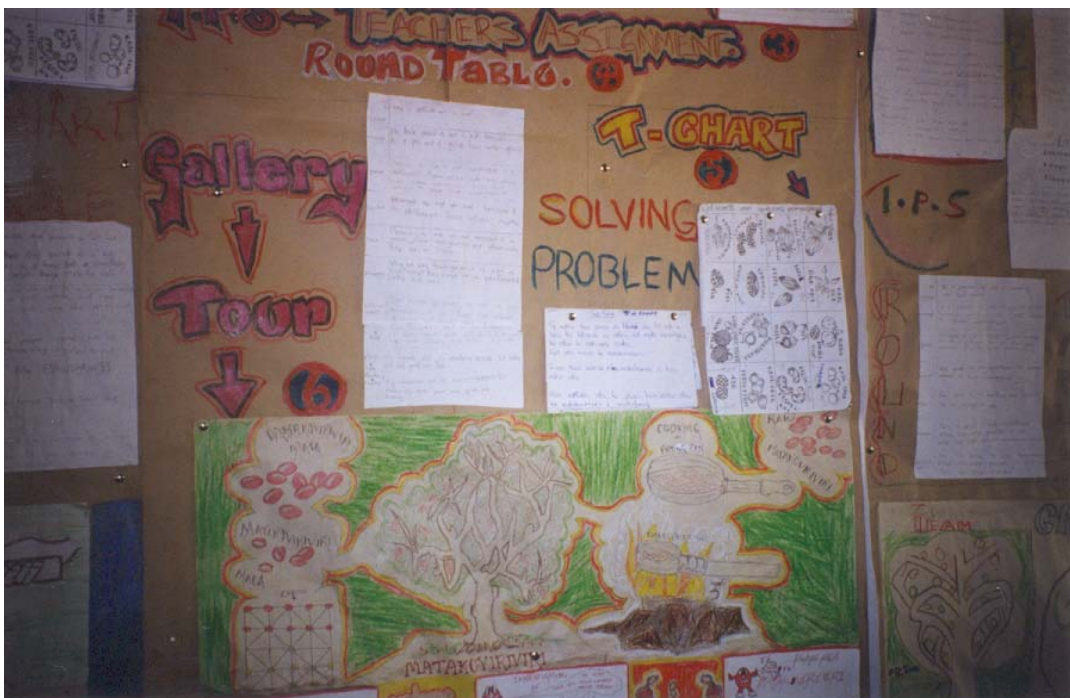Figure 7.5. The Product of One Group's Work

Figure 7.6. A Summary of the Course Developed by the Group

Figure 7.7. A Group of Teachers Encouraging the Others to Celebrate the End of the Workshop

Figure 7.8. Performing the Farewell Song at the End of the Workshop

This clearly indicated that many of the course ideas were being reported as used although it was also noted that a few of the key course ideas were not being used by a number of the teachers. These less used ideas were all related to planning for learning. It was a result that could be expected as such ideas required not only significant teacher change but also changes in the school and Ministry of Education policy. (These issues were attended to in subsequent courses).

Many of the teachers noted the general changes occurring in their classrooms and around the school e.g.

> *We are getting ideas from other teachers. Teachers are sharing ideas.*

> *Group work is occurring more often.*

> *I am using an individual checklist to see what the children are doing.*

> *I am using activities to begin the lesson.*

A number of the teachers also indicated that they were making specific changes for the students with special teaching needs.

> *I found cooperative learning restrictive at first but once I got used to it, it was ok. It also helped the brighter children – the concepts they used helped reinforce their knowledge.*

> *This has been quite an important step for me. I have always been looking for something like an IEP.*

> *The slower ones are now more mixed with the brighter ones.*

> *The lower ability children are getting more used to others helping*

The principal of the school also agreed that many changes had occurred, as noticeable differences in the classrooms of the participating teachers were observed. There were changes in the classroom physical environment, seating arrangements, teaching approaches and student motivation as well as more sharing of ideas by the teachers and student group work.

> *There is a big difference in the classrooms for teachers who have done the course……..There are lots of displays in the classrooms and teachers are implementing cooperative learning. There is a lot of group work and teachers have adjusted their questioning mode…………Some of the teachers have changed the physical arrangements – they [the children] are now in pairs, groups. …..*

The students enjoy the group activities…… it keeps them occupied, supporting, helping one another……There is lots of sharing [by the teachers] and they feel much more confident, this is one of the reasons why they succeeded…….. They talk about it at tea time….. 'I've done….. what have you done?' It's sharing. It's very good.

This principal also commented about the three teachers who did not undertake the course. There was disappointment that they hadn't been able to do the course. A comparison was made with the teachers who had completed the course.

Teachers who hadn't done the course…..they were disappointed…..just looking at them ….there is a big difference in the classrooms…..dull versus interesting, brightness, growing classrooms. I keep suggesting 'why don't you do it?'

Teachers were also asked to identify any problems they encountered in the use of the ideas and which prevented them from applying the strategies in the classroom. A small number of teachers identified problems individual to their implementation of ideas (e.g. discipline problems in the classroom; difficulties in adapting the ideas to the younger children) in the classroom. Over 50% of the teachers agreed however, that a lack of resources (e.g. paper and suitable books) and finding available time were difficulties that created barriers to the implementation of many ideas. The principal noted, however, that the lack of time concern may be a function of the previously held beliefs about students with special needs. Now that the teachers were aware of the need to programme for these students, they found it difficult to consider how planning and teaching time could be made available for those who previously were not regarded as a priority in the classroom.

There was no feedback concerning the issue of criticism from other non-course teachers. In fact, as indicated above, there was disappointment expressed that those teachers did not have the opportunity. One of these teachers even approached the researcher and sought permission to use the course ideas of one of her colleagues. It was predicted that criticism would be a non-issue as planning had prepared the teachers to work in supportive groups, principals were able to take follow-up leadership (as each one was involved in the course) and almost every teacher in every school enrolled on the course.

Second Survey

Two years after the first impact survey almost all the course teachers (N=26) and the three principals completed a survey to measure the ongoing impact of the course (Refer to appendix N for a copy of the two survey forms). By this time the participants had

completed their second course. The teacher survey was designed to gather data on changes that may have occurred in development of knowledge, use of teaching strategies and attitudes as a result of the first course. Information from principals was used to corroborate the findings

1. *Strategies in Use* - An important question asked of the teachers was – 'which teaching techniques, introduced during the course, were still being used?' The responses were highly positive for two of the techniques (i.e. cooperative learning and teaching structures) being identified as often used (defined as more than 3 or 4 times a term). For Bloom's approach the teacher response was less positive; most teachers indicated that they used it only sometimes (defined as only once or twice a term). Gagne and student assessment responses were more ambivalent; approximately equal numbers of teachers used these often or only sometimes. Essentially, all the techniques were considered valuable additions to the teachers' repertoire, there being only three negative responses to all the five techniques. (Refer figure 7.9). As one teacher commented, "I've found it difficult at first but, by doing a lot of practices in the classroom, I found it much easier and helped me a lot in my teaching areas." One of the principals commented – "The teachers' knowledge has greatly increased, as is evident in the changes …..to teaching approaches and the climate of the classroom." In commenting about one teacher use of the strategies, the principal went on to note that "she uses them quite effectively. The children love coming to school and get quite upset if they have to stay home – according to parents." Another principal commented

> *To my knowledge the teachers are improving their teaching method, new resources are seen in the classrooms, working with groups, encouraging them to think for themselves. Peer tutoring is being encouraged and supervised. Happy faces are seen in the class which is comforting to know. Assessment is done orally – by checklist.*
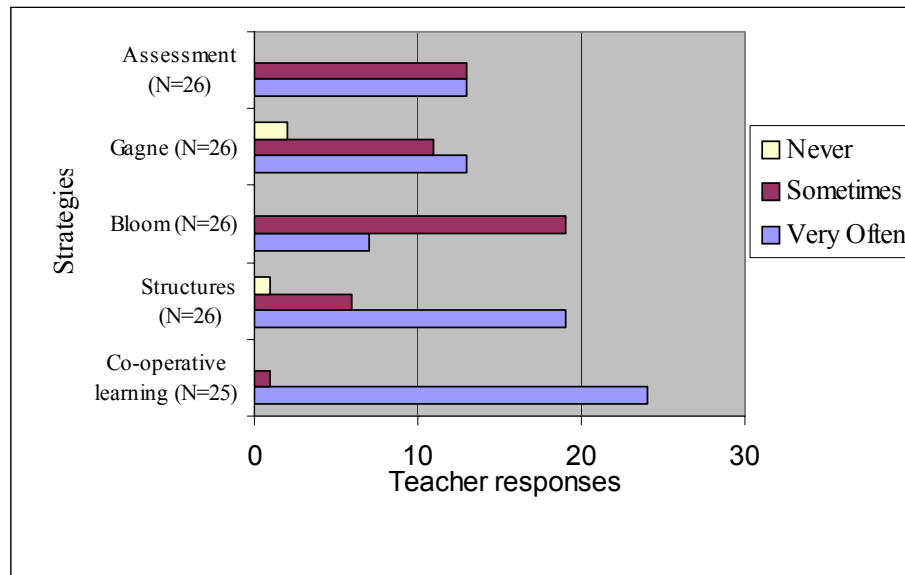
Figure 7.9. Frequency of Use of Teaching Strategies

A number of teachers, in compiling portfolios for their assignments, collected many artefacts to demonstrate the progress that was being achieved in the implementation of ideas in the classroom. These artefacts included student work-sheets, examples of students' work, observational reports of other teachers, photographs, etc. Following the completion of this course, one of the participant teachers provided additional evidence of the continuation of ideas and provided a number of photographs demonstrating the use of the course ideas. Figures 7.10 – 7.12 are samples of these photographs.

Figures 7.10 and 7.11 are very similar but close inspection indicates a progression from 'working together responsibly' to the 'encouragement of responsible behaviour.' In the first photograph, students are enjoying working cooperatively together on a matching task whilst in the subsequent task there is an acknowledgment from each other (by using the 'thumbs up' signal) that responsible behaviour has achieved an agreed answer. In figure 7.12 the teaching structure 'pairs coaching' is being used by groups of students. This is a cooperative learning sequence that involves each student in an alternating checking and learner role. Groups of students throughout the classroom are able to simultaneously work on activities whilst the teacher monitors progress. The photograph (figure 7.13) of students on the beach is interesting. Not only does it provide evidence of the students engaging in a special events activity (i.e. class picnic) as one means of further promoting a safe and inclusive learning environment but it also demonstrates very active parental involvement. The teacher commented:

Figures 7.10 and 7.11

Students working in a small group situation and demonstrating the promotion and encouragement of responsible classroom behaviour.

Figure 7.12

Groups of Students Engaging in a Pairs Check Co-operative Activity

Figure 7.13

Students and Parents on a Picnic Day Cook Islands Style.

I felt this was a very effective means of fostering good relationships between myself and the children, between the children themselves, and myself and the parents. Arranging programmes outside of the classroom like this helps to make the children feel special. They appreciate the fact that you care enough about them to go the extra mile in organising a special treat for them. Their parents also appreciate your efforts and usually give their whole-hearted support.

There were concerns expressed by two principals about some of their teachers' progress however.

Two of the teachers involved were not putting too much practice in the ideas that they have learnt from the course. When they do the students were keen to learn – they enjoyed it.

Some teachers are using 1-2 ideas which has worked for them. Planning and the implementing of their knowledge has been a weakness which I have found this year. So this last term has been concentrated on teacher unit planning to include all or some of the special education knowledge they have acquired.

An important planning approach, the individual educational plan (IEP), was introduced to the teachers on the course. A question, in two parts, asked whether the teacher had developed IEPs independently since the course finished, and if these had proved useful. The response to whether the teachers had developed plans, although not all teachers answered, was that 65% had developed their own plans and that all of these found this strategy useful. Refer to figure 7.14. As one teacher commented - "My highlight for this year is seeing a change and improvement in a particular student's performance. She can now read much better. She is keen to learn now, as opposed to before." One of the principals noted:

I have encouraged teachers to develop at least one IEP each year. I developed mine last year and it worked remarkably well. That this particular student began the year at 1% mathematical skills to 48% at the end of the year and he won the most improved mathematics prize at prize giving at the end of 1998.

2. *Teacher Attitudes* - A change in teacher attitudes was also one of the objectives of the course. Although acknowledging that attitude change is a complex phenomenon, being related to knowledge, beliefs, intentions <u>and</u> behavioural responses, teachers were
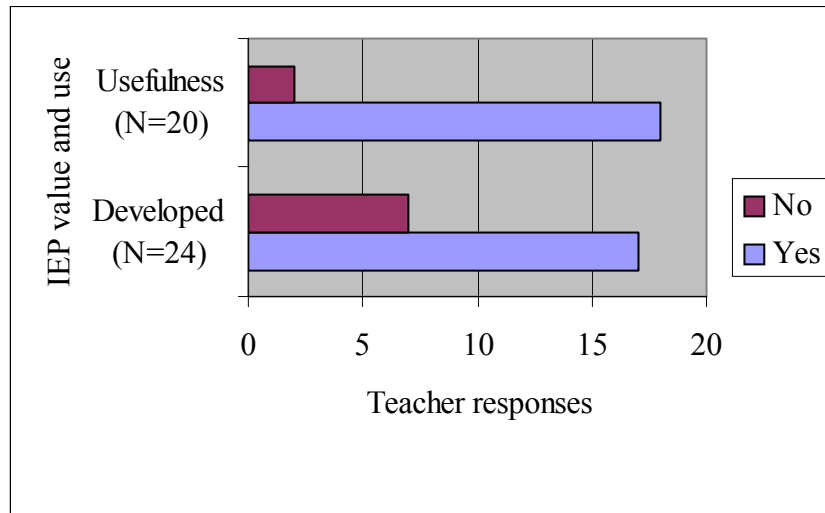
Figure 7.14. Teacher Responses to IEP Value and Use

simply asked if the course changed their attitude to students with special teaching needs. This provided, at least, some cognitive measure of their attitudinal position. All respondents (N=24) were positive, although not all recorded a response. As one teacher commented, "My feelings towards the students are able to share and express well in class and outdoor. Students are able to help me in helping the slow learners. I enjoyed teaching now in class. Very good." As indicated below, one of the principals noted that there had been considerable attitude change.

> *Some teachers have really changed in their attitude towards their classroom teaching practice. You hardly hear negative comments like 'upoko motini',* [pumpkin head] *etc. Some teachers' classrooms are colourful and full of students work. Students seem less threatened and are free-er to express themselves. This is almost certainly as a result of inclusive classroom course. They are using that knowledge.*

Another principal commented "changes are positive and reflect the value they place on the course."

3. *Value of Course Content* - The third major area that was investigated in the second survey concerned the value of the information that was contained in the course. The responses to, defining the special needs child and their needs, the terminology for special needs, using assessment to identify needs and, the information on lesson planning and teaching strategies, were positive (as measured by a 3 point Likert scale). With regard to the history of disability the responses were more ambivalent

with only 50% finding this 'mostly useful' and the other 50% considered that only some information was useful to them. Refer to figure 7.15. An interesting response from the teachers was in answer to the question on working with parents – the responses were more spread across the spectrum. Many of the teachers' comments related to the lack of support from parents either for the teacher's work or for their children's efforts in school. As one teacher commented, "Working with our parents. Our parents here were hopeless, because any matter that their kids needs help they don't care. They just depend on us teachers to do."
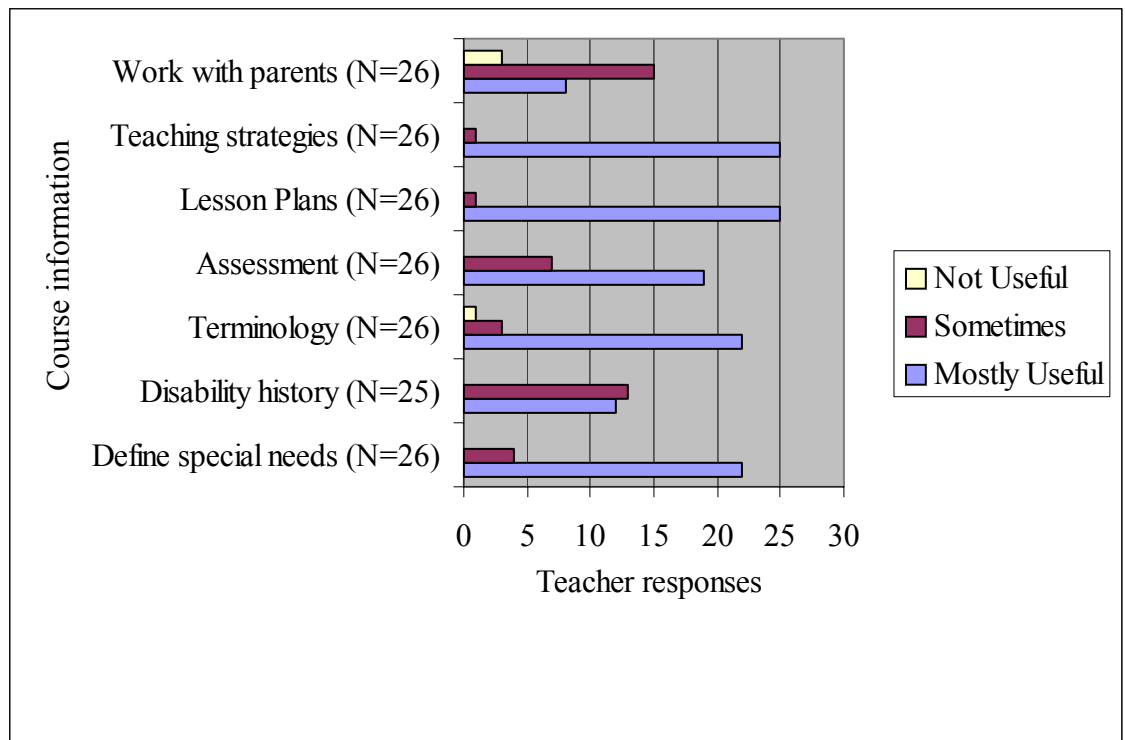

Figure 7.15. Usefulness of Course Content

It seems once again that the most readily transferred ideas, etc., were those that were practical and had significance for the teachers in terms of knowledge of the student, assistance with planning and suggestions for teaching strategies. Less practical information or information that was contrary to teachers' experience was not deemed to be as useful.

Phase 3 Summary

During Phase 3 of this research, evaluation data was collected to ascertain the degree of transfer from the in-service course to the classroom. Measurements of participant

satisfaction and pre- and post-course data (including self report and artefact evidence) were established whilst long-term impact data (including self report and photographic evidence) was obtained from the teachers and principals. The data collected indicated that the course did impact upon teacher behaviour with particular emphasis being upon the practical and immediately relevant techniques that could be used in the classroom. However, there were also clear indicators of knowledge and concept development as well as attitude change. The purpose of this research phase was not to causally link specific strategies to transfer outcomes.

Discussion

Phase 3 of the research project was concerned with assessing the impact of a training course that had utilised many of the transfer strategies identified in the two previous phases. The discussion in this section is not essentially concerned with the effectiveness of the techniques for evaluating transfer but whether the strategies promoted transfer. Was transfer accomplished? Neither was the intention to identify the specific contribution of each strategy to transfer of the training. Additional research programmes would need to be undertaken to assess the role of each strategy. What was important was to identify a range of priority strategies that could be used to construct course planning. Furthermore, it was expected that each course, depending upon a number of factors (e.g. time available, support staff available, purpose of the course, structure of the course, funding, school enrolment or individual teacher enrolment), would have a differing range of strategies to meet the teachers' needs. In essence what was important was a measure of the effectiveness of the 'package' of strategies used to facilitate transfer of training.

In this current research, we already had an estimate of the value of individual strategies. Accordingly, this course was constructed around strategies that could best contribute to its success. Many of the specific strategies implemented in this course were supportive factors (e.g. opening of the course by the Minister of Education, television and press reports, a celebration for the certification, trainer's background knowledge, involvement of whole school staff). Others were more directly linked to performance (e.g. course methods, teacher participation, relapse training, course requirements). Some strategies were beyond the scope of the course management to influence (e.g. teachers had been informed by the MOE that a salary increase would accompany successful completion of the courses – an economic downturn unfortunately delayed this action until much later).

Phase 3 research data was gathered by satisfaction measures, pre- and post-course indicators as well as long-term impact data. It was clear from the data that transfer had occurred. Satisfaction was at a high level, conceptual understanding of learning and teaching altered, attitudes towards inclusive education more positive, knowledge gains made, teacher unit planning incorporated ideas from the course, and long term impact assessments indicated that teachers continued to value and use many of the ideas.[54]

A range of facilitating strategies was implemented before, during and after the course. The following discussion includes a summary outline of the more significant strategies that were incorporated into the course design. Information about the course (for teachers and principals) and pre-course readings were sent sometime prior to its commencement, the MOE emphasised through written communication the importance of the course and school enrolment, island leaders were informed and arrangements made for the course opening with family involvement.

During the course training consisted of a range of interactive group strategies that introduced the teacher to a number of relevant classroom teaching strategies. The importance of a safe learning environment were outlined and procedures implemented to ensure this occurred. Explanatory notes and background information was provided to the teacher daily. Reflective activities were promoted and modelled frequently for the teachers and this was followed by the teachers undertaking group reflection prior to individual reflection. Cooperative learning strategies were used frequently to develop the course ideas.

Follow up activities, after the workshop week, included tutorials, assignment and task completion activities and two 'booster' sessions including an introduction to relapse prevention strategies. Following the end of the course, information relating to the evaluation of it and the outcomes achieved were distributed to the key stakeholders.

It is clear that the strategies used on the course-facilitated development of teacher knowledge, behaviour and attitudes. It was apparent from the satisfaction scores that the teachers were highly satisfied with the course but some caution needs to be undertaken in interpreting this measurement. Because of the high level of respect afforded to trainers

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[54] It is important to note that whilst teachers' transfer was being assessed, they were currently enrolled in subsequent papers. These may have impacted upon the data collected.

this could be an inflated measure and as Alliger et al., (1997) noted the utility type measures are more effective in predicting transfer anyhow. Nevertheless, if Holton's (1996) view is accepted that it can be considered as only one issue in the learning process (and is not strongly predictive of transfer) it was at least a positive expression of the teachers experience. Many noted what they considered to be positive features – interactive techniques, different strategies, and the practical activities that could be used in the classroom. These were all features identified as important for transfer.

There was a change in teacher's conceptions of learning and teaching. No direct teaching about these concepts was undertaken, and although acknowledging that other events could have mediated the change, qualitative differences were noted in the pre- and post-course measures of their definitions of learning. The teachers' views on learning moved toward a deeper understanding of the concept that indicated near transfer. Because the course was centred on teaching methodologies that were considered to promote effective learning, and the teachers were required to specify the nature of learning, this became a measure of transferring procedural knowledge to declarative theoretical knowledge (refer to Haskell, 2001). The respondents in the research suggested that training that was interactive, fun, varied and practical was most appropriate to facilitate transfer. The teachers were in a position to observe and learn from the activities used by the trainer and then articulate for themselves what constituted effective learning.

It seemed that the teachers' conception about teaching altered less. There remained a strong conviction concerning teacher control of the process – perhaps not surprising since the 'teacher' has always been regarded in Polynesian society as an individual with respect, *mana* and authority. Interestingly however, the centrality of the teacher's role became more apparent in the post-course data – a small measure that transfer of ideas about teaching had occurred. (Emphasis on the course had been placed upon the importance of 'what' the teacher did in the classroom.)

Once again there was no direct teaching for teachers to change their attitudes toward inclusive education. The approach was to provide inclusive education research data and information for teachers to discuss. However, given that the course was based upon inclusive education principles, the trainers regarded as experts in the area and the teachers enrolled in the course, a change in attitude was expected. What was perhaps more significant was that the teachers who changed their views related their attitudes in the

post-course measurement to the inclusion strategies that were being promoted in the course. They were able to rationalise their change in thinking.

The measure of knowledge development indicated that there was at least a quest for knowledge and a growing awareness of key information. The course did not have significant requirements for reading of material, retention of knowledge or testing of knowledge but rested upon the understanding and implementation of basic effective teaching strategies. Knowledge that was gained was mainly through discussion, interaction with course members and task completion. Hence it would not be expected that a large knowledge base would develop independent of teacher behaviour.

Post-workshop teacher planning indicated that teachers were able to transfer teaching strategies into their planning and classroom practice. Teachers were required to model one of the trainer's in-service lessons and adapt it for the classroom. This was a more explicit example of transfer. A duplicate form of transfer was at least required to assume that transfer had occurred but many trainees moved beyond this level and were able to develop lesson plans that were specifically related to their students' needs. This unit plan was developed in cooperation with other teachers and followed up assistance given in tutorials. The modelling of the lesson, followed by considerable discussion and then the teaching of the unit assisted many of the teachers to clarify aspects of how to develop a suitable cooperative lesson plan. This was a particularly satisfying activity for the teachers and it embodied a range of the activities considered necessary for effective transfer. A model similar to the Joyce and Showers (1980) teaching model was utilised, teachers worked in teams to develop lessons for each class, discussion occurred about the plans and application followed. A reflection of the activity completed the task.

Two long-term impact sets of data were collected. The data collected consisted of self-report measures with principal corroboration. Some photographic evidence was also obtained. The researcher also made visits to each of the classrooms to discuss teacher's progress) and made informal observations. This data indicated that changes had been made and that the teachers valued the course ideas for their classroom.

At the time of the first data collection (4 months after the completion of the course) it was most evident that the course ideas were being used. In particular, it was the practical teaching ideas (i.e. direct teaching strategies) that had been emphasised and practised

during the workshop sessions that were most useful to the teachers. These strategies were relevant, innovative, and interactive and were the subject of a number of formal and informal staff-room discussions (Source: personal communication from *papa'a* – [Westerner] contracted teacher but not a participating course member.). There was no reported instance of negative feedback from other teachers (n = 2) who did not participate in the course. One teacher was leaving for overseas whilst the other was soon to retire. Interestingly, the teacher who was due to retire contacted the researcher and asked him to make a visit to her classroom to view *her* changes. She had made considerable modifications as a consequence of her colleague sharing the course ideas with her. The involvement of (almost) all the staff, including the principal, had ensured that all were participating and the possibility of negative feedback from teachers diminished.

By the time of the second data collection (2 years after the first impact interviews) many course ideas were still being used although a few teachers were using ideas only infrequently (according to one of the principals). This indicates that the course ideas still had potency. Continued use was undoubtedly related to a number of ideas - the value of the techniques (it can be assumed the 'novelty' of the ideas had dissipated for the teacher), the teacher's ease and enhanced skill in using them, and the ongoing courses which ensured continued contact and feedback with the researcher. Some of the MOE staff also supported and provided feedback to the teachers about their progress.[55] One teacher highly motivated about her classroom changes sent photographs to document what had been implemented in her classroom. Some caution needs to be expressed however concerning the ongoing potency of the changes – unless there remains *continued* support within the school context, it is possible that the changes will come under threat.

Phase 1 – 3 Results Summary

This research project has identified a range of training strategies that have facilitated change in the classroom. Many of the ideas from the international literature on transfer are relevant for the Cook Islands context but there were also factors that were identified that have particular local significance.

In the first phase of the research, data of a more general type was collected to provide a context for course implementation. The value of interactive, participatory courses, trainer

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[55] An in-service programme for the advisers was developed to provide information about the course content and structure.

qualities and the trainer-teacher relationship were highlighted by the respondents, as was the need to ensure support for teacher involvement in professional development. The analysis of the transfer interviews in the second phase of the research resulted in 116 facilitative/barrier items being identified as important for transfer of training. In a follow-up survey the school, teacher and training/trainer items were identified as being of particular value to the respondents but some differences in the importance of the course time periods (before, during and after) within each was detected. Support from others (e.g. colleagues, principal, family, MOE) and to others, as well as resource availability was considered to be most important by many respondents.

Following identification of generic and then more specific 'facilitative/barrier x time' factors, thematic analysis procedures uncovered three major determinants of course effectiveness in terms of transfer of training – a teacher's individual characteristics, trainer/training qualities and social support structures. As reported by the international research literature, a teacher's individual psychological, social, professional skills and behaviours were deemed to be important for the introduction of course ideas into the classroom. Furthermore, and not surprisingly, the trainer and the training programme were also perceived to be important if transfer of the training was to be optimised. A trainer who met the participant's expectations and one who could develop a relevant course with interactive, participatory structures was more likely to facilitate change in the classroom. The third major theme, social support to/from others assumed a particular significance. There was frequent reference to support to/from the school community as well as support from outside this context. The importance of social support was further investigated and it was noted that this support functioned not only to promote and develop course ideas but also to provide a mechanism to protect the individual from unwanted criticism from colleagues.

Many of the ideas identified in the first two phases of the research project were incorporated into a training programme and this course was then monitored for effectiveness of impact. This was phase 3 of the research project. Teacher satisfaction and follow-up course impact data confirmed the value of the course and its usefulness for supporting teachers' implementation of ideas into the classroom. It was concluded that the transfer of training strategies incorporated within the course design contributed significantly to the likelihood of ideas being implemented in the teacher's classroom.

CHAPTER EIGHT
DISCUSSION AND CONCLUSIONS

Based on my reading of the transfer research and from my years of teaching experience, I have come to believe this. Unless schools create cultures of transfer, teach about transfer, and instill a spirit of transfer, requiring a well-learned knowledge base, and practice and drill of some systematic sort, teachers can adopt any instructional method they like in the classroom but, with few exceptions, neither significant learning nor significant transfer will take place. (Haskell, 2001)

The research has been based on the understanding that transfer of training is maximised when contextual elements are determined and strategies developed to meet the needs of a training setting. It has identified a range of training strategies that can facilitate change in Cook Islands classrooms. Many of the ideas and strategies from the international literature on transfer were relevant for the Cook Islands context but there was also a range of factors identified that has particular local significance.

In assessing the outcomes of the overall project reference to the NZODA guiding principles should be made, within the context of transfer of training. The development of *partnerships,* and *participation* and *the involvement of the New Zealand community* with the Cook Island personnel was central to the whole project. For example, the principal and tutors were significantly involved in the development and implementation of the programme. Working relationships were a priority with teachers and each was given responsibility to implement ideas and report back. The WCE in New Zealand was involved in the issuing of NZQA approved certificates.

With regard to *capacity* and *sustainability*, it was clearly outlined in the preceding chapter that there were significant long-term changes in knowledge, attitudes and skills. Although there have been no direct measures of student outcomes as a consequence of the courses, the intention has been to help those students who were failing (and at risk of failing) in the education system. The failing students are those who are at risk psychologically, socially and economically (Special Education News, 2000). Hence, although not in a direct manner, the programme was concerned with *reducing poverty* and social deprivation.

To answer the research questions, emphasis was upon phenomenological methodology, although quantitative data was also collected. In the first phase of the research, data of a more general type was collected to provide a context for course implementation. The value of interactive, participatory courses, trainer qualities and the trainer-teacher relationship were highlighted by the respondents, as was the need to ensure support for teacher involvement in professional development. The analysis of the transfer interviews in the second phase of the research resulted in 116 facilitative/barrier items being identified as important for transfer of training. In a follow-up survey, the school, teacher and training/trainer items were identified as being of particular value to the respondents but some differences in the importance of the time periods (before, during and after the course) within each was detected. Support from others (e.g. colleagues, principal, family, MOE) and to others, as well as resource availability were considered to be most important to many respondents.

Following identification of generic, and then more specific 'facilitative/barrier X time' factors, thematic analysis procedures uncovered three major determinants of course effectiveness, in terms of transfer of training – a teacher's individual characteristics, trainer/training qualities and social support structures. As reported by the international research literature, a teacher's individual psychological, social and professional skills and behaviours were deemed to be important for the introduction of course ideas into the classroom. Furthermore, and not surprisingly, the trainer and the training programme were also perceived to be important if training transfer was to be optimised. A trainer who met the participant's expectations and who could develop a relevant course with interactive, participatory structures was more likely to facilitate change in the classroom. The third major theme, social support to/from others, assumed a particular significance. There was frequent reference to support to/from the school community as well as support external to the school. The importance of social support was further investigated and it was noted that this support functioned not only to promote and develop course ideas but also to provide a mechanism to protect the individual from undesirable criticism from colleagues.

Many of the ideas identified in the first two phases of the research project were incorporated into a training programme and this course was then monitored for effectiveness of impact. This was phase 3 of the research project. Teacher satisfaction and

course impact data measures confirmed the value of the course and its usefulness for supporting teachers' implementation of ideas into the classroom. Accordingly, it was concluded that when transfer of training strategies have been identified as important by local stake-holders, and these are incorporated into a training programme, then there is a greater likelihood of course ideas being implemented in the teacher's classroom. In the following section, a model of transfer (refer figure 8.1) that incorporates findings from this research as well as synthesising key ideas from other research findings and models will be outlined. It is an input – output process model that explains how transfer can best be conceptualised and provides a planning framework to develop a strategic approach.

The fourth objective for this study was more global in nature and centred upon the question 'What understandings can be added to transfer of training theory particularly with regard to how culture impacts upon transfer? ' The international literature, and this research project, have emphasised a number of key aspects important for successful transfer of training. It has been demonstrated by this research, that cultural issues do have a significant part to play in determining the nature of the training and the impact it has upon performance. There have been few attempts to delineate this in the research literature, although it is increasingly being acknowledged as an important consideration (Haskell, 2001; Lim, 1999). The project identified that key cultural components are important factors determining response to training. The values, status, roles, norms and sanctions implicit in any culture and learned via socialisation determine, develop and constrain behaviour. Recognition of this is essential if individuals are to be accepted as a member of that group. Education and training are not external to this process. Hence, it is important to recognise the over-arching contribution of culture to our understanding of transfer of training. In this research it was noted that the core Cook Islands cultural determinants were reflected in the respondents recommendations for strategies. The model has, therefore, given prominence to culture as an over-arching influence although acknowledging that it is a changing and open system (The dotted/open lines represent openness to other systems – cultures, ideas, etc).

Haskell (2001) has noted the importance of assuming a principled approach to transfer of training. He has detailed the inappropriateness and difficulties of using an extemporaneous approach and selecting current fads as means of developing transfer. On the model, beneath the cultural umbrella, Haskell's principles of training have been outlined. These

SOCIO-CULTURAL INFLUENCES
(CONTEXTUAL)

TRANSFER PRINCIPLES

| Transfer Theory | Motivation | Understand Theory & Knowledge | Transfer Thinking | Support Systems | Use Models | Practice | Allow Time |

TRAINING INPUTS ┄┄► **TRAINING PROCESS** ┄┄► **TRAINING OUTPUTS**

	Before	During	After
Trainer			
Trainee			
School			
Other			

Characteristics

Knowledge, skills and attitudes

Knowledge, skills and attitudes

School Improvement

Targets met, satisfaction, etc.

New/additional Training

Student Achievement
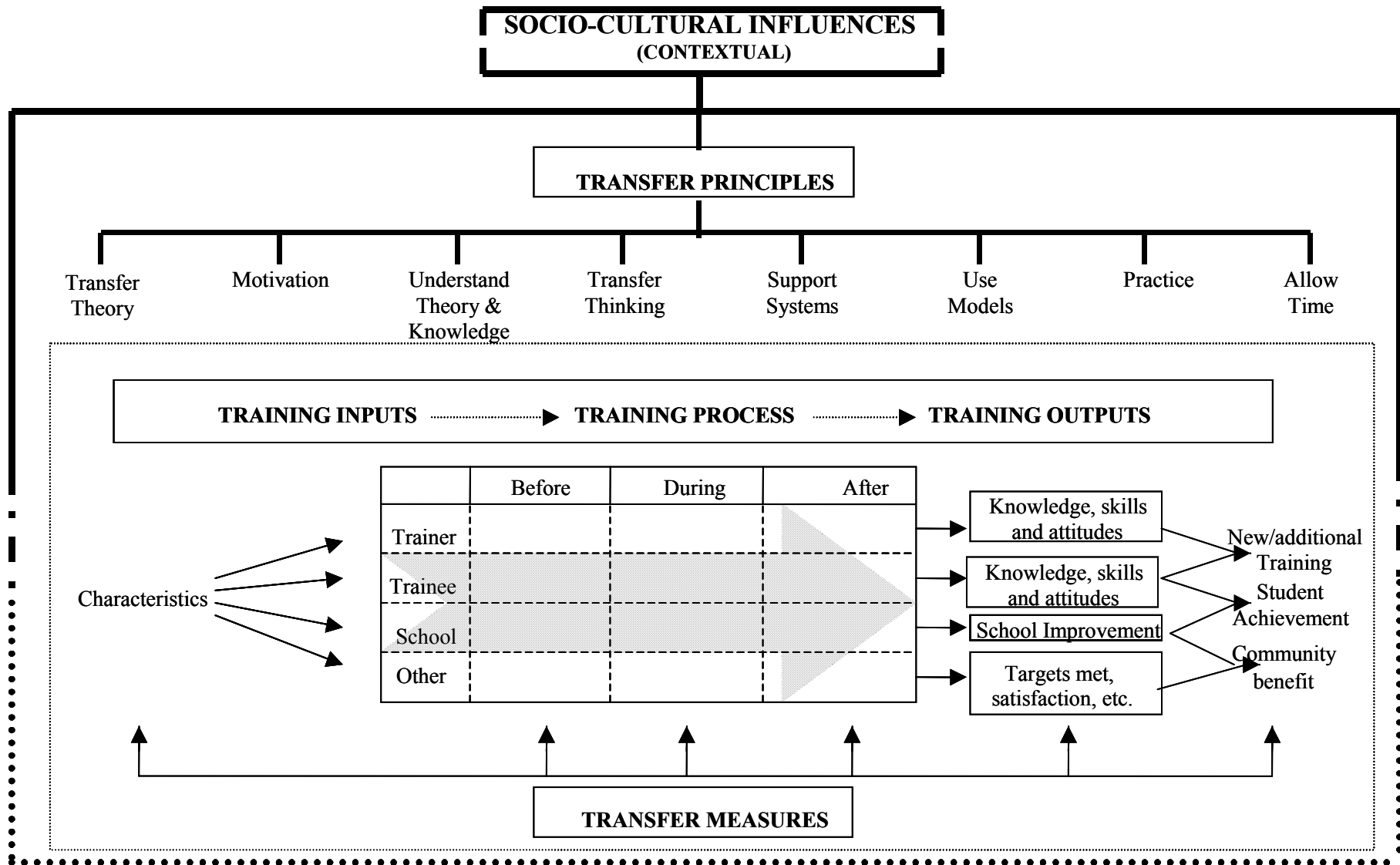
Community benefit

TRANSFER MEASURES

Figure 8.1. A Cultural Model of Transfer of Training

training principles are therefore comprehended in terms of the cultural context but some changes have been made to them. He detailed 'cultures of transfer or support system' as an important principle and this included (national) cultural influence. To imply that this is at a similar level to the other principles under-values culture and, accordingly, it has been separated and given the prominence as an all inclusive influence. The notion of support systems is retained. Some of the other principles have been blended. The following principles are outlined in the model with changes to Haskell's principles acknowledged. The significance of these for culture is also outlined.

1. **Transfer theory** – this is concerned with understanding the background history to transfer and appreciating how it operates. It combines Haskell's principles three and four. Thaman (1996) detailed the influence of Polynesian culture upon transfer.

2. **Motivation** - this is a key to learning and transfer and as Wlodkowski (1999) noted this needs to be interpreted in terms of culturally responsive behaviour. Haskell uses the term 'spirit of transfer' to denote a wider interpretation.

3. **Theory and knowledge about the subject** – details about the subject area, its theory and other potentially related areas of knowledge need to be developed. Some believe (e.g. Helu-Thaman, 1999) that theories of learning and knowledge construction in the Polynesian area should be more reflective of the traditional cultural views. This has combined Haskell's principles 2 and 8.

4. **Transfer thinking** – this is concerned with developing the capacity to relate knowledge, skills, etc., to other sets of knowledge and other experiences, as well as our emotions. As Pea (1987, p. 650) noted "…..affective and motivational influences on knowledge transfer are best studied in the cultural systems that give rise to them rather than as traits of individuals."

5. **Support systems** – this refers to development of a culture of support to promote the transfer. Haskell (2001, p. 137) states, "If we adopt the view that learning is situated, contextually, and culturally, that transfer is social in a fundamental way, then we understand also that learning occurs in the context of people engaging in social activities." The importance of support systems was made very apparent by this current research.

6. **Use of models and exemplars** – Haskell was referring to observing and reading about others who were expert in transfer. Of course, what we know about modeling theory (e.g. Bandura, 1977) would suggest that among other things, the cultural and contextual issues need to be considered if modeling is to be successful.

7. **Practice** – the value of practice was noted by Haskell and also implied in this was the need for feedback. This current research identified how respondents valued feedback – from colleagues, principals, tutors, etc.

8. **Allow time** – Haskell was referring to the need to allow time for the transfer to incubate.

Under the dual umbrellas of culture and transfer principles there are a number of key dimensions that underpin our understanding and explanation for the operation of transfer. Like the Foxon (1993, 1994) approach, it is a process model with measurement opportunities at various phases of the training programme. The training inputs refer to the characteristics of the trainer (e.g. credibility, cross-cultural skills and knowledge of local scene), trainee (e.g. level of motivation, flexibility, and ability), school (e.g. level of principal involvement, support of colleagues and availability of resources) and other (e.g. MOE support for course, family dynamics/structure, parent involvement levels). The idea of Walberg and Genova (1982) that some characteristics are more alterable than others becomes relevant here.

The training programme, trainees and organisational elements of the Baldwin and Ford (1988) model are incorporated in this design in the form of Broad and Newstrom's (1992) training matrix. It adds, however, the dimension of 'other influences' (to account for educational administrative authorities, family and parents, etc.,) and the key stakeholders have become educational personnel. This implies that a partnership over a time period, as outlined in the Broad and Newstrom model, is important if a community of learners is to develop. The training process is interdependent and interactive, blending with both the inputs and outputs. The dotted lines in the training process indicate that the matrix is an open system and interactive as detailed by Gradous (1991). For example, preference for a training design feature can be related to a trainee characteristic and a before training feature (e.g. teacher personality) can impact throughout the course.

The generalisation and maintenance phase of the learning located in the Baldwin and Ford (1988) model occurs in the 'after' phase of the training process – outputs and is promoted by on-the-job feedback and support received from colleagues and principal. One of the significant features of this model is an acknowledgement that the trainer is also a potential learner with knowledge, skills and attitudes developed about the training process and

content. The respondents in the research made a number of suggestions about the usefulness of the trainer becoming a learner during the courses. This is consistent with the notion of a 'community of learners' as discussed by Darling-Hammond (1998).

Implied in this model is the view that approaches to transfer of training need to incorporate a greater number of key variables. Attempts have been made to include important factors identified in the research and from recent theoretical advances. Undoubtedly, it will not be a final statement but one that significantly adds to our understanding of transfer of training.

As with any research, careful interpretation is required and there needs to be a deliberation given to the limits and restraints of its findings. Therefore, the following issues need a circumspect consideration. The research paradigm was interpretivist and employed a phenomenological design. This approach has manifest advantages but also conveys to some, restrictions upon the findings. Essentially this revolves around the issues of interpretation and the value of the research. Faulty interpretation is not the prerogative of qualitative researchers however, as there are numerous instances of faulty quantitative research. Nevertheless, interpretation of data can be problematic. In this research attempts have been made to de-limit this problem by identifying the intentions and perceptual/ thinking processes of the researcher, using a mix of qualitative and quantitative data and by triangulation of data sources. By identifying the researcher presence in phenomenological research, a significant means of addressing the validity problem has been specified.

Another concern centres on the use of interviewing methodology. Apart from the potential for interpretation difficulties, some believe there are problems with using small numbers of subjects and the use of leading questions. These may be problems but the real problem comes if the researcher does not ask the right questions about the obtained data. Providing there is a clear description of what occurred, with careful detailing of the analysis then these problems are minimised.

With qualitative research there are also a number of issues pertaining to the operational definition of truth. In the first instance, the credibility of the research needs to be established. Attention was given to gathering data from various sources for the needs analysis and the transfer interviews and survey. Unfortunately because of the smallness of the respondent pool many of the same respondents (just over 1/3rd) were used for phases 1

and 2 of the research.[56] Furthermore, during phase 3, transfer of training was essentially measured by self-report and data triangulation from the principal of the school. Further research to support the findings of this study will provide opportunities for verification.

For the phenomenological research, the question of the truth of the informants' responses does not create problems of interpretation. Phenomenology is concerned with the perceptions of what the informants believe to be 'truth' - follow-up alternative research approaches can attest to the universal 'truth' of their informants' contributions. This was not the purpose of this study.

Generalisability of the findings can be problematic and local conditions of the research place a restriction upon the applicability for findings to other settings. Hence, because considerable weight has been given to the local setting, firm conclusions cannot be drawn about transferability of the findings. What is acceptable however is that working hypotheses can be outlined and these can be related to similar situations. It is therefore predicted that there will be some validity in relating these findings to other Polynesian countries, particularly the smaller states.   However, once again, follow up research is necessary.

Another methodological issue relates to the utilisation of the research methods. As in many educational research endeavours controls, were not possible. The question of potency of the impact data becomes an issue. However, in the evaluation (phase 3), since this was an outer-island course there was a certain measure of control anyhow. The content of the course for most teachers was new and exposure to intervening events during the course was limited as all of the participants returned to their islands.

An additional potential limitation of this research relates to it being one of the few studies in the area of cultural influence on transfer. Locating benchmarks to compare the data was almost impossible apart from using data from the series of studies undertaken by the researcher's under-graduate students. Undoubtedly support structures, collaboration, etc., are desirable features for many in-service training programmes throughout the world and

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[56] Importantly however, for phase 3 the research informants were a different group of teachers. However, it is important to note that for the quantitative interpretation of data, the sample numbers were relatively small and hence interpretation of the data must remain cautious.

hence defining the levels of difference becomes a matter of some difficulty in a study of this nature if comparable data does not exist. Additional research in this area will promote additional understanding.

In spite of the cautions that need to be exercised in the interpretation of these research findings, they are sufficiently robust to afford a range of implications for programme designers to take into account when planning for transfer of training. The following are some of the key implications arising from this research:

1. The need to understand that cultural characteristics can significantly influence the outcome of a course. For example, with regard to the Cook Islands, the importance of collective consciousness and the unease associated with criticism, requires course planners to consider mechanisms for ensuring that innovations are a means of promoting consensus rather than instigating division. It seems that too little attention is given to considering what are the normative and effective means of innovating with impact, in a system that has its own means of regulating change.

2. In relation to above, it is also important to understand that an individual course participant is shaped by an interaction of political (e.g. policy directives), economic (e.g. available funding for resources), cultural (e.g. attitude to authority), social (e.g. degree of need for affiliation) and personal/psychological forces (e.g. degree of motivational energy) and these intersect with the training programme and trainer. Thus the importance of trainers thoroughly understanding the local context and then demonstrating considerable skill in adapting the training programmes to meet these local needs. The practice of hiring a trainer simply because of content expertise demonstrates a lack of understanding about the training process and its need to 'fit' the context.

3. A central finding of this research relates to <u>support</u> for change. This notion is internationally acknowledged as a key determinant for effective change processes. It is likely that in the Polynesian setting, because of the emphasis upon collaboration and consensus, it assumes even more significance in understanding how transfer can successfully occur. This has implications for change in the school settings – the principal needs to assume a key role as change manager but training is necessary for this to happen. Principals have not been trained to assume this role. Furthermore, with the development of a community of learners around a school community, support for

change would become more manageable and understood more readily. It is developed around consensus.

4. Trainers, policy makers, in-service administrators and funding agencies need to perceive training as a process with differing but related temporal qualities. There are before, during and after course phases. A trainer needs to be allocated time and funding to develop these phases if transfer of training is to be ensured. The involvement of training design experts at the course preparation stage would be an advantage.

5. Trainers working across cultures need to develop professional and personal cross-cultural expertise. Furthermore, the trainer needs to be fully aware of how best to integrate these skills with an appreciation of the political, economic, cultural and societal forces that shape the need for, design and implementation of the programme. Those in a training role working cross-culturally need a thorough preparation prior to entry and an ongoing development of skills if transfer is to be effectively managed. Research indicates that cross-cultural expertise is readily transferred to different settings given high levels of personal motivation.

6. There is a need to evaluate the efficacy of funding short-term training projects that have little follow-through. The value of sustained long-term in-service programmes that provide follow-up has been established. Transfer takes time to develop and needs to be nurtured over a period of time. 'Boom and bust' approaches do not have the same potential to develop knowledge, skills and competencies to a level that promotes change. Planners need to develop more of a reflective position and contemplate what it is they are actually wanting from the training programme. If it is simply awareness, then short-term focus programmes may suffice.

7. In relation to the above, programme developers should facilitate the development by teachers of an expectation for change that will improve their teaching. So often teachers have had the expectation thrust upon them that participation in a training programme is sufficient. The development of a community of learners promotes this attitude change.

8. Attention in training programmes needs to be given to not only content and processes for transfer, but also enskilling teachers to become change agents and skilled in reflecting, adapting and innovating. Teachers need to have a means of dealing with resistances to change, when innovation is warranted, and an understanding that transfer of training depends upon a capacity to adapt content, methods, etc., with certainty.

9. Training needs to be perceived as relevant to the trainee and his/her colleagues. The participants need to seed the relationship between the course content and the demands of the job. A needs analysis is helpful here. Ensuring that the training also has meaning to colleagues can overcome many problems associated with the fear of criticism.

10. Trainers need a clear understanding of how adults learn. 'In-service training' is better thought of as 'in-service learning' – there needs to be an emphasis upon training as a learning phenomenon. In particular, increased awareness of cognitive developments and impact of culture upon learning needs to be strategically incorporated within the training programme.

This research has highlighted a number of significant factors that are important for implementation and theoretical development of transfer of training. The model and identification of strategies can be applied to decision-making and action in many training situations. Given that this research was designed to provide some answers to what constitutes effective transfer of training in a cultural context, it has also given prominence to a range of issues that further research needs to investigate. The following issues are suggested as directions for additional research:

1. The findings of this research project need to be subject to additional investigation. For example, the value of support in other training contexts and with different samples. Would the findings from the present study apply to other professional/non-professional groups? What impact does base training outside this research setting have upon the need for social support? For those who have returned to the Cook Islands - what impact does living in a western society have upon the level of support considered desirable?

2. Further examination of the nature of support and its bearing upon change processes is warranted. What levels of support are needed? In what situations is support detrimental to transfer of training? Does successful change lead to support?

3. There is scope for further examining the role of specific strategies in transfer but also being mindful of the interactive nature of many of the variables. For example, are their identifiable personality variables in the Cook Islands setting that promote change processes more readily? What factors make an individual more resilient to negative feedback? Are changes to a system more readily accepted if introduced by an outsider

to the system? What are the specific qualities that are needed for a principal to become a change agent in a system that is resistant to change?

4. What learning processes occur (and need to occur) when trainers develop expertise to work in cross-cultural settings? How can this be best accomplished?

5. In a society that has a traditional conservatism and an emphasis upon certainty, what is the best means of creating within this system the notion of continuous inquiry and a community of learners? What impact does this have upon the culture?

6. Can the frameworks that have been developed by this research be used not only for planning but also as diagnostic tools to remediate difficulties in training programmes? How many strategies are needed to ensure that a course is likely to succeed?

7. Lessons can be learnt from examining failures in transfer. In this research setting there are many reported anecdotal instances when this has occurred. This provides an excellent opportunity to further develop understanding of transfer of training. What are the factors identified that contribute to the transfer failure? What are the different perspectives on this failure? Can it be predicted?

8. Differing theoretical perspectives can contribute to these findings. Investigations of the research findings could be expanded upon if other perspectives are considered. For example, in the domain of psychological inquiry, need theory, motivational perspectives and social cognitive approaches to explaining behaviour could expand upon how support contributes to an individual's psyche. Sociological inquiry could investigate the functional elements of support and its force as a moderating and innovating element in society.

This research has been concerned with transfer of training and how cultural forces influence it. There is now a rapidly growing literature base defining the importance of transfer and how it can best be approached, albeit mainly in western society. Up until recently however, only minimal attention has been directed to examining how this literature and research experience can itself be best transferred to other cultural settings. As the need for training grows and globalisation of it occurs, there is an urgent need for it to become international and develop a framework for using what is known in different settings. The current research contributes to this need. As Xiao (1996, p.71) has noted in discussing transfer of training in Shenzen, China…..'human factors in the workplace appear to be the most influential factors in the workplace.'

APPENDIX A
RESEARCH ETHICS

THE RESEARCH ETHICS FOR THIS RESEARCH

This research project gathered data from numerous individuals in the Cook Islands. Detailed verbal information was provided about the nature of the research and the ethics governing its implementation to each respondent. Furthermore, each respondent was asked to sign a consent form and was also provided with written information corroborating the verbal information provided earlier.

It is acknowledged that researching in a cross-cultural setting has particular ethical issues that need to be considered. In settings such as the Cook Islands, the relationship of the researcher to respondents needs careful managing. The authority of the researcher could be perceived to impede respondents' choices and influence decision-making. Careful attention was directed toward this issue. The researcher was well known to the respondents and opportunities were taken to become accepted in a social and professional manner as a colleague rather than researcher. This was a role similar to the participant observer. Whenever possible, discussions, etc., were translated into Cook Islands Maori for the respondents.

The following is a copy of the details of the ethics information provided for each respondent. This was also detailed on each of the survey forms, etc.

Kia Orana teachers, principals and teacher educators. Thank you for agreeing to participate in this survey. Your involvement is highly valued and I appreciate the time that you are able to give me to complete the interview. It is anticipated that the survey will take approximately 30-40 minutes.

Please note that your participation is voluntary and you may withdraw at any time. Your participation is valued however and we are hopeful that you will be able to take part. I will seek your personal written approval before you begin to complete the survey.

The information you provide is confidential and you will not be identified in any way. Information collected will be kept secure, available only to the researcher, and then after a period of three years (following publication of the findings) it will be destroyed.

The information collected in these interviews will be made available for you to comment on within the next 2 - 3 months.

APPENDIX B

NEEDS SURVEY

TEACHER AND TEACHER EDUCATOR INTERVIEW

SURVEY OF PREFERRED TRANSFER OF TRAINING STRATEGIES (SPTTS)

Important Introductory Comments

Kia Orana teachers, principals and teacher educators.

Thank you for agreeing to participate in this survey. Your involvement is highly valued and I appreciate the time that you are able to give me to complete the interview. It is anticipated that the survey may take up to 40 minutes. Please note that your participation is voluntary and you may withdraw at any time. Your participation is valued however and we are hopeful that you will be able to take part. I will seek your personal written approval before you begin to complete the survey.

The information you provide is confidential and you will not be identified in any way. Information collected will be kept secure, available only to the researcher, and then after a period of three years (following publication of the findings) it will be destroyed. The information collected in these interviews will be made available for you to comment on within the next 2 - 3 months.

Purpose of the Research

These interviews are part of a major research project (PhD study) undertaken in collaboration with the Cook Island authorities and participating teachers. It is hoped that the experiences of the teachers in Rarotonga will provide valuable information for developing further courses in the Cook Islands. This research is concerned with increasing teachers' opportunities to use the ideas in the classroom. It is the first phase of the research – at this stage we are interested in getting your views on what in-service methods/approaches you like and what you would like to learn about. Part of the interview will be in pairs whilst another part will be undertaken just with you.

Kia manuia

Lex McDonald

CONSENT FORM FOR RESEARCH PROJECT ON

TRANSFER OF TRAINING

I have read the information relating to this research and have also listened to a discussion about it. I understand that by signing this form I give my consent to take part in the research.

I understand that the following applies:

1. I do not have to take part in this research. It is voluntary. I choose to take part.
2. All of my comments are confidential. No one will know what I have said or written.
3. I can withdraw from this research at any time and this will be acceptable to all.
4. All the research material will be kept in a secure place and will not be made available to anyone else apart form the researcher and his assistants.
5. The research material will be destroyed 3 years after the report has been written.
6. I will be given the opportunity to comment upon the information that I provide and can change any of it if I so wish.
7. I can meet with the researcher to discuss the research at a time to be arranged.

I have read the above and agree to take part in this research

NAME:

SCHOOL:

DATE:

SIGNATURE:

COOK ISLANDS
IN-SERVICE TRAINING INTERVIEW SCHEDULE

NEEDS SURVEY

TEACHER AND TEACHER EDUCATOR INTERVIEW

CI IN-SERVICE TRAINING INTERVIEW SCHEDULE
PART 1: INDIVIDUAL INTERVIEW

FOR THE INTERVIEWERS INFORMATION: It is important to place the interviewee at ease and then please explain the following to him/her. "This questionnaire is designed to get your ideas on in-service training so that courses can be better developed. We know that you are very busy and that this is another demand on your time but this information is really important for your future professional training. The information you provide is confidential and no names will be identified. You co-operation will be really appreciated and a copy of the results will be made available to you. So, we are hopeful that you will be able to help us. Will you be happy to participate for about 30 minutes? There are two interviews – this one is an individual interview and the next one will be conducted with a partner. This part should take about 15 minutes to complete. Please try to answer every question and feel free to give us any extra information." NOTE: it may be necessary to interpret many of these survey questions for the teachers and use a language that they would readily understand.

Question	Teacher response
1. How many YEARS of teaching experience (excluding training) have you had?	*Years*
2. Are you MALE or FEMALE (circle one)	**Male** **female**
3. What is your AGE GROUP? (circle one)	20 – 30 yrs 31 – 40 yrs 41 – 50 yrs 51 – 60 yrs 60+ years
4. What CLASS LEVEL(S) do you teach? (e.g. Grade 2)	
5. If you are responsible for the teaching of one class HOW MANY CHILDREN are on that roll?	
6. What TEACHING POSITION do you hold? (e.g. senior teacher)	
7. Please state in full your ACADEMIC and PROFESSIONAL QUALIFICATIONS	

Question	Teacher response		
8. What ETHNIC GROUP(S) do you identify with? (Please circle)	Cook Islands Maori NZ European (Pakeha, European, etc.) Tongan Chinese Other (specify)	NZ Maori Samoan Niuean Indian	
9. On a scale of 1 to 3 (with 1 being very important, 2 being important and 3 being not important) identify the importance of these IN-SERVICE GROUP CHARACTERISTICS to you. (Please circle the number opposite)	Very important	Important	Not very important
In-service members are self selected	1	2	3
Members are experienced teachers	1	2	3
Members teach a similar age level to you	1	2	3
Members have similar cultural identification	1	2	3
Members have similar levels of position responsibility	1	2	3
Members relate effectively to one another	1	2	3
Members choose to work together	1	2	3
If you have any additional comments please tell me			

Question	**Teacher response**		

10.	On a scale of 1 to 3 (with 1 being very important, 2 being important and 3 being not important) identify what is important to you about the trainer. (Please circle the number opposite)			
		Very important	Important	Not very important
	The trainer(s) is a trained teacher	1	2	3
	The trainer has a detailed knowledge of local issues/conditions	1	2	3
	The trainer is a practising teacher	1	2	3
	The trainer is an expert with specialised knowledge	1	2	3
	If you have any additional comments please tell me			

Question	Teacher response
11. In what AREAS OF THE CURRICULUM (e.g. reading, maths) would you like more knowledge, skills and development?	
12. Are there any specific WAYS OF TEACHING children (e.g. a strategy for the student to learn to spell; teacher questioning techniques) that you would like included in an in-service training programme?	
13. List any OTHER ASPECTS ABOUT TEACHING NEEDS that you would like included in an in-service training programme.	

Question	Teacher response
14. Please describe one of the BEST IN-SERVICE TRAINING programmes that you have been involved with. For example: What was the title or course subject or course nature? (e.g. reading; behaviour management; leadership) What was so good about it? Why did you participate in this training?	
15. What is the BEST TIME OF THE YEAR for you to undertake in-service training? (circle one)	Term 1 Term 2 Term 3 Term 4 Holiday times Any time
16. What TIME OF THE DAY do you prefer? (circle one)	Before school Morning Afternoon After school Evening Any time
17. Do you prefer BLOCK courses/training e.g. one intensive week) or DISTRIBUTED courses/training (e.g. once a week for 6 weeks)? (circle one)	Block timing Distributed timing

Question	Teacher response
18. What would best HELP YOU TO IMPLEMENT NEW skills/strategies etc., in the classroom/school after an in-service programme?	
19. What could STOP THE IN-SERVICE TRAINING IDEAS from being used in you class/school?	
20. Describe some examples of the more important CHANGES IN YOUR TEACHING that have arisen from in-service training.	

	Question	Teacher response
21.	Have you had any TRAINING in the area of special education/inclusive education? Please note the time devoted to this training, the topics, and the institution who provided the training.	Yes No
22.	Do you consider that you have SKILLS, KNOWLEDGE, AND COMPETENCE in the area of special education? (please circle one)	Many skills, etc. Some skills Few skills
23.	Could you briefly describe your ATTITUDE towards inclusive education. How do you feel about children with special needs in your classroom?	
24.	Do you have ANY CHILD in your class/responsibility with special teaching needs? If the answer is "yes" please indicate what additional resources you get to help with this child. What additional resources would you like to help this child?	**Yes** **No**
25.	What special education/inclusive education/mainstreaming TOPICS would you like included in an in-service course?	

C I IN-SERVICE TRAINING AND PROFESSIONAL DEVELOPMENT QUESTIONNAIRE

PART 2: PAIR INTERVIEW

FOR THE INTERVIEWERS INFORMATION: Place the interviewees at ease and explain to them that they may help one another understand the questions but that individual answers are desirable. Remind the teachers that the interview is confidential and that no teacher will be able to be identified. Inform the teachers that the interview will take about 15 minutes

Question	Teacher response
26. What do you think are the general GOALS of in-service training?	
27. WHO should decide the SPECIFIC GOALS for an in-service course?	
28. What pre-planning do you think should happen before the in-service course starts?	

Question	Teacher response		

		Very favoured	OK	Not very favoured
29.	(continued)			
		1	2	3
	Training programmes, lectures, workshops Usually there is an expert lecturing and guiding the programme. The topic is usually decided by others. An example of this would be a reading course held at the teachers college with an expert in reading doing the lecturing.			
		1	2	3
	Research/action based programmes Often with others a problem is identified and then information is collected, analysed and the findings are used to improve teaching. An example of this would be a classroom discipline concern – information is collected on a student, this is considered, and a procedure is put in place to change the student's behaviour.			
	Other approaches – please specify any other approaches and put them on a 1 to 3 scale.			

Question	Teacher response		

		Very favoured	OK	Not very favoured
29.	Listed below are five IN-SERVICE TRAINING APPROACHES. On a scale of 1 to 3 (with 1 being very favourable, 2 being OK and 3 being not very favourable) tell me your preferences with regard to the different training approaches. Please identify and describe any others you know of and also put them on a 1 to 3 scale			
	Individual professional development [You choose the are of study/interest, how you learn about it and the pace of your learning. Examples could include professional reading or watching a training video.]	1	2	3
	Peer assistance model [You work with a colleague on a problem/issue that you have. Your colleague works with you – perhaps observing in your class and then tells you what was seen – and then you make some changes in your class. An example of this would be when a colleague observes you implement a new reading procedure and then provides feedback to you about its strengths and weaknesses and how well it went.]	1	2	3
	Shared staff development [This is when you work with a number of your school staff on a shared concern/problem and create a plan to solve that concern. An example of this is when a school staff develops a plan to improve parent involvement in school life.] (Continued on the next page)	1	2	3

Question	Teacher response		
31. Listed below are some SPECIFIC TECHNIQUES (often used as part of the approaches mentioned above). On a scale of 1 to 3 (with 1 being very favourable, 2 being OK and 3 being not very favourable) indicate your preferences. Please identify any other techniques and rank them 1-3.	Very favoured	OK	Not very favoured
Panel discussion	1	2	3
Interviewing a resource person	1	2	3
Working in small groups	1	2	3
Lecture	1	2	3
Use of games	1	2	3
Simulations (role-plays etc.,)	1	2	3
Arranged demonstrations	1	2	3
Natural setting observations	1	2	3
Producing resource materials	1	2	3
Using a learning centre approach	1	2	3
Using a case study to gain insight, etc.	1	2	3
Reading articles, books, etc;	1	2	3
Other techniques (please specify and rank)	1	2	3

	Question	Teacher response
32.	Please describe the type of LOCATION, FACILITIES and RESOURCES you prefer for in-service training. For example – What is the best location/site? What facilities/resources are absolutely necessary?	
33.	Please make a comment on the type of handout that is most useful for developing in-service training ideas	
34.	Make a comment on the usefulness of trying out NEW SKILLS in your classroom while the in-service training programme is on.	
35.	What would be the most useful METHOD(S) TO EVALUATE an in-service training programme?	

	Question	Teacher response
36.	WHEN should this evaluation occur?	
37.	WHO should take part in the evaluation?	
38.	HOW IMPORTANT is it that in-service training results in improved classroom teaching and learning? (circle one)	Very important Important Not very important
39.	What is the BEST WAY to evaluate the classroom usefulness of in-service training programmes?	
40.	Should teachers receive some form of RECOGNITION for participating in in-service training programmes? (circle one) If you answer "yes' what should the recognition (reward, etc.) be?	Yes No

Question	Teacher response
41. Do you have ANYTHING ELSE YOU WOULD LIKE TO SAY about in-service training courses?	

QUESTIONS FOR TEACHER EDUCATOR INTERVIEWS
TEACHER IN-SERVICE NEEDS ANALYSIS

Instructions for Interviewer

1. Explain what this research is about and how we are undertaking it.
2. Seek approval to interview.
3. Explain the ethical procedures.

Questions to ask the Teacher Educator

1. What specifically makes a course really good for Cook Islands teachers? What are the techniques to use?

2. What are some of the cultural issues that need to be considered by course planners and lecturers when organising a course for the Cook Islands teachers?

3. Can you describe a really good course that you (or a colleague) have organised for the teachers?

4. Can you identify anyone in the Cook Islands who has implemented a really good course?

5. Do you have any other comments to make about effective courses?

APPENDIX C
PRE-TRANSFER INTERVIEW INFORMATION SHEET

PRE-INTERVIEWS ON TRANSFER OF TRAINING IN COOK ISLANDS

TEACHER IN-SERVICE RESEARCH PROGRAMME

Kia Orana teachers, principals and teacher educators. Thank you for agreeing to participate in this study. Your involvement is highly valued and I appreciate the time that you are able to give me to complete the interview. It is anticipated that the interview will take approximately 45 minutes.

This research is essentially a formative evaluation study that will consider the utility of transfer of training strategies for Cook Island teacher in-service training. There are a number of phases to this study, viz.,

1. Development of courses and courses implemented on the basis of a needs analysis
2. Defining and evaluation of transfer of training strategies (interviews and surveys)
3. New courses implemented incorporating suggestions from previous phase and evaluation of this development.

Your participation at this present time is concerned with phase 2. The research at this phase involves a number of interviews with individuals and groups of educators. Four groups of teachers (who have participated in phase 1) will be interviewed, as will their principals. Teacher educators (who have not necessarily participated in the courses at phase 1 but who have a knowledge of in-service training programmes) are also being interviewed to gather information on their perceptions of transfer of training strategies.

Please find enclosed the following relevant information that relates to the interview:

1. Pre - interview information

    • Background information
    • Purpose of the research
    • What is transfer of training?
    • Examples of transfer of training
    • The major questions to be asked during the interview

2. Consent form

Once again thank you for participating in this research - your participation will assist with the development of improved teacher in-service training in the Cook Islands.

Kia manuia

Lex McDonald

INTERVIEWS: PRE-INTERVIEW INFORMATION

Background Information

Once again, thank you for agreeing to take part in the interview.

This sheet gives you some information about the research that is being conducted and also asks you to give some thought to the major interview questions that you will be asked when you meet with the interviewer.

Please note that your participation is voluntary and you may withdraw at any time. Your participation is valued however and we are hopeful that you will be able to take part. I will seek your personal written approval before the interviews begin. Your responses will be audio recorded so that they can be analysed at a later date.

The information you provide is confidential and you will not be identified in any way. Information collected will be kept secure, available only to the researcher, and then after a period of three years it will be destroyed. The information collected in these interviews will be made available for you to comment on within the next 2 - 3 months.

Purpose of the Research

These interviews are part of a major research project (PhD study) undertaken in collaboration with the Cook Island authorities and participating teachers. It is hoped that the experiences of the teachers in Rarotonga and Aitutaki will provide valuable information for developing courses in the outer islands. The research is concerned with increasing teachers' opportunities **to use the course ideas in the classroom. In other words, how can we make sure that what is learned on the course is used by the teachers when they return to the classroom. The research is trying to identify from the teachers what they consider to be valuable transfer of training activities.**

Transfer of training is concerned with using / applying the course information, skills and attitudes in the work (classroom environment). We will discuss this further when we meet as a group and additional information is presented below.

What is Transfer of Training?

Transfer of training is concerned with putting into practice what we learn about, and what we learn to do on training courses. It involves the transfer of information, attitudes and skills obtained from the training to the workplace (and then continuing to use them.) So, as teachers, when we participate in an in-service course and follow this up by using the ideas from the course, transfer of training has occurred. Detailed planning is often required to ensure that transfer of training occurs although there are many strategies that can assist teachers to implement the ideas in the classroom.

Many educational course designers and planners are concerned because training does not always result in the course ideas being used successfully or maintained in the classroom. Undoubtedly there are many reasons why this might happen - for example, course content may be irrelevant, course participants unmotivated, or there may be a lack of collegial support for the participants to take part in their course. Successful courses have strategies to enhance the transfer of training and attempt to limit the impact of barriers to workplace implementation.

This research is concerned with the development of effective course strategies that would encourage Cook Island teachers to implement and successfully use the in-service training ideas in their classroom.

Some Examples of Transfer of Training

The following are examples of transfer of training:

1.   On an in-service course a teacher learns about cooperative learning strategies and how to use them in the classroom. When the teacher uses these ideas in the classroom, transfer of training has occurred.

2.   A school staff participates in a computer course that is designed to teach the use of computers in the classroom. Transfer of training occurs when the children in the classroom use the computers (following the teacher's introduction of the ideas to the classroom.)

3.   A parenting course is held to train parents on how to cope with their problem teenagers in the home. Transfer of training has occurred when the parents use these ideas in the home to help solve problems that they have with their teenagers.

As educators what we need to think about is `what can assist teachers to implement the course ideas in their classroom?' For example, one teacher believes it is very useful to make a contract with a colleague so that they help each other to use the cooperative learning ideas in the classroom, whilst another uses a `reminder chart' placed on the classroom wall to help her remember the steps involved in 'group participation.'

The Major Questions to be considered During the Interview

The following questions are the major questions that will be considered during the interview. ** I would appreciate it if you could give some thought to them before we meet.

What are the strategies, activities, ideas, suggestions, situations, etc., that promote or act as barriers to transfer of training? In particular, consider this in relation to before, during and after the course.'

The following may assist you to think about the question in more detail.

     1   BEFORE the course actually begins

- what would you consider to be important activities / information / behaviours etc., that would encourage teachers to use course ideas in the classroom, and

- what are the things that could act as barriers (discouragers) to this happening. What are the things before the course that could discourage teachers from proceeding with the course and using the ideas in the classroom?

2. DURING the course workshops, lectures and tutorials

- what training techniques, strategies, behaviours are useful to assist teachers to use the course ideas in the classroom, and

- what are the things that can act as barriers (discouragers) to this happening?

3. AFTER the course (following graduation)

- what would you consider to be important to encourage teachers to use
 (and to continue to use) course ideas in the classroom, and

- what are the things that can act as barriers (discouragers) to this happening?

** Please note: it is probably useful to consider the roles of the trainer, the participant and his/her school colleagues in answering these questions.

CONSENT FORM FOR RESEARCH PROJECT ON
TRANSFER OF TRAINING

I have read the information relating to this research and have also listened to a discussion about it. I understand that by signing this form I give my consent to take part in the research.

I understand that the following applies:

8.   I do not have to take part in this research. It is voluntary. I choose to take part.
9.   All of my comments are confidential. No one will know what I have said or written.
10. I can withdraw from this research at any time and this will be acceptable to all.
11. All the research material will be kept in a secure place and will not be made available to anyone else apart form the researcher and his assistants.
12. The research material will be destroyed 3 years after the report has been written.
13. I will be given the opportunity to comment upon the information that I provide and can change any of it if I so wish.
14. I can meet with the researcher to discuss the research at a time to be arranged.

I have read the above and agree to take part in this research

NAME:

SCHOOL:

DATE:

SIGNATURE:

APPENDIX D
CONTACT SUMMARY FORM
POST INTERVIEW FEEDBACK FORM

CONTACT SUMMARY FORM

Contact With: **Date:**   **Today's date:**

Contact Site: **Address / Location / Phone:**

This report Written by:

1. What were the main issues/themes that became apparent during this contact?

2. Summarise the information obtained on each target question(s). Were there any questions / information overlooked?

3. Anything else that was salient, interesting, illuminating or important? (Any new hypotheses / speculations / hunches?

4. What new or remaining target questions need to be considered for the next contact?

POST-INTERVIEW CONTACT SHEET

Date of Post-Interview Feedback:

Group Identification / Name of Individual:

Major Findings From the Interview

Any responses or Additional Comments to be Added to the Findings by Respondents?

Additional Questions to Ask the Respondents?

APPENDIX E
TRANSFER SURVEY

SURVEY OF PREFERRED TRANSFER OF TRAINING STRATEGIES (SPTTS)

Important Introductory Comments

Kia Orana teachers, principals and teacher educators.

Thank you for agreeing to participate in this survey. Your involvement is highly valued and I appreciate the time that you are able to give me to complete the interview. It is anticipated that the survey will take approximately 30-40 minutes. Please note that your participation is voluntary and you may withdraw at any time. Your participation is valued however and we are hopeful that you will be able to take part. I will seek your personal written approval before you begin to complete the survey.

The information you provide is confidential and you will not be identified in any way. Information collected will be kept secure, available only to the researcher, and then after a period of three years (following publication of the findings) it will be destroyed. The information collected in these interviews will be made available for you to comment on within the next 2 - 3 months.

Purpose of the Research

These interviews are part of a major research project (PhD study) undertaken in collaboration with the Cook Island authorities and participating teachers. It is hoped that the experiences of the teachers in Rarotonga and Aitutaki will provide valuable information for developing further courses in the outer islands. The research is concerned with increasing teachers' opportunities **to use the course ideas in the classroom. In other words, how can we make sure that what is learned on the course is used by the teachers when they return to the classroom. The research is trying to identify from the teachers what they consider to be valuable transfer of training activities so that this will happen.**

What is Transfer of Training?

Transfer of training is concerned with putting into practice what we learn about, and what we learn to do on a training course. It involves the transfer of information, attitudes and skills obtained from the training to the workplace (and then continuing to use them). So, as teachers, when we participate in an in-service course and follow this up by using the ideas from the course, transfer of training has occurred. Detailed planning is often required to ensure that transfer of training occurs although there are many strategies that can assist teachers to implement the ideas in the classroom.

Many educational course designers and planners are concerned because training does not always result in the course ideas being used successfully or maintained in the classroom. Undoubtedly there are many reasons why this might happen - for example, course content may be irrelevant, course participants unmotivated, or there may be a lack of collegial support for the participants to take part in their course. Successful courses have strategies to enhance the transfer of training and attempt to limit the impact of barriers to workplace implementation.

This research is concerned with the development of effective course strategies that would encourage Cook Island teachers to implement and successfully use the in-service training ideas in their classroom.

The following are examples of transfer of training:

1.   On an in-service course a teacher learns about cooperative learning strategies and how to use them in the classroom. When the teacher uses these ideas in the classroom, transfer of training has occurred.

2.   A school staff participates in a computer course that is designed to teach the use of computers in the classroom. Transfer of training occurs when the children in the classroom use the computers (following the teacher's introduction of the ideas to the classroom).

3.   A parenting course is held to train parents on how to cope with their problem teenagers in the home. Transfer of training has occurred when the parents use these ideas in the home to help solve problems that they have with their teenagers.

As educators what we need to think about is `what can assist teachers to implement the course ideas in their classroom?' For example, one teacher believes it is very useful to make a contract with a colleague so that they help each other to use the cooperative learning ideas in the classroom. Another teacher uses a `reminder chart' placed on the classroom wall to help her remember the steps involved in 'group participation.'

Instructions: Completing the Survey Forms

This research is concerned with the identification of strategies, ideas, etc that will assist teachers to implement course ideas in their classrooms. Prior to this survey, a number of your colleagues identified a very wide range of strategies, etc., that are considered useful for helping the teacher implement course ideas in the classroom. You are required now to consider these suggestions and rate each one as:
1.   Very, very important; or
2.   Very important; or
0.   Less important.

Please place a 1, 2 or 0 in the box beside each statement. Do not omit any items. The tutor will assist you with any terms that are unfamiliar to you and can read items to you if desired.

The research at this phase involves a number of teachers, principals and teacher educators. Each will be asked to complete this survey form.

If you agree to complete this survey form, please complete the consent form now.

Once again thank you for participating in this research - your participation will assist with the development of improved teacher in-service training in the Cook Islands.

Kia manuia
Lex McDonald

SURVEY OF PREFERRED TRANSFER OF TRAINING STRATEGIES (SPTTS)

BEFORE THE COURSE: ROLE OF THE **TRAINER**, HIS / HER BEHAVIOURS, ACTIVITIES, ETC., AND TRAINING FEATURES AND ACTIVITIES THAT COULD ESTABLISH A CLIMATE FOR TRANSFER OF TRAINING TO OCCUR. (Do the following activities, etc., really encourage the teacher to want to do the course?)

1.	Information is provided to the teacher on the **course content and the methods** (i.e. what the course is all about and how the trainers will teach it).	
2.	Information is provided to the teacher on the **course requirements** (e.g. attendance, assignments, participation, hours required).	
3.	Information is provided to the teacher on what he / she will **be able to do by the end of the course** (e.g. the new skills teachers will have).	
4.	Information is provided to the teachers, Ministry, principals, etc on **why this course is useful** and what it will be able to achieve (i.e. this is marketing the course - selling it)	
5.	Before the course starts **social events** and `get-togethers' are planned so trainers and course members can all meet one another. (e.g. pre-course kai kai)	
6.	Before the course starts **introductory course tasks and activities** are given to the teacher to get him / her thinking about the course (e.g. some reading about one of the topics).	
7.	Information is provided to the teacher to show that the course will be **relevant** (useful) for his / her work in the classroom.	
8.	The trainer meets with the teacher to gather information from him / her about **abilities, interests, needs and the teacher's requirements** for the course.	
9.	The **time** of the course (i.e. when it is held) is convenient to the teacher.	
10.	There is a **salary increase** offered to the teacher if the course is completed.	
11.	There is a **certificate awarded** to the teacher if the course is completed.	
12.	The new skills, certificate, etc., that the course is offering could **lead to the teacher gaining promotion.**	
13.	The training programme information indicates to the teacher that **improved teaching** in the classroom will result.	
14.	When teachers hear about the training programme, they are encouraged to enrol in the course because **other teachers are doing extra work** to improve themselves.	
15.	The trainer has a **likeable and pleasant personality.**	
16.	**The trainer has background knowledge** about the culture, local teaching situation, the schools, resources, the educational system, etc.	
17.	The **trainers (or MOE, etc) select the teachers** to attend the course	
18.	It is known that the course will not only help the teacher but also **benefit his / her school and colleagues**	

Please put in each box either a <u>1, 2 or 0</u>.
     1 = it is very, very important (critical) to consider
     2 = it is very important to consider
     0 = not so important

BEFORE THE COURSE: ROLE OF THE TEACHER, HIS / HER BEHAVIOURS AND ACTIVITIES THAT COULD ESTABLISH A CLIMATE FOR TRANSFER OF TRAINING TO OCCUR.
(Do the following characteristics encourage the teacher's participation and success on the course?)

1.	The teacher is able to set **personal goals (to improve) and make a commitment** to complete the course.	
2.	The teacher has a high level of **motivation**, a **positive attitude** toward the course and is **eager** to take part.	
3.	The teacher is **confident** that he / she can do the work required to complete the course.	
4.	The teacher is able to **relate easily** to others and is socially aware.	
5.	The teacher is willing to **try new ideas**, is **flexible**, can **change**, and can **modify his/her attitudes** if necessary.	
6.	The teacher is willing to **share ideas** with others.	
7.	The **teacher chooses to attend** the course (not selected by others)	

BEFORE THE COURSE: ROLE OF THE SCHOOL AND ACTIVITIES RELATED TO THE SCHOOL THAT COULD ESTABLISH A CLIMATE FOR TRANSFER OF TRAINING TO OCCUR. (Do the following activities, etc., encourage the teacher's participation and success on the course?)

1.	**School colleagues and/or other course members** can help the teacher by **supporting and encouraging** their enrolment on the course.	
2.	The school **principal**, deputy, senior teachers, school committee, etc., **assist / support the teacher** to enrol on the course.	
3.	**The school staff** (e.g. principal, deputy, other teachers) consider the **course to be relevant** to the classroom / school.	
4.	The **school principal becomes involved** in finding out about the course, attends meetings about it, seeks information about it, gets involved with the teacher, etc.	

BEFORE THE COURSE: OTHER ACTIVITIES, ETC., THAT COULD ESTABLISH A CLIMATE FOR TRANSFER OF TRAINING TO OCCUR. (Do the following activities, etc., encourage the teacher's participation and success on the course?)

1.	The **community will benefit** from the course.	
2.	**Ministry of Education support** for the course is made very clear.	
3.	The teacher's **family gives the teacher support** for enrolling on the course.	
4.	**Support of some sort** is available for the teacher to enrol on the course.	

Please put in each box either a 1, 2 or 0.
    1 = it is very, very important (critical) to consider
    2 = it is very important to consider
    0 = not so important

BEFORE THE COURSE: ACTIVITIES THAT DISCOURAGE, ACT AS BARRIERS TO ENROLMENT ON A TRAINING COURSE (Do the following ideas, activities, events, etc., stop or discourage the teacher from taking an interest and enrolling on the course?)

1.	The course is held at an **inconvenient time** (of the year, of the day)	
2.	The teacher has too many other **responsibilities at school**.	
3.	The teacher has **another paid job to do** and cannot attend the course.	
4.	The teacher has **family responsibilities** or the family criticise the teacher for wanting to enrol on the course.	
5.	The teacher's **colleagues are critical or not interested** in the teacher being involved in the course.	
6.	There is **no reward** (e.g. extra salary) offered to do the course.	
7.	The teacher has been on **boring, uninteresting courses previously** and expects all others to be the same.	
8.	The **principal and / or Ministry of Education does not get enough information** about the course.	
9.	The **colleagues** of the teacher **do not get enough information** about the course.	
10.	The **teacher** himself / herself **does not get enough information** about the course.	
11.	The **course requirements** (attendance, punctuality, assignments) are **too demanding** on the teacher.	
12.	The **trainer is too superior**, thinks he / she has all of the answers and is not interested in the teacher's views.	
13.	The **teacher lacks confidence** to take part in the training course.	
14.	People think (including the teacher himself / herself) that the **teacher is too old** to take part in the course.	
15.	The **trainer is not known** to the teachers.	
16.	The thought of having to attend a course in the **hot weather.**	

Please put in each box either a 1, 2 or 0
      1 = it is very, very important (critical) to consider
      2 = it is very important to consider
      0 = not so important

DURING THE COURSE: ROLE OF THE **TRAINER**, HIS / HER BEHAVIOURS, ACTIVITIES, ETC., AND TRAINING FEATURES AND ACTIVITIES THAT COULD ESTABLISH A CLIMATE FOR TRANSFER OF TRAINING TO OCCUR. (Do the following activities, etc., encourage the teacher to want to use the course ideas in the classroom?)

1.	The **training style** (i.e. the methods the trainers use to teach the teachers) is satisfying for the teachers.	
2.	The course is **well planned and organised.**	
3.	The **course material is relevant** to the teacher's class / school.	
4.	Information is provided to the teacher on the **specific requirements of the course** (e.g. times of each session, assignment topics and requirements, catch-up work)	
5.	The trainer **maintains contact with the teacher** during the course (e.g. visits to the classroom, tutorial help, letters, faxes)	
6.	The training course **helps teachers to network**, get-together to chat about the course (i.e. during breaks and outside of the course itself).	
7.	The training **encourages the teachers to interact** and work together on the course.	
8.	The trainer has **pleasant personal qualities** (e.g. can be trusted, is fair, lively, interested in the teacher, helpful) important for the success of the course).	
9.	During the training the **teacher is rewarded** for his / her efforts (e.g. praise from the trainer / other teachers / colleagues, etc., work put on display)	
10.	**Additional time (if necessary) is made available** to complete tasks, assignments, etc.	
11.	The trainer **meets with the principal** and / or senior teachers to discuss the teacher's progress	

DURING THE COURSE: ROLE OF THE TEACHER, HIS / HER BEHAVIOURS AND ACTIVITIES THAT COULD ESTABLISH A CLIMATE FOR TRANSFER OF TRAINING TO OCCUR. (Do the following characteristics encourage and make it easier for the teacher to use the ideas in the classroom?)

1.	The teacher has **organised himself / herself** to do the course and has put in place arrangements to make the course 'run' smoothly.	
2.	The teacher **can understand what is happening on the course** (e.g. can understand the language and the ideas being presented.)	
3.	The teacher will **try new ideas**, be flexible in thinking, change his / her approach to teaching, and change his / her attitudes.	
4.	The teacher **participates in the course** activities.	
5.	**The teacher keeps the handouts and takes notes** so that they **can be used later** to check out and implement ideas.	
6.	The teacher **interacts and relates to others** easily on the course.	
7.	The teacher **uses evaluation** (by self, students, colleagues, principal, etc.) techniques to reflect on his / her new work in the classroom.	

Please put in each box either a <u>1, 2 or 0</u>.

        1 = it is very, very important (critical) to consider

        2 = it is very important to consider

        0 = not so important

DURING THE COURSE: ROLE OF THE SCHOOL AND ACTIVITIES RELATED TO THE SCHOOL THAT COULD ESTABLISH A CLIMATE FOR TRANSFER OF TRAINING TO OCCUR. (Do the following activities, etc., encourage the teacher to use the course ideas in the classroom?)

1.	The teacher's **colleagues** and / or course participants **share course ideas** and support one another.
2.	The **principal supports** and / or helps the teacher during the course.
3.	School **resources and facilities are made available** for the teacher to use during the course.
4.	The **course ideas** are seen to be not only **valuable** for the teacher but also for the teacher's **colleagues, the students, etc**., in the school.

DURING THE COURSE: OTHER ACTIVITIES, ETC., THAT COULD ESTABLISH A CLIMATE FOR TRANSFER OF TRAINING TO OCCUR. (Do the following activities, etc., encourage the teacher's to use the course ideas in the classroom?)

1.	There is **Ministry of Education support and interest** in the course and this is maintained during the course.
2.	The teacher's **family support** the participation in the course.

DURING THE COURSE: ACTIVITIES THAT DISCOURAGE, ACT AS BARRIERS TO TRANSFER OF TRAINING. (Do the following ideas, activities, events, etc., stop or discourage the teacher from using the course ideas in the classroom?)

1.	There is **insufficient time** to complete the assignments, tasks, etc.
2.	The teacher's **colleagues are not interested** or make criticisms about the course.
3.	The **organisation and / or management of the school does not support the teacher** while he / she is doing the course.
4.	The **principal is not helpful** and / or lacks interest in the course.
5.	**Other events** (e.g. exams, cultural events, sports) interrupt participation in the course.
6.	The teacher has **personal difficulties** (e.g. transport, sickness) that make course attendance a problem.
7.	School **resources and / or facilities are not available** to be used during the course.
8.	The **training programme is not helpful enough** (e.g. not enough information, not enough help to complete assignments).

Please put in each box either a <u>1, 2 or 0</u>.
 1 = it is very, very important (critical) to consider
 2 = it is very important to consider
 0 = not so important

9.	The course is **difficult for the teacher to understand** (e.g. can not understand the language, can not understand the ideas).	
10.	The training **course requirements** (e.g. attendance, punctuality, assignment completion time) are too difficult for the teacher.	
11.	There is **no contact with the trainers** during the follow-up periods between sessions.	
12.	The **family do not provide support and / or criticise** the teacher's involvement in the course.	
13.	The teacher is **over-worked** at school.	

AFTER THE COURSE: ROLE OF THE **TRAINER**, HIS / HER BEHAVIOURS, ACTIVITIES, ETC., AND TRAINING FEATURES AND ACTIVITIES THAT PROMOTE TRANSFER OF TRAINING. (Do the following activities, etc., encourage the teacher to continue to use the course ideas in the classroom?)

1.	The trainer **maintains contact** with the teacher (e.g. visits, letters etc., and provides feedback on teacher performance).	
2.	The trainer organises a `pep' course (e.g. a follow-up review day after the course).	
3.	The trainer provides some **reward** to the course participant (e.g. shows other teachers the work of the teacher; informs the principal about the good work the teacher is doing).	
4.	The trainer provides a **report to the principal** outlining the new skills etc that the teacher developed on the course.	

AFTER THE COURSE: ROLE OF THE TEACHER, HIS / HER BEHAVIOURS AND ACTIVITIES THAT PROMOTE TRANSFER OF TRAINING. (Do the following characteristics encourage and make it easier for the teacher to continue to use the ideas in the classroom?)

1.	The teacher **keeps his / her notes,** handouts, assignments, etc., **to help plan future work** in the classroom and in other classrooms.	
2.	The teacher **uses evaluation** (by self, students, colleagues, principal, etc) techniques to continue **to improve upon the ideas**.	
3.	The **teacher's improvement** (i.e. improved teaching skills) is rewarding and maintains the teacher's interest in using them.	
4.	The teacher **takes or is given responsibility in the school** to develop the course ideas.	
5.	The teachers on the course **develop a booklet of the course ideas, suggestions, activities, etc**., for their use and for the other teachers in the schools.	

Please put in each box either a 1, 2 or 0.
    1 = it is very, very important (critical) to consider
    2 = it is very important to consider
    0 = not so important

AFTER THE COURSE: ROLE OF THE SCHOOL AND ACTIVITIES RELATED TO THE SCHOOL THAT PROMOTE TRANSFER OF TRAINING. (Do the following activities, etc., encourage the teacher to continue to use the course ideas in the classroom?)

1.	The **benefits** (from the course) that are given to the others in the **school** (e.g. colleagues, students) maintain the teacher's interest and use of course the ideas.	
2.	The **school management plan, curriculum**, etc., includes **the course ideas**.	
3.	School **colleagues** and course participants **continue to support the teacher** and be interested in the ideas.	
4.	**Organised visits to other teachers** and schools are arranged for the course participant and this maintains his / her interest in the ideas and use of them in the classroom.	
5.	The **principal provides support and encouragement** to the teacher.	
6.	**Resources are made available** and this maintains teacher interest and use of the strategies in the classroom.	

AFTER THE COURSE: OTHER ACTIVITIES, ETC. THAT PROMOTES TRANSFER OF TRAINING. (Do the following activities, etc., encourage the teacher to continue to use the course ideas in the classroom?)

1.	**Parent feedback / support** maintains teacher interest and use of the strategies after the course.	
2.	**Ministry of Education support and interest** helps the teacher to keep using the ideas.	
3.	**Evaluation of the ideas and support** from community groups, and important people (e.g. Aronga Mana, Minister of Education) helps the teacher to maintain an interest and use the course strategies in the classroom.	

Please put in each box either a <u>1, 2 or 0</u>.
   1 = it is very, very important (critical) to consider
   2 = it is very important to consider
   0 = not so important

AFTER THE COURSE: ACTIVITIES THAT DISCOURAGE, ACT AS BARRIERS TO TRANSFER OF TRAINING. (Do the following ideas, activities, events, etc., stop or discourage the teacher from continuing to use the course ideas in the classroom?)

1.	The **teacher's colleagues are not interested** and / or criticise the course ideas.	
2.	**School management and organisation does not help** the teacher to keep using the ideas in the classroom.	
3.	**School resources and facilities are not available** for the teacher to use and this makes it difficult to use the course ideas.	
4.	There is **no follow-up contact** from the trainers to discuss ideas and to help the teacher evaluate the ideas in use.	
5.	There is **no reward** for the teacher to carry on using the ideas in the classroom.	
6.	The **demands placed on the teacher** after the course (e.g. demonstrations to other teachers; other work) are too great for the teacher to maintain interest and use of the strategies.	
7.	The **Ministry of Education policies and plans do not sufficiently support the teacher** to maintain an interest and use of the course ideas.	
8.	**Events** (e.g. sports, school trips, cultural events) are so numerous that implementing any new ideas is a problem.	
9.	The **students in the teacher's class show insufficient improvement** when the new ideas are used and therefore the teacher loses interest in using the course ideas.	
10.	The **teacher has insufficient confidence** to carry on and maintain the changes in the classroom.	
11.	The **principal is not helpful** or shows little interest in the new ideas.	
12.	The **teacher has insufficient skill and / or information** to continue to use the ideas.	

Please put in each box either a <u>1, 2 or 0</u>.
    1 = it is very, very important (critical) to consider
    2 = it is very important to consider
    0 = not so important

APPENDIX F

THINGS I KNOW AND THINGS I WANT TO KNOW

Table F.1:

Grid - What is Known -Pre- and Post Course (N = 29)

PRE-COURSE	POST-COURSE
Teacher-Student Interaction Issues • Reward, encourage, praise (14)* • Show care and love (3) • Don't ignore or criticise (2) • Treat same as peers (1)	**Teacher-Student Interaction Issues** • Reward, encourage, praise (3) • Motivate the student (1) • Show care (1) • Talk to the student (1)
Assessment and Planning • Get background information (4) • Locate weaknesses (4) • Find out needs (1)	**Assessment and Planning** • Get background information (7) • Assess before and after learning (5) • Locate weaknesses (1) • IEP (8) • Plan work for student (4)
Instructional Strategies • Activities at level to meet needs (11) • Have patience (8) • Speak slowly and clearly (8) • Give easier work (6) • 1:1 extra attention (6) • Teacher explains more (3) • Return to basics (2) • Use facial expressions (2) • Use outside education activities (2) • Give more time to complete (2) • Interesting and enjoyable lessons (2) • Students need to read more (1) • Students need to speak more (1) • Group work (1) • Senses education (1) • Teacher demonstration (1) • Peer tutoring (1) • Students rechecking work (1) • Realistic expectations	**Instructional Strategies** • Group work and cooperative learning (10) • Bloom's levels of thinking (8) • Have patience (6) • Speak slowly and clearly (5) • Activities (4) • Gagne's teaching-learning ideas (3) • Extra attention (2) • Give easier work (2) • Use outside education activities (1) • Social activities (1) • Students need to read more (1)
Other • Special education teacher needed (1)	**Other** • Teacher attitudes (2) • Inclusion philosophy (1) • Factors in class contributing to problems (1) • Parent involvement (1)

* The numeral refers to the frequency of the suggestions

Table F.2:
Grid - Want to Know More About (Pre- and Post Course Data)

PRE-COURSE	POST-COURSE
Teacher-Student Interaction Issues • Peer group relationships (3) • Building confidence (1) • Keeping student happy (1) • Motivating the student (1)	**Teacher-Student Interaction Issues** • Care and loving relationship (1) • Peer group relationships (1) • Giving responsibility to student (1) • Establishing facilitative environments (4)
Assessment and Planning • Getting background information (15) • How to assess (8) • Locating weaknesses and strengths (2) • Levels of ability (1) • Student interests and likes (1) • Reading level (1) • Planning (3)	**Assessment** • How to assess (17) • Getting background information (13) • Identifying learning needs (3) • Deciding what to teach (1) • Levels of ability (3) • Student interests and likes (1) • Locating weaknesses (1) • Monitoring progress (1) • IEP (18) • Planning (5)
Instructional Strategies • Using appropriate activities and effective methods (26) • Getting and using resources (10) • Coping with braille, dyslexic, stuttering, etc. (8) • Teaching reading (6) • Cooperative learning (3) • Basic skills (e.g. picture matching) (2) • Getting the students to be more creative (2) • Story writing (1) • Using outside education activities (1) • Teaching physical skills (1) • How to develop interesting lessons (1) • More time to teach student (1)	**Instructional Strategies** • Using appropriate activities and methods (14) • Getting and using resources (8) • Group work and cooperative learning (7) • Bloom's levels of thinking (3) • Gagne's teaching-learning ideas (1) • Coping with sign language (1) • Basic skills (eg., matching pictures) (1) • Using outside education activities (1) • Teacher adapting to level (1) • Test-teach-test approach (1) • Individual accountability procedures (1)
Other • Understanding causes (4) • Student attitudes (2) • Working with parents (2) • Student promotion (1) • Facilitative classroom setting (1) • Teacher attitudes (1)	**Other** • Teacher attitudes (4) • Working with parents (4) • General case management (3) • Behaviour problems (7) • Understanding causes (1) • Student promotion (1) • Teacher networking (1)

APPENDIX G
RANK OF ALL SURVEY ITEMS
RANK OF FACILITATIVE ITEMS
RANK OF BARRIER ITEMS

RANKING OF FACILITATIVE AND BARRIER SPTTS ITEM SCORES

Table G.1	
Ranking of All TOT Strategy and Barrier Item Scores for All Key Role Players and Time Periods	
Rank	
1=	The teacher will **try new ideas**, be flexible in thinking, change his/her approach to teaching, and change his/her attitudes.) (3DT)94[57]
1=	The teacher **keeps his/her notes,** handouts, assignments, etc., **to help plan future work** in the classroom and in other classrooms. (1AT)94
3	The course is **well planned and organised.**(2DTr)93
4	The teacher's **colleagues** and/or course participants **share course ideas** and support one another.(1DS)92
5=	**The teacher keeps the handouts and takes notes** so that they **can be used later** to check out and implement ideas.(5DT)90
5=	The teacher **uses evaluation** (by self, students, colleagues, principal, etc.) techniques to reflect on his/her new work in the classroom. (7DT)90
7=	The **course ideas** are seen to be not only **valuable** for the teacher but also for the teacher's **colleagues, the students, etc**., in the school.(4DS)89
7=	The trainer **maintains contact** with the teacher (visits, letters etc., and provides feedback on teacher performance.)(1ATr)89
7=	The teacher uses evaluation (by self, students, colleagues, principal, etc.) techniques to continue to improve upon ideas.(2AT)89
10	The teacher **can understand what is happening on the course** (e.g. can understand the language and the ideas being presented.)(2DT)88
11=	The trainer **maintains contact with the teacher** during the course (visits to the classroom, tutorial help, letters, faxes, etc.)(5DTr)87
11=	The **principal provides support and encouragement** to the teacher.(5AS)87
11=	Information is provided to the teacher on the **course content and the methods** (i.e. what the course is all about and how the trainers will teach it.(1BTr)87
11=	The **training style** (i.e. the methods the trainers use to teach the teachers) is satisfying for the teachers.(1DTr)87
15=	Information is provided to the teacher on the **course requirements** (e.g. attendance, assignments, participation, hours required).(2BTr)86
15=	The teacher is willing to **try new ideas**, is **flexible**, can **change**, and can **modify his/her attitudes** if necessary.(5BT)86
15=	The **principal supports** and/or helps the teacher during the course.(2DS)86
15=	The **teacher's improvement** (i.e. improved teaching skills) is rewarding and maintains the teacher's interest in using them.(3AT)86
15=	The **school management plan, curriculum**, etc., includes **the course ideas**.(2AS)86
20=	The **school principal becomes involved** in finding out about the course, attends meetings about it,

[57] Key: Example - '(3DT) 94' refers to 3rd item in during X teacher section of the SPTTS with item score of 94.

	seeks information about it, gets involved with the teacher, etc.(4BS)85
20=	The teacher has **organised himself/herself** to do the course and has put in place arrangements to make the course `run' smoothly.(1DT)85
20=	The teacher **participates in the course** activities.(4 DT)85
20=	School **resources and facilities are made available** for the teacher to use during the course.(3DS)85
24	**Resources are made available** and this maintains teacher interest and use of the strategies in the classroom.(6AS)84
25=	The teacher is willing to **share ideas** with others.(6BT)83
25=	**School colleagues and/or other course members** can help the teacher by **supporting and encouraging** their enrolment on the course.(1BS)83
25=	The training **encourages the teachers to interact** and work together on the course. (7DTr)83
25=	There is **Ministry of Education support and interest** in the course and this is maintained during the course.(1DO)83
25=	The **benefits** (from the course) that are given to the others in the **school** (e.g. colleagues, students, etc) maintains the teacher's interest and use of course ideas. (1AS)83
30=	The **course material is relevant** to the teacher's class/school.(3DTr)82
30=	Information is provided to the teachers, Ministry, principals, etc. on **why this course is useful** and what it will be able to achieve (i.e. this is marketing the course - selling it) (4BTr)82
30=	During the training the **teacher is rewarded** for his/her efforts (e.g. praise from the trainer/other teachers/colleagues, work put on display, etc)(9DTr)82
33	**Ministry of Education support** for the course is made very clear.(2BO)81
34=	There is a **certificate awarded** to the teacher if the course is completed.(11BTr)80
34=	School **colleagues** and course participants **continue to support the teacher** and be interested in the ideas. (3AS)80
36=	The trainer organises a `pep' course (e.g. a follow-up review day after the course).(2ATr)79
36=	The teacher is able to set **personal goals (to improve) and make a commitment** to complete the course. (1BT)79
36=	Information is provided to the teacher on the **specific requirements of the course** (e.g. times of each session, assignment topics and requirements, catch-up work) (4DTr)79
39=	Information is provided to the teacher to show that the course will be **relevant** (useful) for his/her work in the classroom.(7BTr)78
39=	The teacher is **confident** that he/she can do the work required to complete the course.(3BT)78
41=	The teacher has a high level of **motivation**, **a positive attitude** toward the course and is **eager** to take part.(2BT)77
41=	The school **principal**, deputy, senior teachers, school committee, etc., **assist/support the teacher** to enrol on the course.(2BS)77
41=	The teacher's **family support** the participation in the course.(2DO)77
41=	**Ministry of Education support and interest** helps the teacher to keep using the ideas.(3AO)77
45	**The school staff** (e.g. principal, deputy, other teachers) consider the **course to be relevant** to the classroom / school.(3BS)76
46=	The training course **helps teachers to network**, get-together to chat about the course (i.e. during breaks and outside of the course itself).(6DTr)75
46=	The teacher **takes or is given responsibility in the school** to develop the course ideas.(4AT)75
48=	The trainer provides a **report to the principal** outlining the new skills etc. that the teacher developed

	on the course.(4ATr)74
48=	**School management and organisation does not help** the teacher to keep using the ideas in the classroom. (2ASBr)74
50=	**The trainer has background knowledge** about the culture, local teaching situation, the schools, resources, the educational system, etc.(16BTr)73
50=	**Organised visits to other teachers** and schools are arranged for the course participant and this maintains his/her interest in the ideas and use of them in the classroom. (4AS)73
52=	The training programme information indicates to the teacher that **improved teaching** in the classroom will result.(13BTr)72
52=	It is known that the course will not only help the teacher but also **benefit his/her school and colleagues.** 18BTr)72
54=	There is **no follow-up contact** from the trainers to discuss ideas and to help the teacher evaluate the ideas in use. (4ATrBr)71
54=	Before the course starts **introductory course tasks and activities** are given to the teacher to get him/her thinking about the course (e.g. some reading about one of the topics).(6BTr)71
54=	There is a **salary increase** offered to the teacher if the course is completed. (10BTr)71
57=	There is **no reward** (e.g. extra salary) offered to do the course.(6BTrBr)70
57=	**School resources and facilities are not available** for the teacher to use and this makes it difficult to use the course ideas.(3ASBr)70
57=	The course is **difficult for the teacher to understand** (e.g. can not understand the language, can not understand the ideas).(9DTBr)70
60	The teachers on the course **develop a booklet of the course ideas, suggestions, activities, etc**., for their use and for the other teachers in the schools. (5AT)69
61=	Information is provided to the teacher on what he/she will **be able to do by the end of the course** (e.g. the new skills teachers will have).(3BTr)68
61=	The trainer **meets with the principal** and/or senior teachers to discuss the teacher's progress.(11DTr)68
61=	There is **no contact with the trainers** during the follow-up periods between sessions.(11DTrBr)68
61=	The teacher's **family gives the teacher support** for enrolling on the course.(3BO)68
65=	The trainer meets with the teacher to gather information from him/her about **abilities, interests, needs and the teacher's requirements** for the course.(8BTr)67
65=	The new skills, certificate, etc., that the course is offering could **lead to the teacher gaining promotion.** (12BTr)67
67=	The **principal is not helpful** or shows little interest in the new ideas.(11ASBr)66
67=	School **resources and/or facilities are not available** to be used during the course.(7DDBr)66
67=	The **teacher chooses to attend** the course (not selected by others).(7BT)66
67=	The **organisation and/or management of the school does not support the teacher** while he/she is doing the course.(3DSBr)66
67=	There is **no reward** for the teacher to carry on using the ideas in the classroom.(5ASBr)66
67=	The **Ministry of Education policies and plans do not sufficiently support the teacher** to maintain an interest and use the course ideas.(7AOBr)66
73=	The **training programme is not helpful enough** (e.g. not enough information, not enough help to complete assignments).(8DTrBr)65
73=	**Support of some sort** is available for the teacher to enrol on the course.(4BO)65
73=	**Additional time (if necessary) is made available** to complete tasks, assignments, etc.(10DTr)65

76=	The teacher is able to **relate easily** to others and is socially aware.(4BT)64
76=	The **teacher has insufficient skill and/or information** to continue to use the ideas.(12ATBr)64
76=	The teacher has too many other **responsibilities at school**.(2BSBr)64
79=	**Parent feedback/support** maintains teacher interest and use of the strategies after the course.(1AO)63
79=	The **time** of the course (i.e. when it is held) is convenient to the teacher.(9BTr)63
79=	The course is held at an **inconvenient time** (of the year, of the day)(1BTrBr)63
79=	The **teacher's colleagues are not interested** and/or criticise the course ideas.(1ASBr)63
83=	The trainer has **pleasant personal qualities** (can be trusted, is fair, lively, interested in the teacher, helpful, etc.) important for the success of the course.(8DTr)62
83=	The **demands placed on the teacher** after the course (e.g. demonstrations to other teachers; other work) are too great for the teacher to maintain interest and use of the strategies.(6ASBr)62
83=	The trainer has a **likeable and pleasant personality.**(15BTr)62
83=	The teacher has **personal difficulties** (e.g. transport, sickness) that make course attendance a problem. (6DTBr)62
87=	When teachers hear about the training programme, they are encouraged to enrol in the course because **other teachers are doing extra work** to improve themselves. (14BTr)61
87=	The **teacher** himself/herself **does not get enough information** about the course.(10BTrBr)61
87=	The **teacher has insufficient confidence** to carry on and maintain the changes in the classroom.(10ATBr)61
87=	The **students in the teacher's class show insufficient improvement** when the new ideas are used and therefore the teacher loses interest in using the course ideas.(9ASBr)61
91=	**Other events** (e.g. exams, cultural events, sports) interrupt participation in the course.(5DOBr)60
91=	There is **insufficient time** to complete the assignments, tasks, etc.(1TrDBr)60
91=	The teacher **interacts and relates to others** easily on the course. (6DT)60
94	The teacher has **family responsibilities** or the family criticise the teacher for wanting to enrol on the course. (4BOBr)59
95=	**Evaluation of the ideas and support** from community groups, and important people (e.g. Aronga Mana, Minister of Education) helps the teacher to maintain an interest and use the course strategies in the classroom. (4AO)58
95=	The training **course requirements** (e.g. attendance, punctuality, assignment completion time) are too difficult for the teacher.(10DTrBr)58
95=	The teacher is **over-worked** at school.(13DSBr)58
98=	The **principal is not helpful** and/or lacks interest in the course.(4DSBr)57
98=	The **principal and/or Ministry of Education does not get enough information** about the course. (8BTrBr)57
100=	The **trainer is too superior**, thinks he/she has all of the answers and is not interested in the teacher's views. (12BTrBr)56
100=	The **course requirements** (attendance, punctuality, assignments) are **too demanding** on the teacher. (11BTrBr)56
102=	The **community will benefit** from the course.(1BO)54
102=	The **teacher lacks confidence** to take part in the training course.(13BTTBr)54
104	The **colleagues** of the teacher **do not get enough information** about the course. (9BSBr)53
105=	The **family do not provide support and/or criticise** the teacher's involvement in the course.(12DOBr)49

105=	Before the course starts **social events** and `get-togethers' are planned so trainers and course members can all meet one another. (e.g. pre-course *kai kai*).(5BTr)49
107	The teacher has been on **boring, uninteresting courses previously** and expects all others to be the same. (7BTrBr)48
108=	People think (including the teacher himself/herself) that the **teacher is too old** to take part in the course. (14BTBr)47
108=	The teacher's **colleagues are not interested** or make criticisms about the course.(2DSBr)47
110	The teachers **colleagues are critical or not interested** in the teacher being involved in the course.(5BSBr)4
111	The **trainers (or MOE, etc.) select the teachers** to attend the course. (17BTr)45
112=	The teacher has **another paid job to do** and can not attend the course.(3BOBr)44
112=	The trainer provides some **reward** to the course participant (e.g. shows other teachers the work of the teacher; informs the principal about the good work the teacher is doing.) (3ATr)44
114	The thought of having to attend a course in the **hot weather.**(164BTrBr)43
115	The **trainer is not known** to the teachers.(15BTrBr)41
116	**Events** (e.g. sports, school trips, cultural events) are so numerous that implementing any new ideas is a problem.(8AOBr)41

Table G.2

Ranking of All Facilitative TOT Strategy Item Scores for All Key Role Players and Time Periods

Rank	Overall Rank	
1=	1=	The teacher will **try new ideas**, be flexible in thinking, change his/her approach to teaching, and change his/her attitudes.) (3DT)94[58]
1=	1=	The teacher **keeps his/her notes,** handouts, assignments, etc., **to help plan future work** in the classroom and in other classrooms. (1AT)94
3	3	The course is **well planned and organised.**(2DTr)93
4	4	The teacher's **colleagues** and/or course participants **share course ideas** and support one another. (1DS)92
5=	5=	**The teacher keeps the handouts and takes notes** so that they **can be used later** to check out and implement ideas.(5DT)90
5=	5=	The teacher **uses evaluation** (by self, students, colleagues, principal, etc.) techniques to reflect on his/her new work in the classroom. (7DT)90
7=	7=	The **course ideas** are seen to be not only **valuable** for the teacher but also for the teacher's **colleagues, the students, etc**., in the school.(4DS)89
7=	7=	The trainer **maintains contact** with the teacher (visits, letters etc., and provides feedback on teacher performance).(1ATr)89
7=	7=	The teacher uses evaluation (by self, students, colleagues, principal, etc.) techniques to continue to improve upon ideas.(2AT)89
10	10	The teacher **can understand what is happening on the course** (e.g. can understand the language and the ideas being presented).(2DT)88
11=	11=	The trainer **maintains contact with the teacher** during the course (visits to the classroom,

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[58] Key: Example - '(3DT) 94' refers to 3rd item in during X teacher section of the SPTTS with item score of 94.

		tutorial help, letters, faxes, etc.)(5DTr)87
11=	11=	The **principal provides support and encouragement** to the teacher.(5AS)87
11=	11=	Information is provided to the teacher on the **course content and the methods** (i.e. what the course is all about and how the trainers will teach it.(1BTr)87
11=	11=	The **training style** (i.e. the methods the trainers use to teach the teachers) is satisfying for the teachers. (1DTr)87
15=	15=	Information is provided to the teacher on the **course requirements** (e.g. attendance, assignments, participation, hours required).(2BTr)86
15=	15=	The teacher is willing to **try new ideas**, is **flexible**, can **change**, and can **modify his/her attitudes** if necessary.(5BT)86
15=	15=	The **principal supports** and/or helps the teacher during the course.(2DS)86
15=	15=	The **teacher's improvement** (i.e. improved teaching skills) is rewarding and maintains the teacher's interest in using them.(3AT)86
15=	15=	The **school management plan, curriculum**, etc., includes **the course ideas**. (2AS)86
20=	20=	The **school principal becomes involved** in finding out about the course, attends meetings about it, seeks information about it, gets involved with the teacher, etc. (4BS)85
20=	20=	The teacher has **organised himself/herself** to do the course and has put in place arrangements to make the course `run' smoothly.(1DT)85
20=	20=	The teacher **participates in the course** activities.(4 DT)85
20=	20=	School **resources and facilities are made available** for the teacher to use during the course. (3DS)85
24	24	R**esources are made available** and this maintains teacher interest and use of the strategies in the classroom.(6AS)84
25=	25=	The teacher is willing to **share ideas** with others.(6BT)83
25=	25=	**School colleagues and/or other course members** can help the teacher by **supporting and encouraging** their enrolment on the course.(1BS)83
25=	25=	The training **encourages the teachers to interact** and work together on the course. (7DTr)83
25=	25=	There is **Ministry of Education support and interest** in the course and this is maintained during the course.(1DO)83
25=	25=	The **benefits** (from the course) that are given to the others in the **school** (colleagues, students, etc) maintains the teacher's interest and use of course the ideas. (1AS)83
30=	30=	The **course material is relevant** to the teacher's class/school.(3DTr)82
30=	30=	Information is provided to the teachers, Ministry, principals, etc on **why this course is useful** and what it will be able to achieve (i.e. this is marketing the course - selling it) (4BTr)82
30=	30=	During the training the **teacher is rewarded** for his/her efforts (praise from the trainer/other teachers/colleagues, work put on display, etc.).(9DTr)82
33	33	**Ministry of Education support** for the course is made very clear.(2BO)81
34=	34=	There is a **certificate awarded** to the teacher if the course is completed. (11BTr)80
34=	34=	School **colleagues** and course participants **continue to support the teacher** and be interested in the ideas.(3AS)80
36=	36=	The trainer organises a `**pep' course** (e.g. a follow-up review day after the course). (2ATr)79
36=	36=	The teacher is able to set **personal goals (to improve) and make a commitment** to complete the course. (1BT)79

36=	36=	Information is provided to the teacher on the **specific requirements of the course** (e.g. times of each session, assignment topics and requirements, catch-up work, etc.). (4DTr)79
39=	39=	Information is provided to the teacher to show that the course will be **relevant** (useful) for his/her work in the classroom.(7BTr)78
39=	39=	The teacher is **confident** that he/she can do the work required to complete the course. (3BT)78
41=	41=	The teacher has a high level of **motivation**, **a positive attitude** toward the course and is **eager** to take part.(2BT)77
41=	41=	The school **principal**, deputy, senior teachers, school committee, etc., **assist/support the teacher** to enrol on the course.(2BS)77
41=	41=	The teacher's **family support** the participation in the course.(2DO)77
41=	41=	**Ministry of Education support and interest** helps the teacher to keep using the ideas. (3AO)77
45	45	**The school staff** (e.g. principal, deputy, other teachers) consider the **course to be relevant** to the classroom / school.(3BS)76
46=	46=	The training course **helps teachers to network**, get-together to chat about the course (i.e. during breaks and outside of the course itself).(6DTr)75
46=	46=	The teacher **takes or is given responsibility in the school** to develop the course ideas.(4AT)75
48	48=	The trainer provides a **report to the principal** outlining the new skills etc. that the teacher developed on the course.(4ATr)74
49=	50=	**The trainer has background knowledge** about the culture, local teaching situation, the schools, resources, the educational system, etc.(16BTr)73
49=	50=	**Organised visits to other teachers** and schools are arranged for the course participant and this maintains his/her interest in the ideas and use of them in the classroom. (4AS)73
51=	52=	The training programme information indicates to the teacher that **improved teaching** in the classroom will result.(13BTr)72
51=	52=	It is known that the course will not only help the teacher but also **benefit his/her school and colleagues.**(18BTr)72
53=	54=	Before the course starts **introductory course tasks and activities** are given to the teacher to get him/her thinking about the course (e.g. some reading about one of the topics).(6BTr)71
53=	54=	There is a **salary increase** offered to the teacher if the course is completed. (10BTr)71
55	60	The teachers on the course **develop a booklet of the course ideas, suggestions, activities, etc.**, for their use and for the other teachers in the schools. (5AT)69
56=	61=	The teacher's **family gives the teacher support** for enrolling on the course.(3BO)68
56=	61=	Information is provided to the teacher on what he/she will **be able to do by the end of the course** (e.g. the new skills teachers will have).(3BTr)68
56=	61=	The trainer **meets with the principal** and/or senior teachers to discuss the teacher's progress. (11DTr)68
59=	65=	The trainer meets with the teacher to gather information from him/her about **abilities, interests, needs and the teacher's requirements** for the course.(8BTr)67
59=	65=	The new skills, certificate, etc., that the course is offering could **lead to the teacher gaining promotion.**(12BTr)67
61	67=	The **teacher chooses to attend** the course (not selected by others).(7BT)66
62=	73=	**Support of some sort** is available for the teacher to enrol on the course.(4BO)65
62=	73=	**Additional time (if necessary) is made available** to complete tasks, assignments,

		etc.(10DTr)65
64	76=	The teacher is able to **relate easily** to others and is socially aware.(4BT)64
65=	79=	**Parent feedback/support** maintains teacher interest and use of the strategies after the course. (1AO)63
65=	79=	The **time** of the course (i.e. when it is held) is convenient to the teacher. (9BTr)63
67=	83=	The trainer has **pleasant personal qualities** (e.g. can be trusted, is fair, lively, interested in the teacher, helpful, etc.) important for the success of the course. (8DTr)62
67=	83=	The trainer has a **likeable and pleasant personality.**(15BTr)62
69	87=	When teachers hear about the training programme, they are encouraged to enrol in the course because **other teachers are doing extra work** to improve themselves. (14BTr)61
70	91=	The teacher **interacts and relates to others** easily on the course. (6DT)60
71	95=	**Evaluation of the ideas and support** from community groups, and important people (e.g. Aronga Mana, Minister of Education) helps the teacher to maintain an interest and use the course strategies in the classroom. (4AO)58
72	102=	The **community will benefit** from the course.(1BO)54
73	105=	Before the course starts **social events** and `get-togethers' are planned so trainers and course members can all meet one another.(e.g. pre-course *kai kai*).(5BTr)49
74	111	The **trainers (or MOE, etc.) select the teachers** to attend the course.(17BTr)45
75	112=	The trainer provides some **reward** to the course participant (e.g. shows other teachers the work of the teacher; informs the principal about the good work the teacher is doing). (3ATr)44

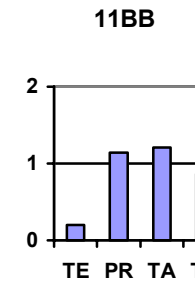| Table G.3		
Ranking of All TOT Barrier Item Scores for All Key Role Players and Time Periods		
Rank	**Overall Rank**	
1	48=	**School management and organisation does not help** the teacher to keep using the ideas in the classroom.(2ASBr)74
2	54=	There is **no follow-up contact** from the trainers to discuss ideas and to help the teacher evaluate the ideas in use.(4ATrBr)71
3=	57=	There is **no reward** (e.g. extra salary) offered to do the course.(6BTrBr)70
3=	57=	**School resources and facilities are not available** for the teacher to use and this makes it difficult to use the course ideas.(3ASBr)70
3=	57=	The course is **difficult for the teacher to understand** (e.g. can not understand the language, can not understand the ideas).(9DTBr)70
6	61=	There is **no contact with the trainers** during the follow-up periods between sessions. (11DTrBr)68
7	67=	The **principal is not helpful** or shows little interest in the new ideas.(11ASBr)66
8=	67=	School **resources and/or facilities are not available** to be used during the course.(7DSBr)66
8=	67=	The **organisation and/or management of the school does not support the teacher** while he/she is doing the course.(3DSBr)66
8=	67=	There is **no reward** for the teacher to carry on using the ideas in the classroom.(5ASBr)66
8=	67=	The **Ministry of Education policies and plans do not sufficiently support the teacher** to maintain an interest and use the course ideas.(7AOBr)66

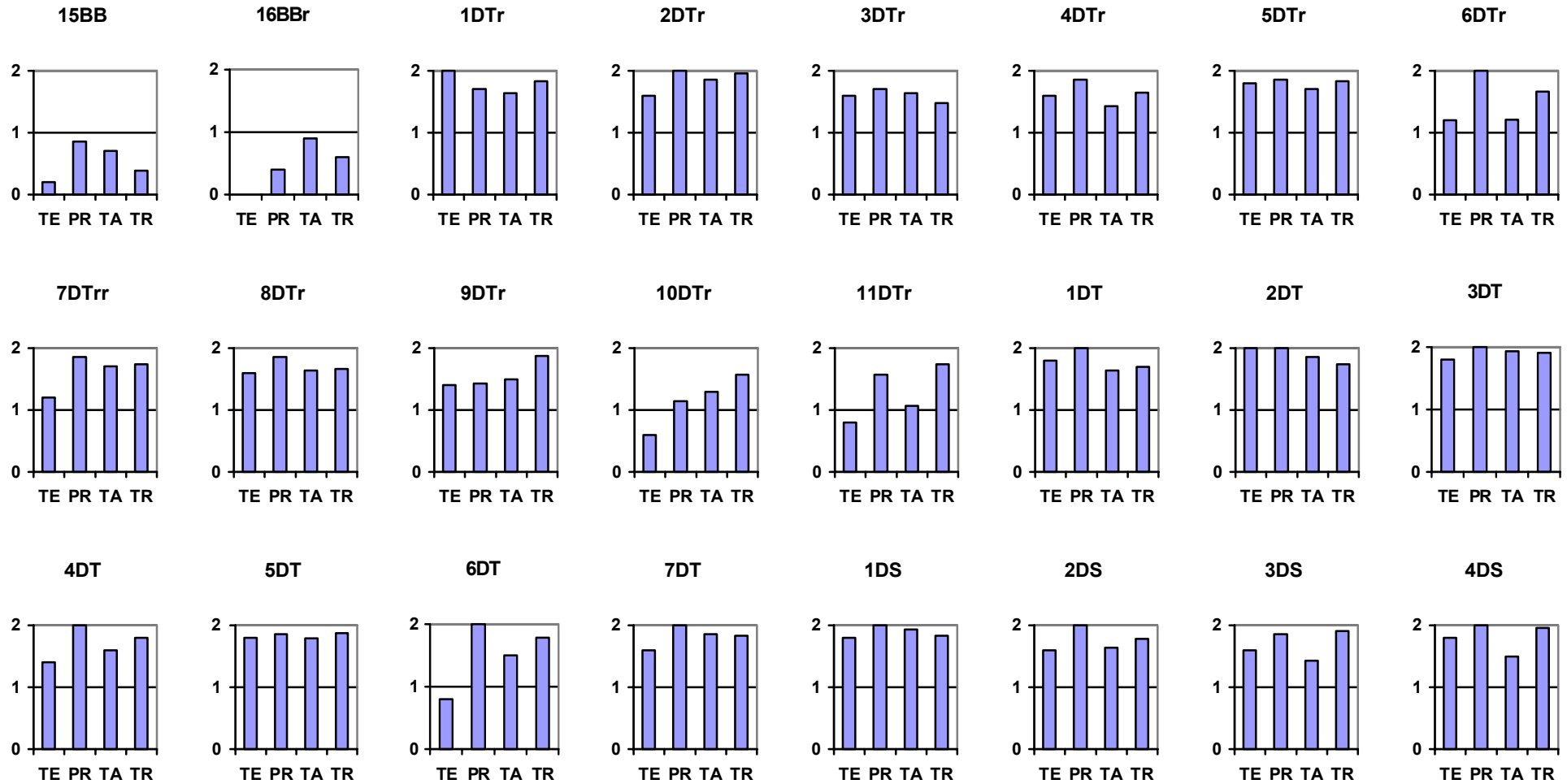| 12	73=	The **training programme is not helpful enough** (e.g. not enough information, not enough help to complete assignments).(8DTrBr)65
13=	76=	The **teacher has insufficient skill and/or information** to continue to use the ideas.(12ATBr)64
13=	76=	The teacher has too many other **responsibilities at school**.(2BSBr)64
15=	79=	The course is held at an **inconvenient time** (of the year, of the day).(1BTrBr)63
15=	79=	The **teacher's colleagues are not interested** and/or criticise the course ideas.(1ASBr)63
17=	83=	The **demands placed on the teacher** after the course (e.g. demonstrations to other teachers; other work) are too great for the teacher to maintain interest and use of the strategies.(6ASBr)62
17=	83=	The teacher has **personal difficulties** (e.g. transport, sickness) that make course attendance a problem.(6DTBr)62
19=	87=	The **teacher** himself/herself **does not get enough information** about the course.(10BTrBr)61
19=	87=	The **teacher has insufficient confidence** to carry on and maintain the changes in the classroom. (10ATBr)61
19=	87=	The **students in the teacher's class show insufficient improvement** when the new ideas are used and therefore the teacher loses interest in using the course ideas.(9ASBr)61
22=	91=	**Other events** (e.g. exams, cultural events, sports) interrupt participation in the course.(5DOBr)60
22=	91=	There is **insufficient time** to complete the assignments, tasks, etc.(1DTrBr)60
24	94	The teacher has **family responsibilities** or the family criticise the teacher for wanting to enrol on the course.(4BOBr)59
25=	95=	The training **course requirements** (e.g. attendance, punctuality, assignment completion time) are too difficult for the teacher.(10DTrBr)58
25=	95=	The teacher is **over-worked** at school.(13DSBr)58
27=	98=	The **principal is not helpful** and/or lacks interest in the course.(4DSBr)57
27=	98=	The **principal and/or Ministry of Education does not get enough information** about the course. (8BTrBr)57
29=	100=	The **trainer is too superior**, thinks he/she has all of the answers and is not interested in the teacher's views.(12BTrBr)56
29=	100=	The **course requirements** (attendance, punctuality, assignments) are **too demanding** on the teacher. (11BTrBr)56
31	102=	The **teacher lacks confidence** to take part in the training course.(13BTBr)54
32	104	The **colleagues** of the teacher **do not get enough information** about the course.(9BSBr)53
33	105=	The **family do not provide support and/or criticise** the teacher's involvement in the course. (12DOBr)49
34	107=	The teacher has been on **boring, uninteresting courses previously** and expects all others to be the same.(7BTrBr)48
35=	108=	The teacher's colleagues are not interested or make criticisms about the course. (2DSBr)47
35=	108=	People think (including the teacher himself/herself) that the **teacher is too old** to take part in the course. (14BTBr)47
37	110	The teacher's **colleagues are critical or not interested** in the teacher being involved in the course. (5BSBr)46
38	112=	The teacher has **another paid job to do** and cannot attend the course. (3BOBr)44

39	114	The thought of having to attend a course in the **hot weather.**(16BTrBr)43
40=	115	The **trainer is not known** to the teachers.(15BTrBr)41
40=	116	**Events** (e.g. sports, school trips, cultural events) are so numerous that implementing any new ideas is a problem.(8AOBr)41

APPENDIX H

MEAN SCORES FOR EACH GROUP ON EACH ITEM

15BB   16BBr   1DTr   2DTr   3DTr   4DTr   5DTr   6DTr

7DTrr   8DTr   9DTr   10DTr   11DTr   1DT   2DT   3DT

4DT   5DT   6DT   7DT   1DS   2DS   3DS   4DS

336

12AB
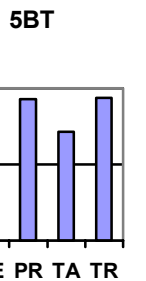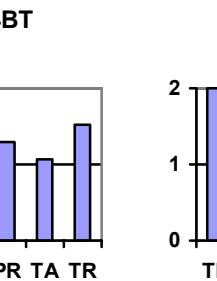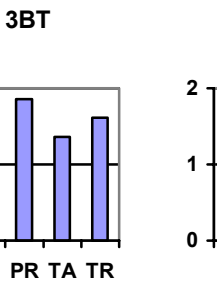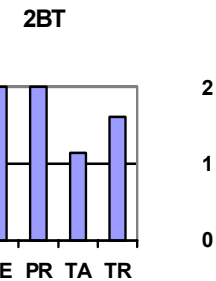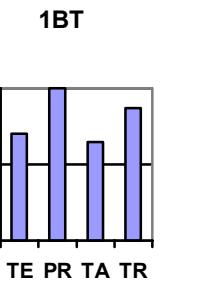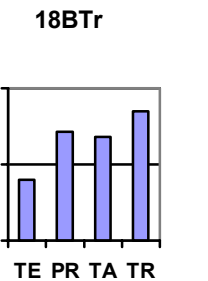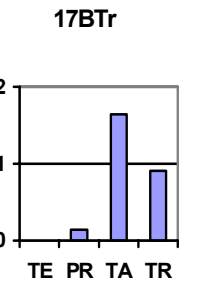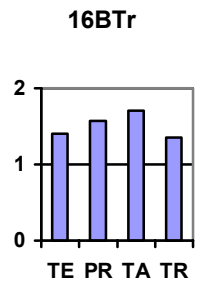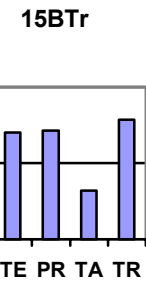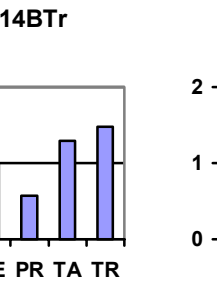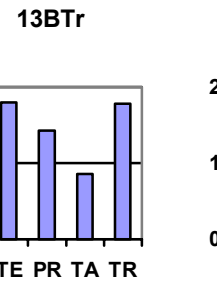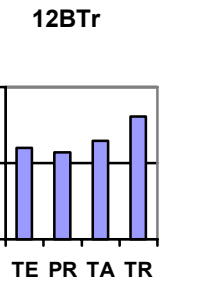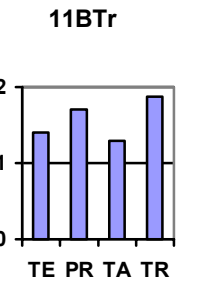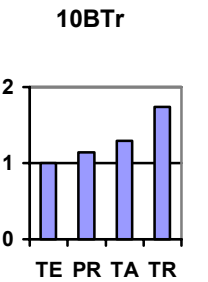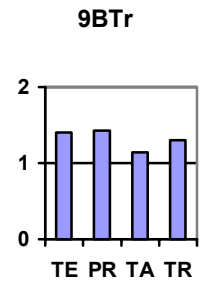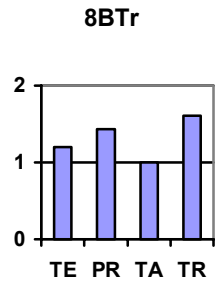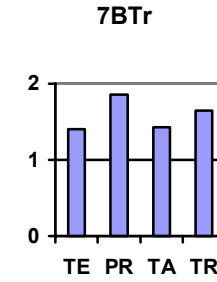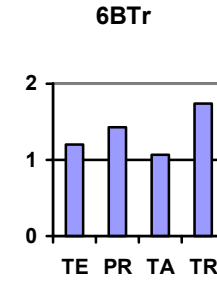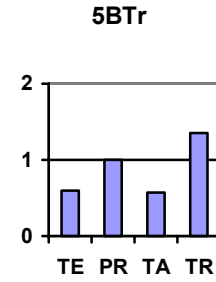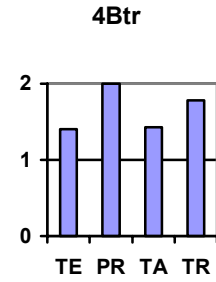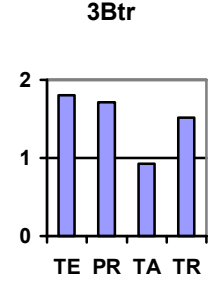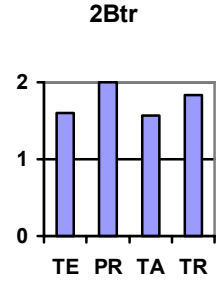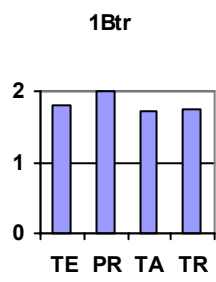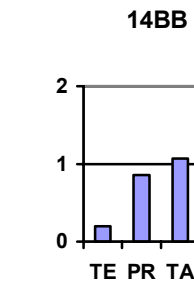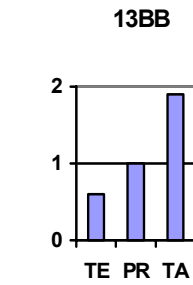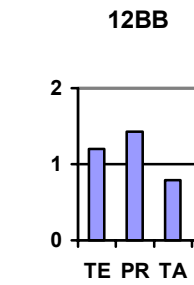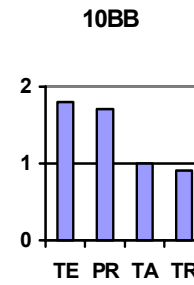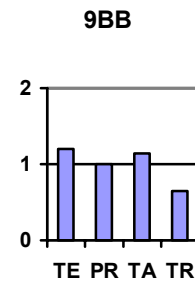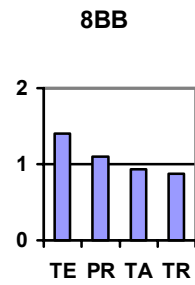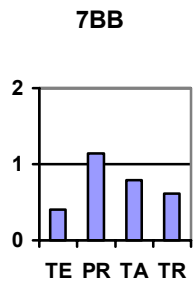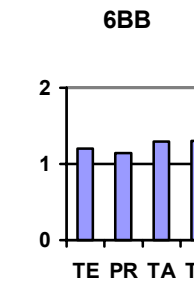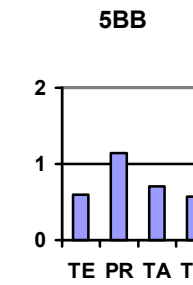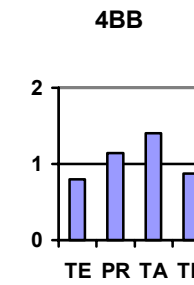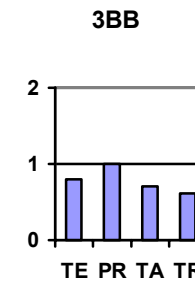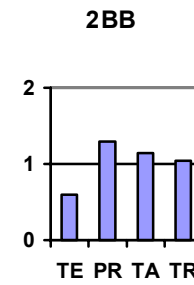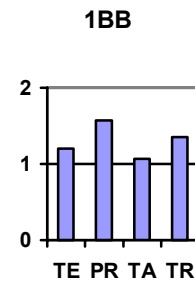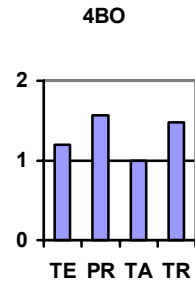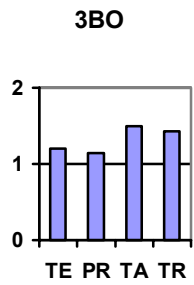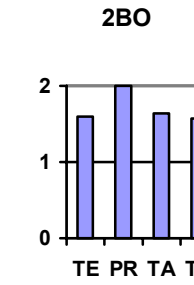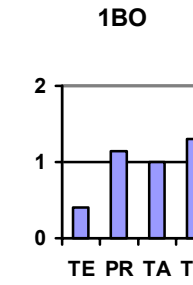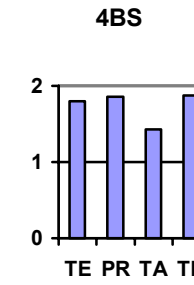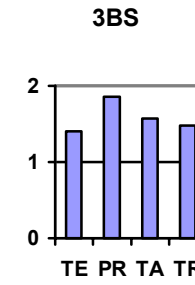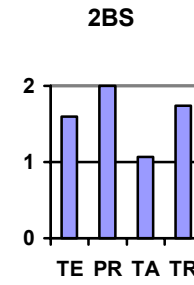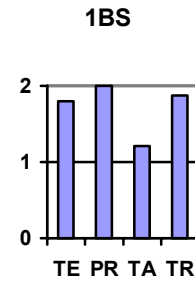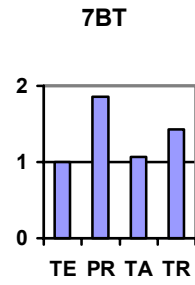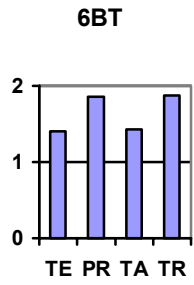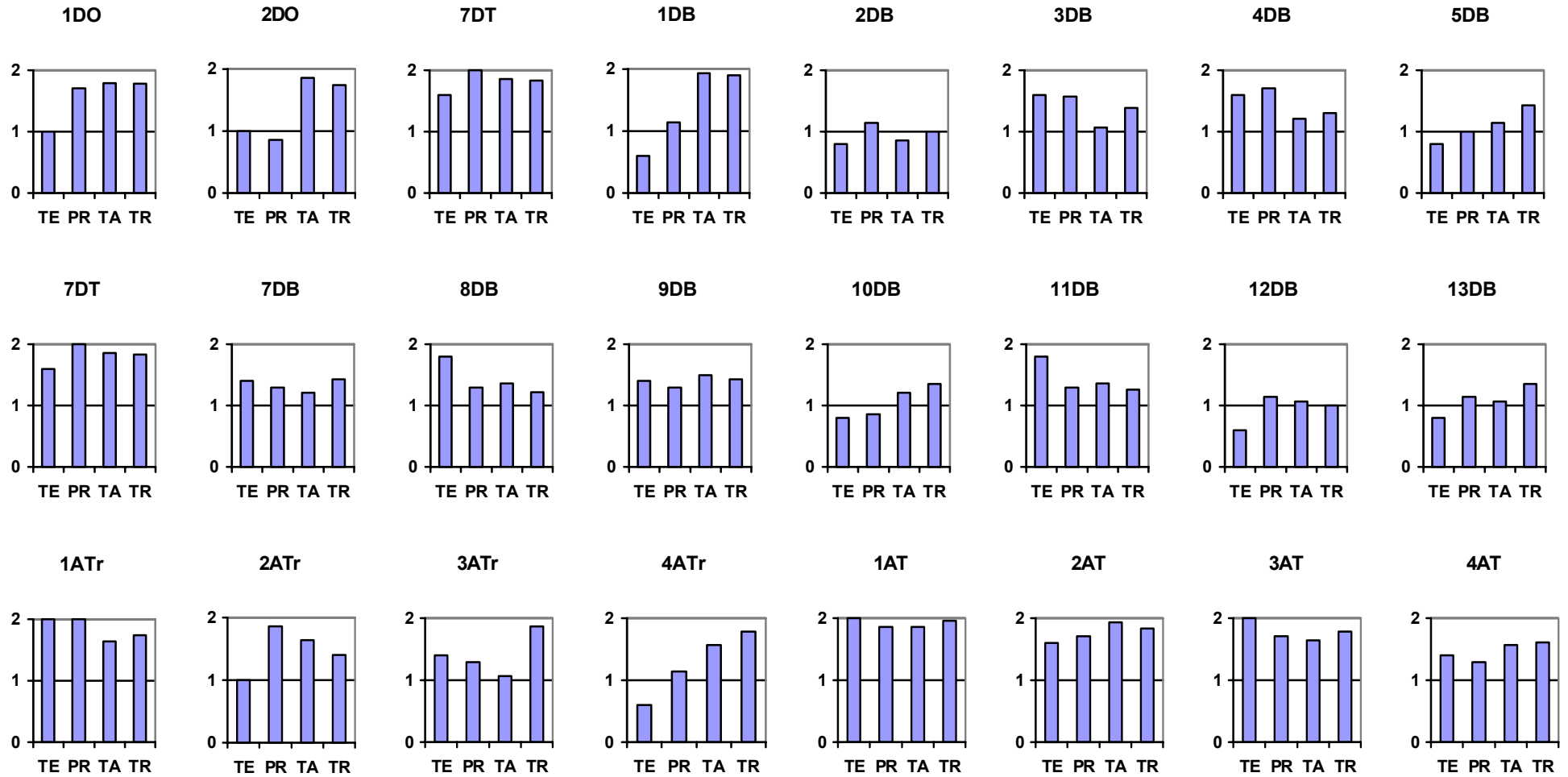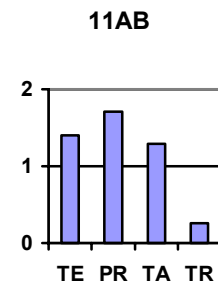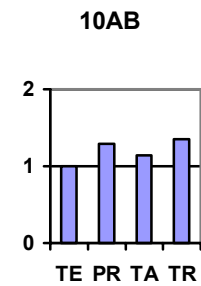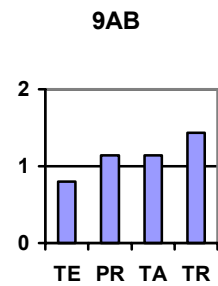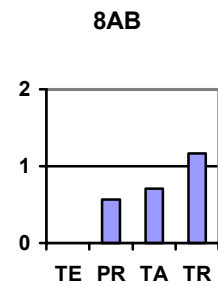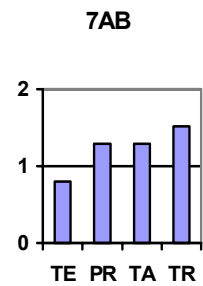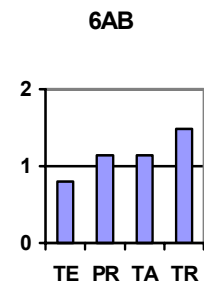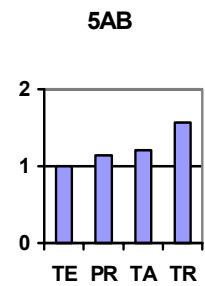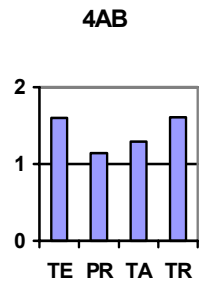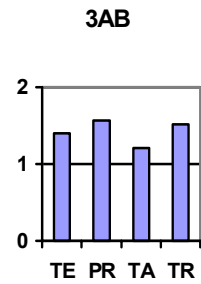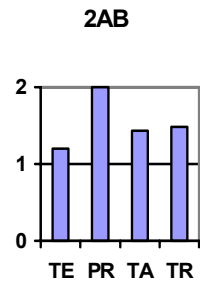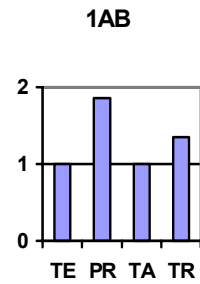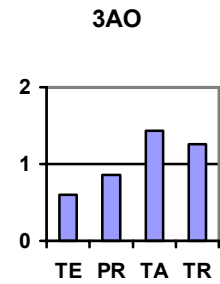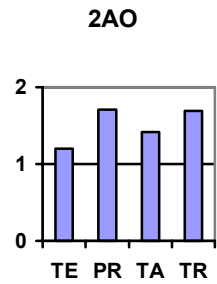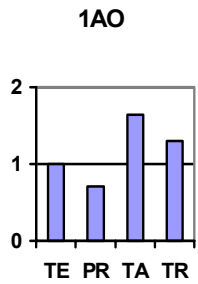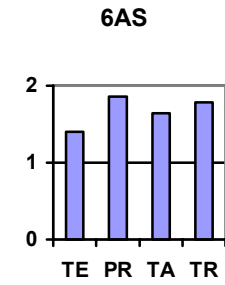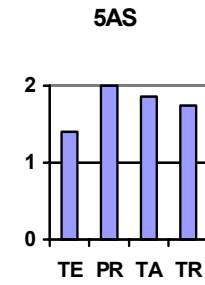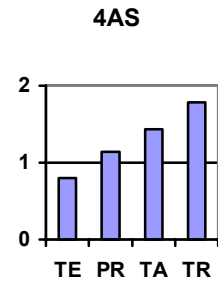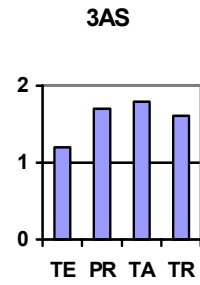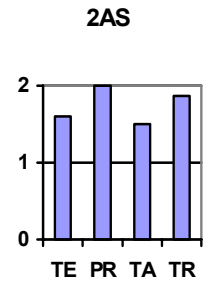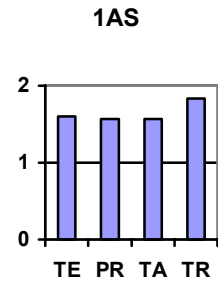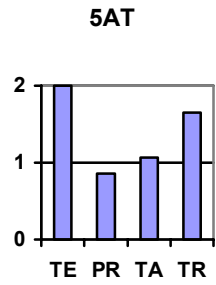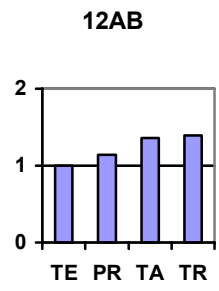
Figures H.1. Mean scores for each group on each item (1-116)

APPENDIX I

PROBABILITY DISTRIBUTION OF GROUP SCORES FOR EACH CATEGORY
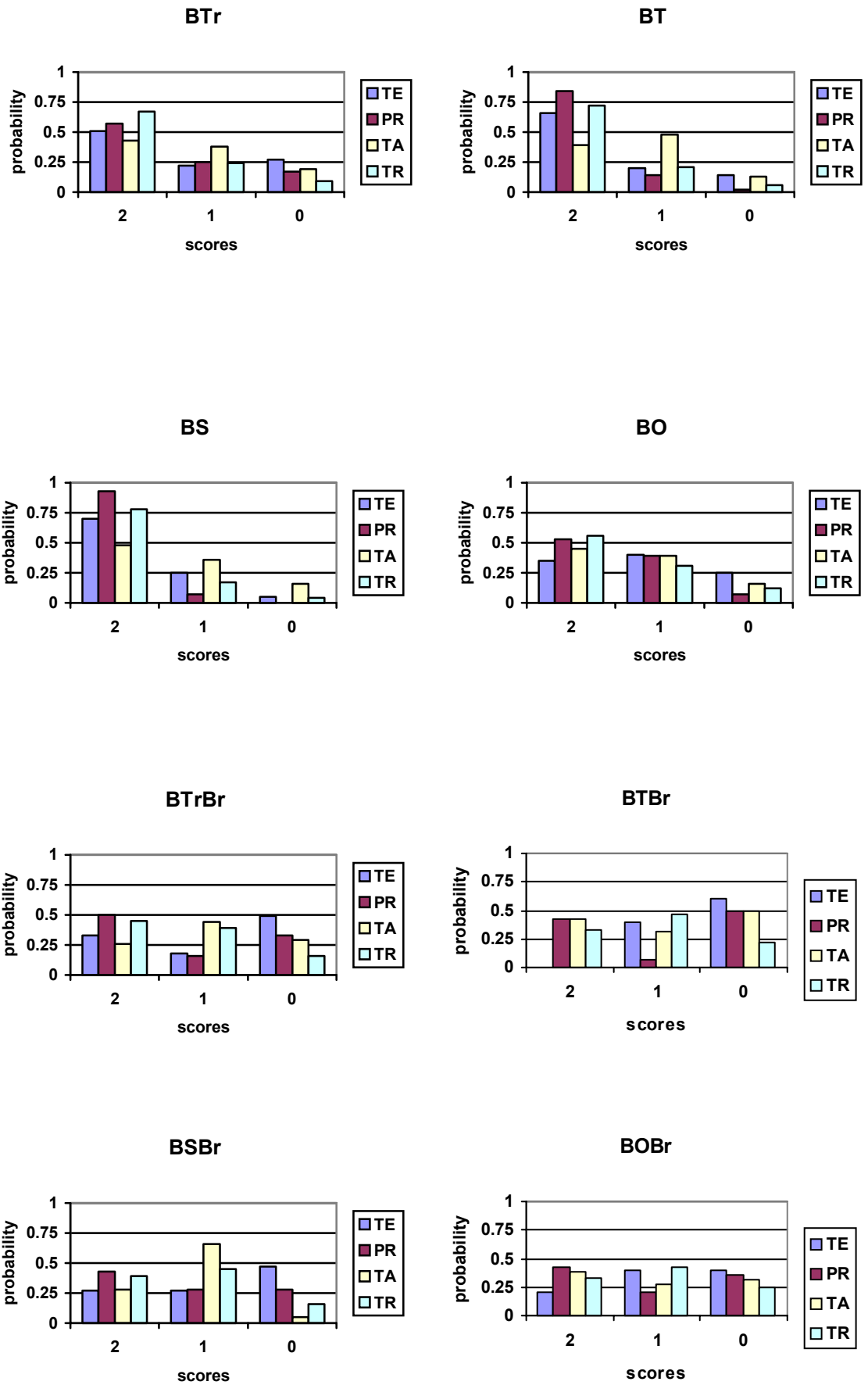
Figures I.1. Probability distribution of teacher educators (TE), principals (PR), Aitutakian teachers (TA) and Rarotongan teachers (TR) scores for the SPTTS before items.
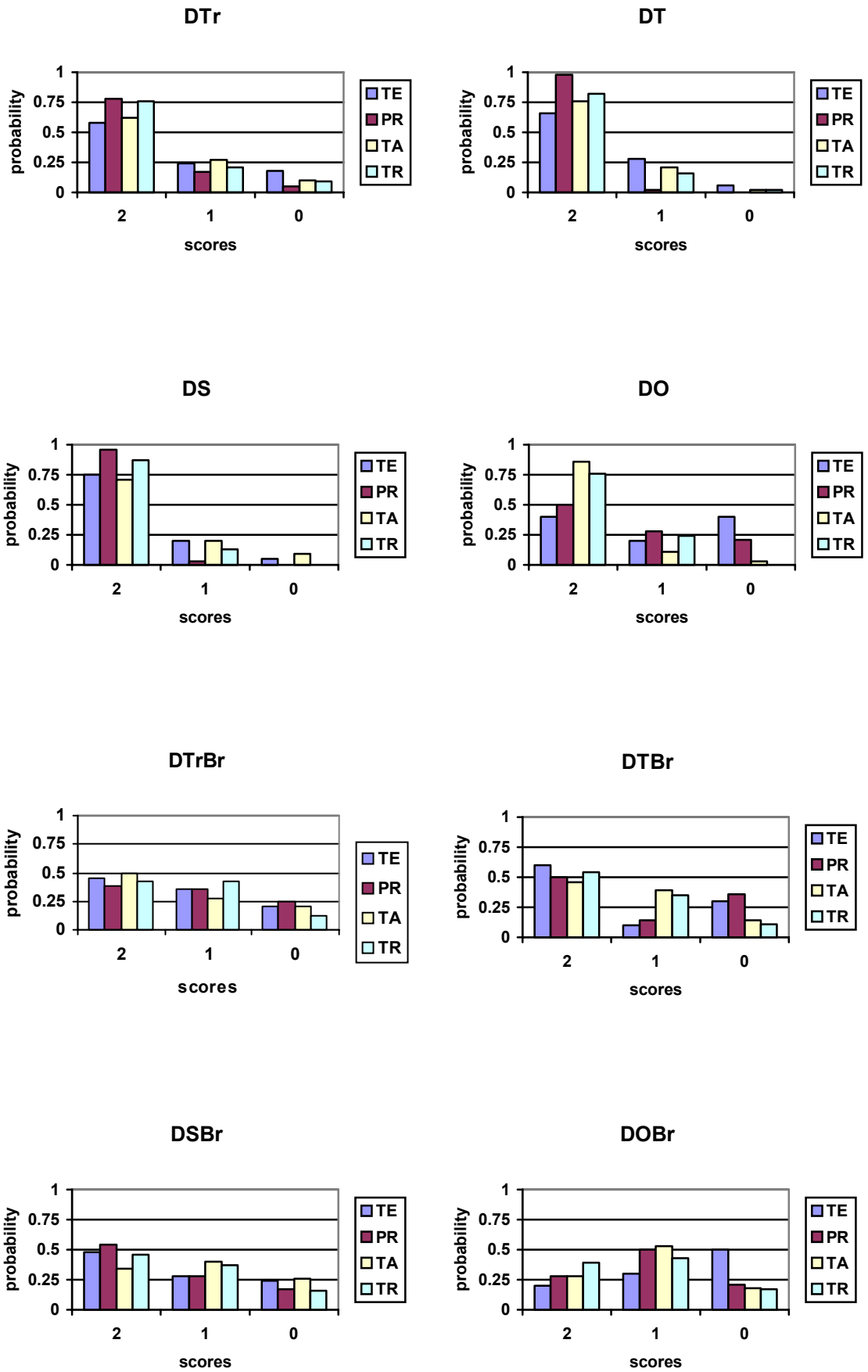
Figures I.1. Probability distribution of teacher educators (TE), principals (PR), Aitutakian teachers (TA) and Rarotongan teachers (TR) scores for the SPTTS during items.
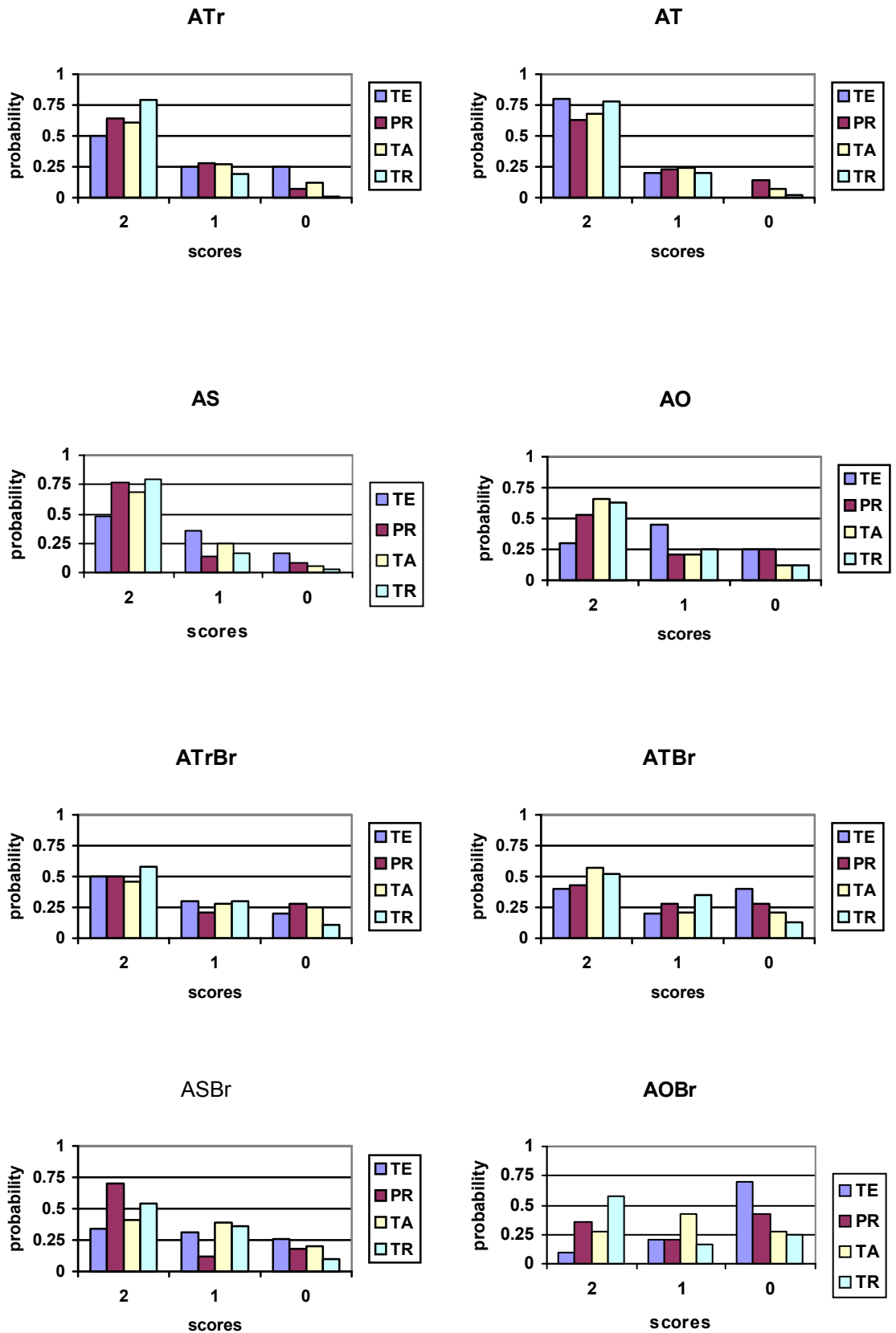
Figures I.1 Probability distribution of teacher educators (TE), principals (PR), Aitutakian teachers (TA) and Rarotongan teachers (TR) scores for the SPTTS after items.

APPENDIX J
GUIDELINES FOR PRINCIPALS

GUIDELINES FOR PRINCIPALS

**SPECIAL EDUCATION: THE INCLUSIVE CLASSROOM
TEACHER IN-SERVICE TRAINING COURSE**

ASSISTING TEACHERS TO TRANSFER

THEIR LEARNING TO THE CLASSROOM

A COLLABORATIVE PROJECT

**WELLINGTON COLLEGE OF EDUCATION
NZ MINISTRY OF FOREIGN AFFAIRS
COOK ISLANDS MINISTRY OF EDUCATION**

AN INTRODUCTORY IMPORTANT MESSAGE TO PRINCIPALS

Kia Orana. This course is an introductory course in the area of inclusive education. It is designed to assist teachers to become better skilled and informed about how to deal with the student with special teaching needs in the regular classroom.

Emphasis has been upon putting ideas into practice in the classroom. It is recognised that the principal has a vital role to play here and accordingly we request that you provide assistance to your teachers as they try ideas and complete their assigned practical tasks. If the principals' support is not available, it is likely that the teachers will find it difficult and less rewarding to try the ideas. Your support means that you need to actively involve yourself in helping the teachers and monitor their progress throughout the course.

Your Ministry of Education has given its full support for this programme and has promoted the principal's involvement. We respectfully request that you assist your teachers to implement the course ideas.

SUGGESTED GUIDELINES FOR PRINCIPALS

Professional growth and change are vital for schools as we approach the year 2000. The effective principal undertakes many tasks as the professional manager of the school but undoubtedly, one of the most significant roles is to assist the classroom teacher to ensure that effective teaching and learning in the classroom are occurring. This in-service course is designed to enskill teachers in classroom management so that effective teaching and learning can proceed in a safe learning environment.

Transfer of the training ideas to the classroom is not easy or automatic. It depends upon many factors - one of the most important supports that teachers can have is the support of the principal. This support needs to go beyond the principal simply inquiring about progress. The principal needs to provide support of many kinds - emotional support, resource support, coaching support, planning support, evaluation support, eliminate problems, etc. The following guidelines are suggested for principals to help teachers make changes in the classroom.

1. **Principals need to develop a plan for assisting teachers with the changes.** They should record what changes / new strategies the teachers are going to implement, detail the plans on when and how this is to happen and record the outcomes. A meeting between the principal and the individual teacher would be required. The visiting tutor / lecturer would like to consider these notes with you when a visit is made to the school. Refer to the attached form `Using In-service Ideas in the Classroom: Principal's Record.'

2. Your teachers, as a group, should be consulted about their plans and always included in planning sessions that relate to achieving the transfer of the ideas to the classroom. **It is suggested that there be a number of scheduled meetings for the teachers to share ideas, plan, work with one another, feedback results, etc.** It is important that the principal be at these meetings to provide support and encouragement to the teachers.

3. **Principals should encourage the development of a peer support arrangement** (i.e. the teacher has a buddy co -worker) and assist teachers to work in these small groups (2 - 3 people) so that they can help one another implement the ideas in the classroom. If this happens it lessens the responsibilities of the teacher and they can easily discuss, plan, reflect, etc.

4. **When the teacher is confident, principals should arrange to visit the classroom** so that the teacher's new skills can be demonstrated. Your coaching and advice would be invaluable. An informal, friendly approach is to be recommended.

5. Teachers often experience problems when they make changes in the classroom - they may feel anxious and struggle. **You will need to provide emotional support, guidance and understanding.**

6. **The principal needs to clearly indicate to the teachers the importance of the programme,** its skills and emphasise the support it is receiving from your Ministry of Education. Your open acknowledgment of this at staff meetings would be valuable.

7. **Provide incentives for your teachers who are involved in the course.** For example, display their work to other teachers, encourage them to make contributions to staff development sessions, give them additional responsibility, inform the school committee, etc.

8. **Always listen to the teachers who indicate that they are having problems in implementing the ideas.** Try to assist them to remove the blockages to change. You may be able to provide additional resources, guidance, arrange visits to another classroom, give them additional time to plan, etc.

9. **Be aware of the assignments that the teachers are required to complete for the course.** The writing of assignments must not, of course, be done during school time but often teachers will be required to implement course ideas during school time. If you could provide assistance with the assignments teachers would appreciate it.

10. **Liaise with the course tutors / lecturers and seek their advice and guidance if necessary.** They will visit you and want to discuss each teacher's progress with you. The form `Using In-service Ideas In The Classroom' would be an excellent starting point for this discussion.

We appreciate that you are very busy people but your input into this programme would be highly valued. Please do not hesitate to contact us if you would care to discuss any of these matters.

Thank you for your assistance.
Bill Evaroa   Nga Strickland   Lex McDonald

USING IN-SERVICE IDEAS IN THE CLASSROOM: PRINCIPAL'S RECORD

NAME OF TEACHER: CLASS:

NAME OF COURSE;

Date:
Teacher's objective:

What will be done by the teacher:

Help, assistance, etc required:

How the teacher will decide if it is successful or not:

Outcome (What happened? Was it successful? What's next?)

Date:
Teacher's objective:

What will be done by the teacher:

Help, assistance, etc required:

How the teacher will decide if it is successful or not:

Outcome (What happened? Was it successful? What's next?)

Date:
Teacher's objective:

What will be done by the teacher:

Help, assistance, etc. required:

How the teacher will decide if it is successful or not:

Outcome (What happened? Was it successful? What's next?)

APPENDIX K

COURSE OUTLINE

WELLINGTON COLLEGE OF EDUCATION
TE WHANAU O AKO PAl KI TE UPOKO O TE lKA

SCHOOL OF SPECIAL EDUCATION

PROGRAMME TITLE

Special Education: The Inclusive Classroom

CODE

C06.10

VALUE

One seventh of a full time course
One C level credit
Compulsory paper for Dip.ESSTN and Cert.lncl.Ed

PREREQUISITES

Nil

COURSE HOURS

As required by the New Zealand Qualifications Authority this course consists of 50 hours of lectures, and 125 hours of independent study and assignment work.

COURSE DESCRIPTION

This paper is designed to assist classroom teachers to develop understandings and strategies that will facilitate inclusionary practices. Teachers will be encouraged to establish a classroom environment that recognises the individual needs of all children.

A brief introduction to the philosophical and historical foundations of special education will precede the examination of classroom practices.

A theoretical base will be established and this will draw upon applied behaviour analysis, ecological approaches and the collaborative problem solving perspective. Teachers will use the principles of these theories and the findings of the research literature to plan programmes to meet the needs of their students.

This paper, in linking the theory with the practical classroom applications, will enable teachers to meet the needs of all students in the classroom.

TARGET GROUP

This paper is designed to meet the needs of special education teachers and classroom teachers who have students with special teaching needs. **It** is the core compulsory paper of the Diploma in the Education of Students with Special Teaching Needs and it is also the compulsory core paper towards the Higher Certificate in Inclusive Education. This paper may also be counted towards the Higher and Advanced Diploma in Teaching.

COURSE CONTENT

Prior to 1995 this paper was entitled 'Special Education Teachers Supporting Children in the Mainstream: Theory and Practice' and was a co-requisite to paper B ('Special Education Teachers Supporting Children in the Mainstream: Philosophy and Practice'). Both papers have been modified with paper A remaining as a core paper .

This paper will also be offered, from time to time, to teachers overseas and will be presented as a part-distance course.

STAFFING

This course will be taught by Lex McDonald.

LEARNING OUTCOMES

At the end of this course teachers will be able to:

1. Develop strategies to promote positive attitudes towards disability and inclusive education;

2. Identify their own attitudes, beliefs and values relating to disability and inclusive education;

3. Demonstrate knowledge and understanding of current special education policy and its historical/legal foundations;

4. Identify the characteristics of learners and their needs;

5. Demonstrate a range of assessment, planning and evaluation procedures;

6. Implement a range of appropriate teaching strategies to meet the needs of all students;

7. Demonstrate a knowledge of applied behaviour analysis and implement a teaching strategy using these principles;

8. Identify the role of the family and *whanau* in the student's education and strategies that develop partnerships;

9. Demonstrate a knowledge of collaborative consultation and partnership strategies;

10. Locate and access resources appropriate for the students teaching needs; and

11. Critically read and evaluate articles relating to inclusive education.

12. Assessment, planning and evaluation (eg., assessment strategies, procedures, IEPs/IDPs,)

13. Writing reports, data based decision-making

The following content will be addressed in an introductory approach:

      ∗   Philosophical, historical and legal foundations of special education

      ∗   Characteristics of learners and their needs

      ∗   Inclusive teaching practices (eg., cooperative learning, peer tutoring, task analysis)

      ∗   Collaborative partnerships with parents, *whanau* and others

      ∗   Resources

(This course is a modification of the course delivered in New Zealand. It has been changed to meet the local conditions of the Cook Islands. The level, requirements and standards remain the same as the original course so that NZQA recognition can be maintained.)

EQUITY STATEMENT

The focus of this paper is the establishment of the inclusive classroom. This is a classroom in which all students regardless of gender, ethnicity, disability and other difference are included.

TE TIRITI O WAITANGI STATEMENT

During the course there will be an emphasis upon the issues of partnership, collaboration and decision making in special education as it relates to the *tangata whenua*.

COURSE REQUIREMENTS

Course participants are required to attend all sessions. (20% absences will be permitted for illness and unavoidable events but absences must be discussed with the course tutors and catch-up work completed.)

All assignments must be completed to a satisfactory standard. **If** work is judged to be unsatisfactory, it can be resubmitted twice more. **If** this work is unsatisfactory, or any designated work is incomplete, course credit will be withheld.

ASSESSMENT

Learning outcomes will be assessed through the course written assignments and responses to class discussions and activities.

The major assignments are detailed on separate handout.

Full details of the requirements of these assignments will be given to the teachers.

Independent reading tasks and activities relating to the course outcomes will also be undertaken by the teachers.

COURSE EVALUATION

Course member satisfaction will be evaluated by requesting all course members to complete the course evaluation form at the end of the course. In addition to this, brief evaluation probes will be undertaken at various times during the course to provide formative evaluation.

Staff will evaluate the course on the basis of the student evaluations, the achievement of learning outcomes (via assignments, class group work, discussions and reading tasks and reflective consideration.)

REQUIRED TEXTS AND RESOURCES

There are no required texts. A resource file of up-to-date articles will be made available to the students. Handouts will also be provided.

ASSIGNMENTS

For this paper you will be required to complete three assignments one of which is compulsory. Each assignment will be considered further in workshops/tutorial meetings that will follow the course days. These tutorials will be held at your school on each of the islands. The tutors will also take this opportunity to discuss your work with you and assist with any assistance you may need to put the ideas into the classroom. (The dates for the workshops have yet to be decided.) The workshop sessions revise the material presented on the course and will also provide additional resources as well. Workshop attendance is compulsory.

<u>**Topics**</u>
Please note that assignment one MUST be completed as well as two others.

1.   **Individual Educational Plan (compulsory assignment)**

*   **What is an IEP?** [Explain briefly what an IEP is and detail what should be included in an IEP.]

*   **Why are IEPs useful?** [Provide some reasons why IEPs are useful]

*   **Assessment Information.** [Present a description of the assessment information that you collected on the child. What is the child's name (fictitious)? Age? Class? Any relevant background information? If you undertook any tests, include a copy of these. Make sure it is very clear in your assignment what information was collected. Some of this information will probably be included on the IEP form.]

∗   **IEP Meeting** [Organise an IEP meeting (including the parents if at all possible) and then after this meeting, write the IEP (using the information collected during the assessment stage and the information obtained from the parents, etc). Include a copy of the IEP in your assignment.]

*   **Work Samples** [Include in the assignment some examples of the child's work that you and the family have agreed to work on. (For example, a story, handwriting, reading test). These samples should be work that the child is doing prior to your attempts to improve it.]

2.   **Assessment**

*   **What is Assessment?** [Describe what assessment is and explain why we do it.]

*   **Assessment Information Collected** [Select a child whose learning progress or skill levels are of concern to you. Assess this child in at least one of the following areas: reading/English; mathematics/computer studies; story writing/essay; other areas to be negotiated with the lecturer. Remember, it is important to use a number of different assessments in each area before you make a judgement about the child's skill levels. Write about the assessment methods you used, the names of any tests, and include in the assignment all the actual tests and assessment information collected.]

∗   **Goal Setting: Using The Assessment Information** [Use your assessments to list the skills the child can do and then identify what the next goals are for him / her.

•   **Reflection** [Reflect about what has happened. Write something about how your understanding of the child's needs have changed by doing the assessment and goal setting. What was the most difficult part of the assignment for you?]

3.   **Bloom's Levels of Thinking**

*   **Bloom's Levels of Thinking in the Classroom** [Explain briefly what Bloom's levels of thinking are and how and why this can be used in a classroom.]

*   **Lesson Plan Using Bloom's Ideas** [Plan and teach a lesson using Bloom's levels, clearly indicating the different questions/activities developed to encourage thinking. Include a copy of your teaching plan in the assignment.]

*   **Work Samples** [Include some work samples of the children from your lesson. At least 3 samples are required - one high / average / low progress student.]

*   **Reflection** [Reflect on the work. Consider for example the following:
How did you think of the lesson?
Could it have been better planned, implemented?
Did it achieve what you hoped it would achieve?
How well were the children with learning difficulties catered for?
Were any parts difficult for you? How could it be made easier?]

4.   **Cooperative Learning Lesson**

*   **What is Cooperative Learning?** [Explain briefly what cooperative learning is and detail some information on the five essential elements.]

*   **Why Use Cooperative Learning?** [Provide some reasons why teachers might use cooperative learning.]

*   **Cooperative Learning Lesson Plan** [Plan and teach a cooperative learning lesson clearly indicating how the five elements are included in the lesson. Include a copy of plan in the assignment.]

*   **Relection** [Reflect on the work. Consider for example the following:
What did you think of the lesson?
Could it have been better planned, implemented?
Did it achieve what you hoped it would achieve?
How well were the children with learning difficulties catered for?
Were any parts difficult for you? How could it be made easier?]

DUE DATES: Due dates for these assignments will be decided with you. All assignments need to be handed in on time.

TIMETABLE FOR NGA-PU-TORU COURSE PAPER A (CO610): SPECIAL EDUCATION AND THE INCLUSIVE CLASSROOM

Day 1 (Monday 4pm start):	Opening of the course
	Administration issues
	Disability awareness
Day 2 (Tuesday 8.30-4.00)	Characteristics of learners and their needs
	Assessment - Intervention - Monitoring approach
	Assessment
Day 3 (Wednesday 8.30 - 4.00)	Planning for your child with special needs (lesson planning and IEP)
	Monitoring performance
Day 4 (Thursday 8.30 - 4.00)	Teaching practices (adapting activities - Bloom)
	Teaching practices (cooperative learning)
Day 5 (Friday 8.30 -11.00)	Review, overflow activities, reflection
Day 6 (to be arranged)	Review
	Role of the family
Day 7 (to be arranged)	Working together to solve problems: working as a team
	Review
	Assignment issues

APPENDIX L
LEARNING AND TEACHING CONCEPTIONS

YOUR THOUGHTS

This information is being gathered to find out what people think about children with special needs and learning. **There are no right or wrong answers.** We would like you to do this at the beginning and at the end of the course. Please write your name on this sheet. Thank you for your cooperation.

_____

Please write your name here:

_____

1.   What does **learning** mean to you **and how** do people learn?

        What is learning?

        How do people learn?

2.   What does **teaching** mean to you **and** what are some **effective ways of teaching?**

        What is teaching?

        What are some effective ways of teaching?

3.   What are your thoughts about having **children with special teaching needs in your classroom?** Do you think mainstreaming and inclusive education really works? Why do you say this?

Table L.1: Changes in Teachers' Conception of Learning

TEACHER	PRE-COURSE			POST-COURSE	
	CONCEPTS	EXAMPLE		CONCEPTS	EXAMPLE
NU	A,C	Making use of the brain. Reading. Experiencing.		C	Change of behaviour (skills)
CN	A	Gain ideas of something		C	Changing your behaviour and attitudes
SN	C,D	Being able to understand. Do what is wanted.		A, B	Taking information into our heads. Sharing ideas.
NV	A,C,D	Getting new ideas. Being able to read and understand.		C,D	Behavioural and attitude changes. Understand and achieve it.
UN	B	Sharing ideas and thoughts		C	Changes in behaviour or thinking
UU	A	Know what has been taught		C	Change of behaviour and skill
NW	A	Getting different sorts of information		B	What you achieve from the teacher - "demonstrate after me what I am doing."
UV	A,C	Information that you got from someone. Skill.		B	To achieve the aim.
NX	B	Sharing ideas		A,B	Sharing, exchanging and gaining information. Achieve (something)
TU	A, C	Receiving the message. Puts (what is received) into practice.		C,E	Change of behaviour or your thinking.
UW	A, D	Know about an important idea. Understanding what is given.		A	Gathering information
UO	A	Getting information		B	Sharing ideas
TC	A	Finding out and taking in.		A	Gaining knowledge
MM	A	Studying what we don't know		A,C	Remembering information. Listening. Seeing. Doing. Taking part.
KD	A,D,C	Learning is increasing your knowledge and understanding - the way things work, exist are used.		A,C,D,E	Learning is increasing knowledge, understanding. Changing the way you think or what you do.
OJ	A	Acquire messages		C,E	Changing of behaviour and thinking.
NG	A	Seeking information, discovering new ideas.		C, E	Change of behaviour and attitudes
OS	A	Something you have achieved, accomplished.		A	Learning is achieving.
UX	A,D	Getting new ideas and understanding the environment.		C,D	Giving the child something to do. For him/her to understand the task.
UL	A,D	Grasping knowledge and understanding from others.		C,E	Changing behaviour or thinking.
OU	B	Remembering things and answering questions.		A,D,E	Learning is knowledge, analysis, comprehension, interpretation, evaluation.
OP	B	Knowledge is absorbed and transmitted.		C,E	Change of behaviour, thinking, or attitudes
NO	B	Studying and putting in action.		C,E	Changing habits, behaviour, thinking.
BU	A	Studying		C	By doing it
OL	A,C,D	Gather information, practise, know		C,E	Changing thinking, behaviour
KQ	A, C,D	To know something. Doing or grasping something.		C,E	Change of behaviour and thinking
SQ	A	Gaining knowledge		C,E	Change of behaviour and thinking
UT	B	Achieving ideas and sharing with others		C,E	Change in their behaviours, attitudes
KI	A,B,C,E,F	New information, using it, broadens horizons, improves the quality of one's life		C,E	Thinking and/or behaviour has undergone change.

APPENDIX M
LESSON PLAN ASSIGNMENT

WORKING ON THE SAME TOPIC WITH DIFFERENT ABILITIES

Introduction

As teachers we need to develop ways that children with very different abilities and skills can work on the same topic but at different levels. In any class there is a wide range of abilities, talents, strengths, knowledge, skills, values, beliefs, attitudes, experiences, backgrounds, interests and needs. Teaching is a complex task!!

Questioning, Thinking and Learning

1. In the past teachers have emphasised the recall (remembering) of information. Today however we realise that if children leave school with simply a *kete* of facts then we are failing them.

2. Unfortunately in many classrooms most of the teacher's questions are to do with facts. Research tells us that usually

    60% are questions to get facts (e.g. What is the capital of NZ?)

    20% are questions about behaviour (e.g. Have you finished yet?)

    20% are questions that require higher level thinking (e.g. If you were the PM, what would you do?)

1. If we want to develop children's thinking skills we need to go beyond recall questioning and ask higher-order questions. Benjamin Bloom has developed an easy-to-follow plan for developing activities at 6 levels of questioning-thinking.

2. Reasons for using Bloom's approach:

    *   Children can work on same topic but at different levels

    *   Helps teacher and children ask different types of questions

    *   Helps children develop a range of thinking skills and problem solving

    *   Teacher can set up learning centres using activities at different levels

EXPERT JIGSAW ACTIVITY

WORKING ON THE SAME TOPIC WITH DIFFERENT ABILITIES

Expert jigsaw activity (follow these instructions carefully)

∗ The tutor will divide the class into groups of three (this is your HOME group)

∗ Number yourselves 1 - 3

∗ Each person in your group will be given a different reading (person 1 will read about levels one and two, person 2 will read about levels three and four, and person 3 will read about levels five and six).

∗ After reading your reading move to your EXPERT group (this will be a group of people who have read the same material as you).

∗ In your EXPERT group discuss

   a) What it was about (recall and understand it)

   b) Make sure everyone knows about it

   c) Talk about how you could teach it to your HOME group members In 3-4 minutes (discuss? chart? model it? pictures?) and how you could test their understanding (quick quiz?)

∗ Move back to your HOME group and take turns to present your information and then test your members to check their understanding.

∗ In this group develop a project poster (e.g. dogs, fishing, league) for a learning centre and have on it a range of activities that would encourage different thinking and problem solving skills in children.

∗ Undertake group processing:

   • Did we achieve our goal?

   • Could we do it better next time? How?

   • What did we learn?

<u>**Example of a Lesson Plan at Level 2 (Copied from handwritten document)**</u>
Grade: 3 (7-8 year old)   **No. of students**:   24
Time: 1.5 hours   **Date:**   20.8.97
Topic: Seafood

Objectives:
1. To impress upon the children the importance of seafood.
2. To make known to the children the different kinds of seafood and their locations.

Resources: A4 paper, pencils, crayons, sea life chart.

Introduction:
1. Whole class sitting in the middle facing each other.
2. Sing the round – 'white sand and grey sand.'
3. Ask students what they have for lunch.
4. Hands up those children who had fish for dinner?
5. Who caught the fish and how?
6. What else lives in the sea that is edible?

Sea Life Chart
1. Point out the edible species on the chart, their names and where they live in the sea.
2. Why do we eat these food?
   - Clean
   - Makes us strong and healthy
   - Good for our blood
   - Help
   - Protects us from sickness
   - Helps the body grow

Activities
1. Share out the A4 sheets with questions on
2. Read the questions to the children with some explanation. (Refer to next page for the activities)
3. Explain each student is to do their own

Assessment
1. Choose children to read their answers to the class.
2. Ask – did they put the right answer and did they complete all the questions?

ACTIVITY SHEET QUESTIONS

1. Name 5 sea foods (knowledge)

2. Draw a diagram of your favourite sea food and explain where you find it in the sea. (comprehension).

3. Make a list of five words under each heading (application). Food found in

The reef	The ocean
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

4. Explain why we eat sea food (analysis).

5. Compose a song about the sea food (synthesis).

6. Do you think that sea food is the best? Why? (evaluation)

(Researcher's comments: this lesson plan was deemed to be at the replication level as there were only minor changes to the teaching model presented during the workshop week).

Example of a Lesson Plan at Level 3 (Copied from handwritten document)

Topic: Tourism awareness – a follow-up lesson to an off-site visit to the Tiare Holiday Cottages Motel
Class level: Lower 5th form
Objective: students should be able to apply Bloom's thinking processes to the topic.
Materials: pens, paper, coloured pens.
Time: 1 hour
Grouping: 13 students (3 groups of 3 and 1 group of 4)

Sequence of Activities
1. 'What's on top?' in relation to the off-site visit.
2. Brainstorm main ideas related to the topic in a face-to-face discussion on the following topics: accommodation, meals, and types of tourists.
3. Allocate groups and work areas.
4. Allocate tasks for each group. In each group each person has a task to do –
   - Leader and reporter
   - Encourager
   - Writer
5. Tasks for each group

   Group 1 (Bloom's levels 1,2 and 3)
   - Write down all the facts about the manager, management and motel
   - Describe the things you saw.
   - Make a map of the motel area
   Group 2 (Levels 3-4)
   - Develop a brochure to advertise the motel
   - Choose one thing about the motel and tell how much work it is for the manager
   Group 3 (Level 5)
   - Imagine how you would make improvements to the motel
   - Draw a development plan for new changes
   - Compose a song for this motel
   Group 4 (Level 6)
   - Do you think we need better motels on the island?
   - Do you think we need more tourism?
   - Make a presentation for the Tourism dept in Rarotonga.
6. Follow-up next day
   - numbered heads
   - all the ones go to one group, twos to another etc
   - mini-lecture where each one teach about home group topics
   - return to home group and teacher call at random student from each group to check what is known (reflection).

(Researcher's comments: this lesson plan was judged to be at level 3 – new ideas from other parts of the course were being used such as brainstorming, numbered heads, etc and authentic activities used).

Example of a Lesson Plan at Level 4 (Copied from handwritten document)

Grade: *7-8*   **Topic:**   Investigation of Maukean culture

Activities

1. Teacher and students decide on questions for week-end investigation activity (Students to work together in groups over the weekend to find answers to the following sets of questions)

- Group 1 Maukean Dialect
  - Are we speaking our own dialect today or is it mixed?
  - If it has changed why it that?
  - Can you suggest ways of correcting it?
- Group 2 Tradition – investiture
  - How was the chief's investiture done in the past?
  - How is it different to todays investiture?
  - In the past – what kind of food did they prepare for the occasion? Were the tribes involved?
  - Today – is there a change in food preparation? Explain.
  - What did / do they wear for the occasion?
- Group 3 Food – past and today
  - What food was grown in the past? Is any of it extinct? Why is that?
  - What were the exports in the past?
  - Why is it today that we do not export anything?
- Group 4 Craft material used – local and synthetic
  - Find out number of women using locally dyed fibre. Any reason for such practice? Number of women using synthetic material or dye?
  - What difference in costume making today in comparison to that of the past?
- Group 5 Dancing past and today
  - How is local dancing different/similar today?
  - What actions or moves are borrowed or copied from other nationalities?
  - Do you think we should improve our dancing moves here? Give your views?

2. Following the weekend groups present results. The following instructions put on the blackboard.
   - Get your notes in order.
   - Study and make sure you understand them.
   - Discuss and plan what you want to do for your display to the other groups.
   - Feel free to include your own ideas or make improvements.
   - Share individual responsibility.
   - Resources need to be collected from the resources table.
   - Teacher will move from group to group to offer assistance where and when needed.

3. Groups work on their tasks.
4. When completed students at random chosen to report upon their group's effort.
5. Students suggest improvements, praise each groups effort and display work.
6. Follow-up work during the week.
   - Korero teacher invited by group 1 to discuss Maukean dialect and todays investiture and the new marae that the tribe is working on and cleaning.
   - Teacher within the school asked to work with class on modern *head ei* making. To be followed by class engaging in modern dancing.

- *Umu* making – boys and girls bring rocks, hibiscus leaves and food (taro, arrowroot, kumara, fish, taro tops, chicken to be prepared at home and wrapped in leaves)

(Researcher's comments: this lesson plan had many features of level 4 because Bloom's questions were integrated into a lesson plan in an insightful manner not just in a mechanistic fashion. Furthermore it went beyond the realms of the classroom and encouraged the students to ask the Bloom type questions, albeit with teacher guidance).

APPENDIX N

SURVEYS OF TEACHERS AND PRINCIPALS

**PRINCIPAL EVALUATION (DECEMBER 1997) OF NGA-PU-TORU
SPECIAL EDUCATION AND THE INCLUSIVE CLASSROOM COURSE
(APRIL – JULY 1997)**

Interview Questions

1. Have you observed, or been aware, of any of the course ideas being implemented? If so, how frequently?

2. Have there been any difficulties and/or any problems of implementation?

3. Do you have any other comments?

**TEACHER EVALUATION (DECEMBER 1997) OF NGA-PU-TORU
SPECIAL EDUCATION AND THE INCLUSIVE CLASSROOM COURSE
(APRIL – JULY 1997)**

Interview Questions

1. Can you tell me about any of the strategies, activities, etc., that were recommended/used on the course, that you are now using yourself? Can you tell me about the ways you have changed these activities for your classroom? Can you provide examples?

2. With regard to the course, can you please tell me about any other information or experiences you gained from the course that has helped you to change your ideas, teaching activities in the classroom?

3. Can you identify any problems you have had in implementing the course ideas?

4. Do you have any other comments to make?

REFERENCES

Abdal-Haqq, I. (1989). The influence of reform on inservice teacher education. ERIC Digest ED322147. Eugene, OR:, ERIC Clearinghouse on Educational Management, College of Education, University of Oregon.

ACEAD (Advisory Committee on External Aid and Development) (1999). Preliminary review of NZODA support for education and training. Discussion paper # 9. Wellington: Author.

Adler, N. J. (1986). International dimensions of organisational behaviour. Boston: Kent

Ainscow, M., & Hopkins, D. (1992). Aboard the Moving School. Educational-Leadership, 50, 3, p79-81.

Aiono, F. (1992). Culture and democracy in the South Pacific. Suva: University of the South Pacific, Institute of Pacific Studies.

Alexander, P., & Murphy, P. (1999). Nurturing the seeds of transfer: A domain specific perspective. International Journal of Educational Research, 31, 7, 561-576.

Alliger, G. M., Tannenbaum, S. I., Bennett, W. Jr., Traver, H., & Shotland, A. (1997). A meta-analysis of the relations among training criteria, Personnel Psychology, 50, 2, 341-58.

Analoui, F. (1993). Training and transfer of learning. Aldershot, UK: Avebury.

Anderson, G. (1990). Fundamentals of educational research. London: The Falmer Press.

Anderson, J. A. (1995). Toward a framework for matching teaching and learning styles for diverse populations. In R. R. Sims & S. J. Sims (Eds.), The importance of learning styles (pp. 69-78). Westport, Connecticut: Greenwood Press.

Arnold, R., Burke, B., James, C., Martin, D., & Thomas, B. (1991). Educating for a change. Doris Marshal Institute for Education and Action, Toronto: Between the Lines.

Asia Development Bank (1997). National human resources development policy framework. Rarotonga: Author.

Atkinson, J. W. (1964). An introduction to motivation. Princeton: Van Nostrand.

Atkinson, R. C., Bower, G., & Crothers, E. J. (1965). An Introduction to Mathematical Learning Theory. New York: Wiley

Ausubel, D. P. (1968). Educational psychology: A cognitive view. NY: Holt, Rinehart, Winston.

Axtell, C. M., Maitlis, S., & Yearta, S. K. (1997). Predicting immediate and longer term transfer of training. Personnel Review, 26, 3, 201-213.

Baba, T. (1999). Teacher education and globalisation: Challenges for teacher education in the Pacific during the new millennium. Directions, 21, 1, 31 − 50.

Baldwin, T. T. (1992). Effects of alternative modeling strategies on outcomes of interpersonal-skills training. Journal of Applied Psychology, 77, 147-154.

Baldwin, T. T., & Ford, J. K. (1988). Transfer of training: A review and directions for future research. Personnel Psychology, 41, 63-105.

Baldwin, T. T., & Magjuka, R. J. (1997). Training as an organizational episode: Pretraining influences on trainee motivation. In J. K. Ford (Ed.), Improving training effectiveness in work organisations (pp 99-127). Mahwah, NJ: Lawrence Erlbaum Associates.

Baldwin, T. T., Magjuka, R. J., & Loher, B. T. (1991). The perils of participation: effects of choice of training on trainee motivation and learning, Personnel Psychology, 44, 51-65.

Bamford, G. (1986). Training the majority: Guidelines for the rural Pacific. Suva: Institute of the Pacific Studies of the University of the South Pacific.

Bandura, A. (1977). Social Learning Theory. Englewood Cliffs, NJ: Prentice-Hall.

Barrie, J., & Pace, R. W. (1997). Competency, efficiency and organisational learning. Human Resource Development Quarterly, 8, 4, 335-342.

Barrie, J. & Pace, R. W. (1998). Learning for organizational effectiveness: Philosophy of education and human resource development. Human Resource Development Quarterly, 9, 1, 39-54.

Bateson, M. C. (1994). Peripheral visions: Learning along the way. New York: Harper Collins.

Baumgartel, H., Reynolds, M., & Pathan, R. (1984). How personality and organisational-climate variables moderate the effectiveness of management development programmes: A review and some recent research findings. Management and Labour Studies, 9, 1-6.

Beaglehole, E., & Beaglehole, P. (1946). Some modern Maoris. Wellington: New Zealand Council for Educational Research.

Bell, B., & Gilbert, J. (1996). Teacher development. A model from science education. London: Falmer Press.

Bellanca, J. (1996). Designing professional development for change. A systemic approach. Highett, Victoria, Australia: Hawker Brownlow.

Bellanca, J. & Fogarty, R. (1992). Cognition in practice. In A. Costa, J. Bellanca, & R. Fogarty (Eds.), If minds matter: A foreword to the future: Vol. 2. Cheltenham, Victoria: Hawker Brownlow Education.

Ben-Hur, M. (1994, December). Thoughts on teaching and transfer. Paper presented at IRI/Skylight Consultant Conference, Chicago, IL.

Bennett, B. B. (1987). The effectiveness of staff development training practices: A meta-analysis. Dissertation. Eugene, OR: Division of Teacher Education and the Graduate School of the University of Oregon.

Benson, P. G. (1978). Measuring cross-cultural adjustment: The problem of criteria. International Journal of Intercultural Relations, 2, 21-37.

Bereiter, C. (1995). A dispositional view of transfer. In A. McKeough & L.J. Marini (Eds.), Teaching for transfer: Fostering generalisation in learning, (pp 21-34) Mahwah, NJ: Elbaum.

Biggs, J. (1993). From theory to practice. A cognitive systems approach. Higher Education Research and Development, 12, 1, 73-85.

Billett, S. (1992). Towards a theory of workplace learning. Studies in Continuing Education, 14, 2, 143-155.

Billett, S. (1994). Searching for authenticity: A socio-cultural perspective of vocational skill development. The Vocational Aspect of Education, 46, 1, 3-16.

Bloom, B. S., Englehart, M. D., Furst, E. J., Hill, W. H., & Krathwohl, D. R. (1956). Taxonomy of educational objectives. The classification of educational goals: Handbook I. Cognitive domain. New York: David McKay.

Bogg, J., & Cooper, C. (1995). Job satisfaction, mental health, and occupational stress among senior civil servants, Human Relations, 48, 3, 327-41.

Bolam, R. (1987, December). What is effective INSET? Paper presented at the annual members conference of the National Foundation for Educational Research in England and Wales, Bristol.

Bonk, C. J. & Kim, K. A. (1998). Extending sociocultural learning theory to adult learning. In M. C. Cecil & T. Pourchot (Eds.), Adult learning and development (pp. 67-88). Mahwah, NJ: Lawrence Erlbaum.

Boshier, R., & Collins, J. R. (1985). The Houle typology after twenty-two years: A large-scale empirical test. Adult Education, Quarterly, 30, 3, 113-130.

Boud, D., & Miller, N. (Eds.), (1996). Working with experience animating learning. Routledge; London.

Boud, D., & Walker, D. (1992). In the midst of experience: Developing a model to aid learners and facilitators. In J. Mulligan and C. Griffin (Eds.), Empowerment through experiential learning (pp. 163-169). London: Kogan page.

Bower, G. H., & Hilgard, E. R. (1981). Theories of Learning. Englewood Cliffs:Prentice-Hall.

Brady, M., & Anderson, D. (1983). Some issues in the implementation of PL 94-142 in the Pacific basin territories. Education, 103, 3, 259 - 269.

Bransford, J., Brown, A., & Cocking, R. (Eds) (1999). How people learn: Brain, mind experience and school. Washington, D.C.: National Academy Press.

Brethower, D. & Smalley, K. (1998). Performance based instruction: Linking training to business results. London: Jossey Bass.

Bridges, D. (1993) Transferable skills: a philosophical perspective. Studies in Higher Education, 18, 1, 43-51.

Brinkerhoff, R. O. (1987). Achieving results from training, San Francisco: Jossey-Bass Inc. Publishers.

Brinkerhoff, R. O., & Gill, S. J. (1994). The learning alliance: Systems thinking in human resource development. San Francisco: Jossey Bass.

Brinkerhoff, R. O., & Montesino, N. U. (1995). Partnerships for training transfer: lessons from a corporate study. Human Resource Development Quarterly, 6, 3, 263-74.

Broad, M. L. (1997a). Overview of transfer of training: from learning to performance. Performance Improvement Quarterly, 10, 2, 7-21.

Broad, M. L. (1997b). Transfer concepts and research review. In M.L. Broad (Ed.), Transferring learning to the workplace (pp. 1-18). Alexandria, VA: American Society for Training and Development.

Broad, M. L., & Newstrom, J. W. (1992). Transfer of training: Action packed strategies to ensure high payoff from training investments. Reading, MA: Addison-Wesley.

Broekhuizen. L. D. & Dougherty, B. (1999). Teacher diversity: Implications for professional development. Honolulu, HA: Pacific Resources for Education and Learning.

Brookfield, S. D. (1995). Becoming a critically reflective teacher. San Francisco: Jossey-Bass.

Brooks, L. W., & Dansereau, D. F. (1987). Transfer of information: An instructional perspective. In S. M. Cormier & J. D. Hagman (Eds.), Transfer of learning: Contemporary research and applications (pp. 121-150). San Diego, CA: Academic Press, Inc.

Brown, J. S., Collins, A., & Duguid, P. (1989). Situated cognition and the culture of learning. Educational Researcher, 18, 1, 32-42.

Buckley, R., & Caple, J. (1996). One to one training and coaching skills. London: Kogan Page.

Burke, L., & Baldwin, T. (1999). Workforce training transfer: A study of the effect of relapse prevention training and transfer climate. Human Resource Management, 38, 3, 227-242.

Bush R. N. (1984). Effective staff development. In Making our schools more effective: Proceedings of three state conferences. San Francisco: Far West Laboratory [On-line]. Available: http://www.sedl.org/change/issues/issues42

Butler, J. A. (1992). Staff development. School Improvement Research Series. Series VI [On-line]. Available: http://www.nwrel.org/scpd/sirs/6/cul12

Caffarella, R. S. (1994). Planning programmes for adult learners: A practical guide for educators, trainers and staff developers. San Francisco: Jossey-Bass.

Caffarella, R. S., & Merriam, S. B. (May, 1999). Perspectives on adult learning: Framing our research. Proceedings of the 1999 AERC (Adult Education Research Conference) in DeKalb, Illinois.

Cajete, G. (1994). Look to the mountain: An ecology of indigenous education. Skyland, NC: Kivaki Press.

Campbell, I. (1992). A historical perspective on aid and dependency: The example of Tonga. Pacific Studies Journal, 15, 3, 59- 75.

Campione, J. C., Shapiro, A. M., & Brown, A. L. (1995). Forms of transfer in a community of learners: Flexible learning and understanding. In A. McKeough, J. Lupart, & A. Marini (Eds.), Teaching for transfer: Fostering generalization in learning (pp. 35-68). Mahwah, NJ: Lawrence Erlbaum Associates, Publishers.

Cannon-Bowers, J. A., Salas, E., Tannenbaum, S. I., & Mathieu, J. E. (1995). Toward theoretically-based principles of training effectiveness: A model and empirical investigation. Military Psychology, 7, 141-164

Cardno, C. (1996). Professional development: An holistic approach. New Zealand Journal of Educational Administration, 11, December, (pp.25-28).

Castaldi, T. (1989). Adult learning: Transferring skills from the workplace to the classroom. Lifelong Learning: An Omnibus of Practice and Research, 12, 6, 17-19.

Chen, H. (1997). Applying mixed methods under the framework of theory-driven evaluations. In J. C. Green & V. J. Caracelli (Eds.), Advances in mixed-method evaluation: The challenges and benefits of integrating diverse paradigms. Vol. 74, New Directions for Evaluation. San Francisco: Jossey-Bass.

Cheng, E. & Ho, D. (2001). A review of transfer of training studies in the past decade. Personnel Review, 30, 1, 102-118.

Clair, N. & Adger, C. T. (1999). Professional development for teachers in culturally diverse schools. ERIC Digest ED435185. Eugene, OR:, ERIC Clearinghouse on Educational Management, College of Education, University of Oregon.

Clark, C., Dobbins, G., & Ladd, R. (1993). Exploratory field study of training motivation. Group and Organisational Management, 18, 3, 292-307.

Cohen, D. (1974). Some considerations in the development, implementation, and evaluation of curricula (Technical Report 2). Iowa: University of Iowa, Science Education Centre.

Cole, M. & Scribner, S. (1974). Culture and thought: A psychological introduction. New York: John Wiley and Sons.

Collins, A., Brown, J. S., & Newman, S. E. (1989). Cognitive apprenticeship: Teaching the crafts of reading, writing, and mathematics. In L. B. Resnick (Ed.), Knowing, learning, and instruction: Essays in honor of Robert Glaser (pp. 453-494). Hillsdale, NJ: Lawrence Erlbaum Associates.

Collinson, C. A., & Brook, J. A. (1997). The workplace and its influence in transfer of training. 30 August, Massey University, Palmerston North, New Zealand. 1997 Annual Conference of the New Zealand Psychological Society.

Colquitt, J. A., LePine, J. A. , & Noe, R. A. (2000). Toward and integrative theory of training motivation: A meta-analytic path analysis of 20 years of research. Journal of Applied Psychology, 85, 678-707.

Connell, J., & Lea, J. (1995). Pacific 2010: Urbanisation in Polynesia. Canberra: Australian National University, National Centre for Development Studies.

Cook Islands Government (2001). Population. Economy. [On-line]. Available: http://www.cook-islands.gov.ck/geography.htm   [Accessed 2001, July 24]

Cook Islands Ministerial Task Force (1989). Polynesia way: Observations and perceptions. Conclusions and proposals. Review of Cook Islands education. Cook Islands: Author.

Cordiero, P. A. (1997, March). A problem based learning approach to professional development: Supporting learning transfer. Paper presented at the Annual Meeting of the American Education Research Association, Chicago , Il.

Cormier, S. (1984). Transfer of training: An interpretive review (Technical Report No.608). Alexandria, VA: Army Research Institute for the Behavioural and Social Sciences.

Cormier, S., & Hagman, J. (1987). Transfer of learning. San Diego, CA: Academic Press.

Cox, B. (1997). The rediscovery of the active learner in adaptive contexts: A developmental-historical analysis of transfer of training. Educational Psychologist, 32, 1, 41-55.

Craft, A. (2000). Continuing professional development. A practical guide for teachers and schools. London: Routledge Falmer.

Crafts, L. W. (1935). Transfer as related to number of common elements. Journal of General Psychology, 13, 147-158.

Craig, H. J., Kraft, R. J., & du Plessis, J. (1998). Teacher Development: Making an Impact. Washington, DC: The World Bank.

Cranton, P. (1994). Understanding and promoting transformative learning: A guide for educators of adults. San Francisco, CA: Jossey-Bass.

Cree, V., & Macaulay, C. (Eds). (2001). Transfer of learning in professional and vocational education. London: Routledge.

Crocombe, R. (1983). The South Pacific: An introduction. Auckland: Longman Paul.

Cross, K. P. (1981). Adults as Learners: Increasing participation and facilitating learning. San Francisco: Jossey-Bass.

Cruz, B. J. (1997). Measuring the transfer of learning. Performance Improvement Quarterly, 10, 2, 83-97.

Curry, D. H., Caplan, P., & Knuppel, J. (1994). Transfer of training and adult learning (TOTAL). Journal of Continuing Social Work Education, 6, 1, 8-14.

Cushner, K. & Brislin, R. W. (1996). Intercultural Interactions: A Practical Guide. Thousand Oaks: Sage Publications.

Daley, B. J. (May, 1998). Novice to Expert: How Do Professionals Learn? Paper delivered to the Adult Education Research Conference (AERC), in San Antonia, Texas.

Darling-Hammond, L. (1990). Teacher professionalism; Why and how? In A. Lieberman (Ed.), Schools as collaborative cultures: Creating the future now. New York: Falmer Press.

Darling-Hammond, L. (1998). Teachers and teaching: Testing policy hypotheses from a national commission report. Educational Researcher, 27, 1, 5-10.

Davenport, E. & Low, W. (2001). Basic education and Pacific peoples: Changing the priorities. Auckland: Oxfam.

Day, C. (2000). Stories of change and professional development: The costs of commitment. In C. Day, A. Fernandez, T. Hauge & J. Moller (Eds.), The life and work of teachers: International perspectives in changing times, (pp. 91 - 115). London: Falmer Press.

De Corte, E. (1995). Learning theory and instructional science. In P. Reiman & H. Spada (Eds.), Learning in humans and machines: Towards an interdisciplinary learning science (pp. 97-108). Elmsford, NY: Pergamon.

De Corte, E. (1996). Instructional psychology: Overview. In E. De Corte & F. E. Weinert (Eds.), International encyclopedia of developmental and instructional psychology (pp. 33-43). Oxford: Pergamon.

Decker, P. J. (1980). Effects of symbolic coding and rehearsal in behavior modeling training. Journal of Applied Psychology, 65, 627-634.

Decker, P. J. (1982). The enhancement of behavior modeling training of supervisory skills by the inclusion of retention processes. Personnel Psychology, 32, 323-332.

Deese, J. (1958). Transfer of training. The psychology of learning. NY: McGraw-Hill.

Dennison, G., Dennison, P. & Teplitz, J. (1995). Brain gym for business: Instant brain boosters for on-the-job success. Venture, CA: Edu-Kinesthetics, Inc.

Densem, P. (1990). Disability in the Cook Islands (UNDP Regional Project - RAS/86/128). Development Advisory services for the Pacific.Vanuatu: United Nations ESCAP.

Detterman, D. (1993). The case for the prosecution: Transfer as an epiphenomenon. In D. Detterberg & R. Sternberg (Eds.), Transfer on trial (pp. 1-24). Norwood, NJ: Ablex Publishing Co.

Dillon, L. S. (1993). West meets East: Succeeding with Japanese audiences. Training and development, 47, 3, 39-43.

Dirkx, J. (1998). Transformative Learning Theory in the Practice of Adult Education: An Overview. PAACE Journal of Lifelong Learning ,7, 1-14.

Donaldson, J., Flannery, D., & Ross-Gordon, J. (1993). A triangulated study comparing adult college students' perceptions of effective teaching with those of traditional students. Continuing Higher Education Review, 57, 3, 147-65.

Doyle, W., & Ponder, G. (1978). The practicality ethic in teacher decision. Interchange, 8, 1-12.

Driskell, J. E., & Johnston, J. H. (1998). Stress exposure training. In J. A. Cannon-Bowers & E. Salas (Eds.), Making Decisions Under Stress: Implications for Individual and Team Training. Washington, DC: APA Books.

Duncan, C. P., & Underwood, B. J. (1953). Transfer in motor learning as a function of degree of first task learning and inter-task similarity. Journal of Experimental Psychology, 46, 445-452.

Ellis, H. C. (1965). The Transfer of Learning. New York: Macmillan.

Ellsworth, J. B. (2000). Surviving change : a survey of educational change models. ERIC Digest 443417. ERIC Clearinghouse on Information & Technology, Syracuse University, NY.

Ely, D. (1990). Conditions that facilitate the implementation of educational technology innovations. Journal of Research on Computing in Education, 23, 2, 298-305.

Entwhistle, A. & Entwhistle, N. (1997). The experience of understanding in revising for degree examinations. Learning and Instruction, 2, 1 – 22.

ERO (New Zealand Education Review Office)(2000). Inservice training for teachers in New Zealand schools. ERO document #1. Wellington, NZ: Author.

Facteau, J. D., Dobbins, G. H., Russell. J. E. A., Ladd, R. T., & Kudisch, J. D. (1995). Influence of the general perceptions of the training environment on pretraining motivation and perceived training transfer. Journal of Management, 21, 1-25.

Feldstein H. D. & Boothman, T. (1997). Success factors in technology training. In M. Broad (Ed.)., Transferring learning to the workplace, (pp.19-33). Alexandria,VA: ASTD.

Fenstermacher, G. D. (1986). Philosophy of research on teaching: Three aspects. In M. C. Wittrock (Ed.), Handbook of research on teaching (3rd ed., pp. 37-49). New York: Macmillan.

Ferguson, G. A. (1963). On transfer and the abilities of man. In R. G. Grose & R. C. Birney (Eds.), Transfer of learning: An enduring problem in psychology (pp. 181-194). New York: D. Van Nostrrand.

Feuer, D., & Geber, B. (1988). Second thoughts about adult learning theory. Training, 25, 12, 31-39.

Fitzgerald, M. (1993). Culture and disability in the Pacific: When does a difference make a difference? Network, 3, 2, 7-12.

Fogarty, R. (1989). From training to transfer: The role of creativity in the adult learner. Unpublished doctoral dissertation, Loyola University of Chicago.

Fogarty, R. (1997). Enhancing transfer. In A. Costa & R. Liebermann (Eds.), Supporting the spirit of learning. When process is content (pp. 73- 87). Thousand Oaks, CA: Corwin Press.

Fogarty, R., Perkins, D., & Barrell, J. (1991a). How to teach for transfer. Highett, Victoria, Australia:Hawker Brownlow.

Fogarty, R., Perkins, D., & Barell, J. (1991b). The mindful school: How to integrate the curricula. Palantine, IL: IRI Skylight.

Ford, J. K. (1994). Defining transfer of learning. The meaning is in the answers. Adult Learning, X, X. 22- 24.

Ford, J. K. (1997). Transfer of training: The criterion problem. Applied Psychology: An International Review, 46, 349-354.

Ford, J. K., & Kraiger, K. (1995). The application of cognitive constructs and principles to the instructional systems model of training: Implications for needs assessment, design, and transfer. In C. L. Cooper & I. T. Robertson (Eds.), International Review of Industrial and Organizational Psychology, 10, 1-48.

Ford, J. K., Quinones, M. A., Sego, D. J., & Sorra, J. S. (1992). Factors affecting the opportunity to perform trained tasks on the job. Personnel Psychology, 45, 511-527.

Ford, J. K., Smith, E. M., Weissbein, D. A., Gully, S. M., & Salas, E. (1998). Relationships of goal orientation, metacognitive activity and practice strategies with learning outcomes and transfer. Journal of Applied Psychology, 83,2, 218-233.

Ford, J. K., & Weissbein, D. A. (1997). Transfer of training: An updated review. Performance Improvement Quarterly, 10, 2, 22-41.

Foxon, M. J. (1992). In defence of post-course evaluations. Going beyond the smiles sheet. Australian Journal of Educational Technology 8, 1, 1-12. http://cleo.murdoch.edu.au/gen/aset/ajet/ajet8/wi92p1.html

Foxon, M. J. (1993). A process approach to the transfer of training. Part 1: The impact of motivation and supervisor support on transfer maintenance. Australian Journal of Educational Technology, 9 (2), 130-143.

Foxon, M. J. (1994). A process approach to transfer of training. Part 2: using action planning to facilitate the transfer of training. Australian Journal of Educational Technology, 10, 1, 1-18.

Foxon, M. J. (1997). The influence of motivation to transfer, action planning, and manager support on the transfer process. Performance Improvement Quarterly, 10, 2, 42-63.

Friedman, B. A. (1990). Six ways to make it work at work. Training and Development Journal, December, 17-19.

Friedman, M., & Rosenman, R. H. (1974). Type A behavior and your heart. Greenwich, CT: Fawcett.

Fullan, M. G. (1982). The meaning of educational change. Ontario: OISE Press.

Fullan, M. G. (1991). The new meaning of educational change. London: Cassell.

Fullan, M. G. (1992). Successful school improvement. Buckingham: Open University Press.

Fullan, M. G., Bennett, B., & Rolheiser-Bennett, C. (1990). Linking classroom and school improvement. Educational Leadership 47, 8, 13-19.

Gage, N. (1984). What do we know about teaching effectiveness? Phi Delta Kappan, 66, 2, 87-93.

Gagne, E. D. (1985). The cognitive psychology of school learning. Boston: Little Brown.

Gagne, R. M., Baker, K., & Foster, H. (1950). On the relation between similarity and transfer of training in the learning of discriminative motor tasks. Psychological Review, 57, 67-69.

Gagne, R. M., & White, R. T. (1978). Memory structures and learning outcomes. Review of Educational Research 48, 2, 187-222.

Gall, M. D., & Renchler, R. S. (1985). Effective staff development for teachers: a research-based model. ERIC Digest ED256009. Eugene, OR:, ERIC Clearinghouse on Educational Management, College of Education, University of Oregon.

Garavaglia, P. L. (1993). How to ensure transfer of training. Training and Development, 47, 10, 63-68.

Garavaglia, P. L. (1996). Applying a transfer model to training. Performance and Instruction, 35, 4, 4-8.

Gardner, H. (1993). Multiple intelligences: The theory in action. New York: Basic Books.

Garrison, D. R. (1994). An epistemological overview of the field. In D. R. Garrison (Ed.) Research perspectives in adult education (pp1-15). Malabar, FL: Krieger Publishing

Gass, M. A. (1989). Transfer of learning in adventure education. In J. C. Miles & S. Priest (Eds.), Adventure Education (pp.199-208). State College, PA: Venture Publishing Inc.

Gephart, R. (1999). Paradigms and research methods. Research Methods Forum, [Online serial] 4. Available: http://www.aom.pace.edu/rmd/1999_RMD_Forum_Paradigms_ and_Research_Methods.htm [Accessed 2001, June 10]

Ghiselli, E. E. (1966). The validity of occupational aptitude tests. New York: John Wiley & Sons.

Gibson, C. C. (1992). Distance education: On focus and future. Adult Education Quarterly, 42, 3, 167-179.

Gick, M. L., & Holyoak, K. J. (1980). Analogical problem solving. Cognitive Psychology, 12, 306-355.

Gick, M. L., & Holyoak, K. J. (1987). The cognitive basis of knowledge transfer. In S. M. Cormier & J. D. Hagman (Eds.), Transfer of learning: Contemporary research and applications, (pp.9-46). San Diego, CA: Academic Press.

Gielen, E. W. (1996, March). Transfer of training in corporate setting: Testing a model. Paper delivered at the Academy of Human Resource Development Conference. Minneapolis, MN.

Giorgi, A. (1983). Concerning the possibility of phenomenological psychological research. Journal of Phenomenological Psychology, 14, 2, 129-170.

Gist, M. E., Bavetta, A. G., & Stevens, C. K. (1990). Transfer training method: Its influence on skill generalisation, skill repetition, and performance level. Personnel Psychology, 43, 501-523.

Goettl, B. P., Yadrick, R. M., Connolly-Gomez, C., Regian, W. J., & Shebilske, W. L. (1996). Alternating task modules in isochronal distributed training of complex tasks. Human Factors, 38, 330-346.

Goldberger, N. R. (1996). Cultural imperatives and diversity in ways of knowing. In N. R. Goldberger, J. N. Tarule, B. M. Clinch, & M. F. Belenky (Eds.), Knowledge, difference, and power: Essays inspired by women's ways of knowing (pp.335-371). New York: Basic Books.

Gordon, J. (1989). Transfer of training. Training, 26, 11, 72-75.

Gordon, M. E., & Cohen, S. L. (1973). Training behavior as a predictor of trainability. Personnel Psychology, 26, 261-272.

Gradous, B. D. (1991). The development and validation of a transfer of training system (Project No. 45). St Pauls, Minnesota: Minnesota University, Department of Vocational and Technical Education.

Graves, T., & Graves, N. (1978). The stress of modernization in a traditional Polynesian society. South Pacific Research Institute, research Institute, Research Report No. 18.

Greeno, J. G. (1992, June). The situation in cognitive theory: Some methodological implications of situativity. Paper presented at the American Psychological Association conference, San Diego, California.

Gregoire, T. K. (1994). Assessing the benefits and increasing the utility of addiction training for public child welfare workers: A pilot study. Child Welfare, 73, 69-81.

Gregoire, T. K., Propp, J., & Poertner, J. (1998). The supervisor's role in the transfer of training. Administration in Social Work, 22, 1, 1-18.

Guskey, T. R. (1985). Staff development and teacher change. Educational Leadership, 42, 7, 57-60.

Guthrie, J., & Schwoerer, C. (1994). Individual and contextual influences on self-assessed training needs. Journal of Organizational Behavior, 15, 5, 405-422.

Hall, G. E., & Hord, S. M. (1987). Change in schools: Facilitating the process. Albany: State University of New York.

Hall, J. F. (1966). The psychology of learning. Philadelphia, PA: J. B. Lippincott.

Hammer, M. R., Gudykundst, W. B., & Wiseman, R. L. (1978). Dimensions of intercultural effectiveness. International Journal of Intercultural Relations, 11, 65-88.

Hand, H. H., Richards, M. D., & Slocum, J. M. (1973). Organisation climate and the effectiveness of a human relations programme. Academy of Management Journal, 16, 185-195.

Hao'ofa, E. (1993). Our sea of islands and A beginning. In E. Waddell, V. Naidu & E. Hau'ofa (Eds.)., A new Oceania: Rediscovering our sea of islands, (pp. 2-16; pp. 126-139). Suva, Fiji: School of Social and Economic Development, University of the South Pacific.

Hao'ofa, E. (2000). The ocean in us. In A. Hooper (Ed.)., Culture and sustainable development in the Pacific, (pp. 32-43). Melbourne, Australia; Asia Pacific Press.

Harding, S. (1987). Introduction: Is there a feminist method? In S. Harding (Ed.)., Feminisim and methodology (pp.1-14). Milton Keynes: Open University Press

Hargreaves, A., & Dawe, R (March, 1989). <u>Coaching as unreflective practice: Contrived collegiality or collaborative culture?</u> Paper presented at the Annual Meeting of the American Educational Research Association, San Francisco, CA.

Hargreaves D. H., & Hopkins, D. (1991). <u>The empowered school: The management and practice of development planning</u> . London: Cassell

Hargreaves, D. H., & Hopkins, D. (Eds.) (1994). <u>Development planning for school improvement.</u> London: Cassell Professional.

Haskell, R. E. (2001). <u>Transfer of learning. Cognition, instruction and reasoning</u>. San Diego, CA: Academic Press.

Haslerud, G. M. (1972). <u>Transfer, memory and creativity.</u> Minneapolis: University of Minnesota Press

Havelock, R., & Zlotolow, S. (1995). <u>The change agent's guide, (2nd ed.).</u> Englewood Cliffs, NJ: Educational Technology Publications.

Heaney, T. (May, 1995). <u>Learning to control democratically: Ethical questions in situated adult education</u>. Proceedings of the Adult Education Research Conference. University of Alberta, Edmonton.

Helu-Thaman, K. H. (1999). The forgotten context: Culture and teacher education in Oceania. <u>Directions, 21</u>, 1, 13-30.

Hesketh, B. (1997). Dilemmas in training for transfer and retention. <u>Applied Psychology: An International Review, 46</u>(4), 317-339.

Higgins, S. & Leat, D. (1997). Horses for courses or courses for horses: What is effective teacher development? <u>British Journal of In-service Education, 23</u>, 3, 303-314.

Hoepfl, M. C. (1997). Choosing qualitative research: A primer for technology education researchers. <u>Journal of Technology Education, 9,</u> 1, 1-16.

Hofstede, G. (1984). <u>Culture's consequences.</u> Newbury Park, CA: Sage.

Hofstede, G. (1991). <u>Cultures and organisations: Software of the mind.</u> London: McGraw-Hill.

Holt, M. (1994). The transfer of the learning process: Before, during and after educational programmes. <u>Adult Learning, 5,</u> 4, 24-30.

Holton, E. F (1996). The flawed four-level evaluation model. <u>Human Resource Development Quarterly, 1</u>, 5-21.

Hopson, P., & Welbourne, L. (1998). Adult Development and Transformative Learning. <u>International Journal of Lifelong Education 17</u>, 2, 72-86.

Hord, S. M. (1997). Professional learning communities: Communities of continuous inquiry and improvement. Austin: Southwest Educational Development Laboratory.

Howard, A. (1990). Cultural paradigms, history, and the search for identity in Oceania. In Linnekin, J. & Poyer, L. (eds.), Cultural identity and ethnicity in the Pacific, (pp. 259-279)

Howey, K. R., Matthes, W. A., & Zimpher, N. L. (1985). Issues and problems in professional development. Oak Brook, IL: North Central Regional Educational Laboratory.

Hoyle, E. (1980). Professionalism and deprofessionalisation in education. In E. Hoyle & J. Megarry (Eds.), World yearbook of education 1980: professional development of teachers, (pp. 42-57). London: Kogan Page.

Huczynski, A. A., & Lewis, J. W. (1980). An empirical study into the learning transfer process in management training. Journal of Management Studies, 17, 227-240.

Husserl, E (1970) Translated D. Carr. Logical investigations. London, New York: Routledge and K. Paul; Humanities Press.

Hynds, A. (1997). Perceptions on transfer of training strategies for teacher inservice within New Zealand. Wellington College of Education, Wellington, N.Z.

Imel, S. (1989). Teaching adults: Is it different? ERIC digest No.82 [On-line]. Available: http://www.ed.gov/databases/ERIC_Digests/ed305495 [Accessed. 2001, September 11]

Imel, S. (1995). Teaching adults. Is it different? Myths and Realities. ERIC Digest No. 82., Columbus, Ohio: ERIC Clearing House on Adult, Career and Vocational Education, Center on Education and Training for Employment, The Ohio State University.

Imel, S. (2000). Change: Connections to adult learning and education. ERIC Digest No. 221, Columbus, Ohio: ERIC Clearing House on Adult, Career and Vocational Education, Center on Education and Training for Employment, The Ohio State University.

Imel, S. (2001). Adult Development. Trends and Issues Alert No. 22. ERIC Digest No.449376, Columbus, Ohio: ERIC Clearing House on Adult, Career and Vocational Education, Center on Education and Training for Employment, The Ohio State University.

Irvine, J., & York D. (1995). Learning styles and culturally diverse students: A literature review. In J. Banks & C. Banks (Eds.), Handbook of research on multicultural education (pp 484 - 497). N.Y.: Macmillan Publishing.

Jacobson, W. (1996). Learning, culture, and learning culture. Adult Education Quarterly, 47, 1, 15-28.

James, W. (1890). Principles of psychology. New York: Holt.

Jarvis, P. (1987). Adult learning in the social context. London: Croom Helm.

Jedrziewski, D. (1995). Putting methods to the madness of evaluating training effectiveness. Performance and Instruction, 34, 1, 23-31.

JHPIEGIO (2001). Glossary of learning and training terms. Reproline: The reading room. [Online]. Available: http://www.reproline.jhu.edu/english/6rea/6gloss/glosstrn.htm [Accessed 2001, July 16].

Johnson, D. & Johnson, R. (1998). Social psychological applications to social issues. Cooperative learning and social interdependence theory. [Online]. Available at http://www.clcrc.com/pages/SIT.html [Accessed 2001, August 12].

Jonsson, T. (1992). Special education training in developing countries. Division of International Special Education Services Newsletter, 1, 8-10.

Joyce, B., & Showers, B. (1980). Improving inservice training: The messages of research. Educational Leadership, 37, 379-385.

Joyce, B., & Showers, B. (1988). Student achievement through staff development. New York: Longman.

Judd, C. H. (1908). The relation of special training and intelligence. Educational Review, 36, 42-48.

Katona, G. (1940). Organizing and memorizing: Studies in the psychology of learning and teaching. New York: Columbia University Press.

Katz, L., Raths, J., & James, D. (1985). A framework for research on teacher education programmes. Journal of Teacher Education, 36, 6, 9-15.

Keesing, F. (1981). Social anthropology in Polynesia. Suva: South Pacific Commission.

Kegan, R. (1994). In over our heads: The mental demands of modern life. Cambridge, MA: Harvard University Press.

Kellehear, A. (1993). The unobtrusive researcher: A guide to methods. St Leonards, Australia: Allen & Unwin.

Kember, D. (1996). The intention to memorise and understand: Another approach to learning. Higher Education, 31, 3, 341-354.

Kim, Y. (1992, May). Development of intercultural identity. Paper presented at the annual conference of the International Communication Association, Miami, FL.

Kim, Y., & Ruben, D. (1988). Intercultural transformation. In Y. Kim & W. Gudykundst (Eds.). Theories in intercultural communication (pp. 299-321). Newbury Park, CA: Sage.

King, J. (1998). Facilitating inquiry-based staff development. Focus on Basics 2, issue C, 19-21.

Kirkpatrick, D. (1994). Evaluating training programmes: the four levels. San Francisco: Berrett: Koehler.

Knapman, B. (1986). Aid and dependent development of the Pacific island states. Journal of Pacific History, 21,3, 139-152.

Knowles, M. (1970). The modern practice of adult education: An autobiographical journey. New York: Association Press

Knowles, M. (1980). The modern practice of adult education (Rev. ed.). Chicago: Follett.

Knowles, M. (1984). Andragogy in action. San Francisco: Jossey-Bass.

Knowles, M., & Associates (Eds.). (1985). Andragogy in action: Applying modern principles of adult learning. San Francisco: Jossey-Bass.

Kolb, D. A. (1984). Experiential learning: experience as the source of learning and development. Englewood Cliffs, New Jersey, Prentice-Hall, Inc.

Koloto, A. (1997). Issues for Education in the South Pacific: education and change in the Kingdom of Tonga. Oxford Studies in Comparative Education, 7, 1,

Kozlowski, S. W., & Doherty, M. L. (1989). Integration of climate and leadership: Examination of a neglected issue. Journal of Applied Psychology, 74, 4, 546-553.

Kozlowski, S. W., & Salas, E. (1997). A multilevel organizational systems approach for the implementation and transfer of training. In J. K. Ford (Ed.), Improving Training Effectiveness in Work Organizations (pp. 247-287).

Kraiger, K. (1995, August). Paradigms lost: Applications and misapplications of cognitive science to the study of training. Invited address presented at the 103rd annual convention of the American Psychological Association, New York.

Kraiger, K. (in press). Preface. In K. Kraiger (Ed.), Creating, implementing, and managing effective training and development (pp. xv-xxiv). San Francisco, CA: Jossey-Bass.

Kraiger, K., Ford, J. K., & Salas, E. (1993). Application of cognitive, skill-based, and affective theories of learning outcomes to new methods of training evaluation, Journal of Applied Psychology, 78, 2, 311-28.

Kvale, S. (1987a). Validity in the qualitative research interview. Methods, 1, 2, 37-72.

Kvale, S. (1987b). Interpretation of the qualitative research interview. In F. J. van Zuuren, F. J. Wertz, & B. Mook (Eds.), Advances in qualitative psychology: Themes and variations (pp. 25-40). Lisse, The Netherlands: Swets and Zeitlinger.

Lanier, J. E. & Little, J. W. (1986). Research on teacher education. In Merlin C. Wittrock (Ed.), Handbook of research on teaching (pp.527-569) New York: MacMillan Publishing Company.

Larkin, J., McDermott, J., Simon, D. p., & Simon, J. A. (1980). Expert and novice performance in solving physics problems. Science, 208, 1335-1342.

Larrivee, B. (1999). Authentic classroom management: Creating a community of learners. Needham Heights, MA: Allyn & Bacon.

Lave, J. (1988). Cognition in practice: Mind, mathematics and culture in everday life. New York: Cambridge University Press.

Lave, J. (1993). The practice of learning. In S. Chaiklin & J. Lave (Eds.), Understanding Practice. Cambridge: Cambridge University Press.

Lave, J., & Wenger, E. (1991). Situated learning: Legitimate peripheral participation. Cambridge: Cambridge University Press.

Lee, C. (1992). The relations of personality and cognitive styles on job and class performance; Journal of Organizational Behaviour, 13, 175-85.

Leithwood, K. A., & Montgomery, D. J. (1982). The role of the elementary school principal in programme development. Review of Educational Research, 52, 309-339.

Lester, S. (1999). An introduction to phenomenological research [Online]. Available: http://www.devmts.demon.co.uk/resmethy

Levine, P. J. (1996). Change is constant (every once in awhile). East Lansing: Michigan State University. www.canr.msu.edu/aee/extension/oct.96

Lewin, K. (1951). Field theory in social science. New York: Harper Row.

Lieberman, A. & Miller, L. (1999). Teachers – transforming their world and their work. New York: Teachers' College Press.

Light, P., & Butterworth, G. (Eds.) (1993). Context and cognition. Ways of learning and knowing. Hillsdale: Lawrence Erlbaum.

Lim, D. (1999). Organizational and cultural factors affecting international transfer of training. Performance Improvement, 38, 3, 30-36.

Lim, D. H., & Wentling, R. M. (1998). Transfer of training programs for multinational chain hotels in Korea. International Journal of Training and Development, 2, 1, 17-28.

Lincoln, Y., & Guba, E. (1985). Naturalistic inquiry. Beverly Hills, CA: Sage Publications.

Linnekin J., & Poyer, L. (Eds.)(1990). Cultural identity and ethnicity in the Pacific. Honolulu: University of Hawaii Press.

Lippit, R., Watson, J., & Westley, B. (1958). The dynamics of planned change. New York: Harcourt, Brace, and World.

Little, A. (1990, March). Understanding culture: A pre-condition for effective learning. A special study for the UNESCO World Conference on Education for All, Bangkok, Thailand.

Little, J. W. (1982). Norms of collegiality and experimentation: Workplace conditions of school success. American Educational Research Journal, 19, 325-340.

Little, J. W. (1986). Seductive images and organizational realities in professional development. In Ann Lieberman (Ed.), Rethinking school improvement/research, craft, and concept (pp. 26-44). New York: Teachers College Press.

Livingston, D. W. & Roth, R. (1998). Workplace communities and transformative learning: Oshawa autoworkers and the CAW. Convergence, 21, 3, 12-23.

Locke, E. A. (1968). Toward a theory of task motivation and incentives. Organizational Behavior and Human Performance, 3, 157-189.

MacKeracher, D. (1996). Making sense of adult learning. Toronto: Culture Concepts, Inc.

Mara, D., Foliaki, L., & Coxon, E. (1994). Pacific Islands education. In E. Coxon, K. Jenkins, J. Marshall & L. Massey, (Eds.), The politics of learning and teaching in Aotearoa-New Zealand, (pp. 180 – 214). Palmerston North: Dunmore Press.

Marini, A., & Genereux, R. (1995). The challenge of teaching for transfer. In A. McKeough, J. Lupart, & A. Marini (Eds.), Teaching for transfer: Fostering generalization in learning pp. 1-19). Mahwah, N.J.: Lawrence Erlbaum Associates.

Marton, F. & Saljo, R. (1997). Approaches to learning. In F. Marton, D. Hounsell & N. Entwhistle (Eds.), The experience of learning. Implications for teaching and studying in higher education (pp. 238-257). Edinburgh: Scottish Academic Press

Marx, R. D. (1986). Improving management development through relapse prevention studies. Journal of Management Development, 5, 2, 27-40.

Matheson, K. (1999). Education for all: 2000 report. Rarotonga, Cook Islands: Ministry of Education.

Mathieu, J. E., Tannenbaum, S. I., & Salas, E. (1992). Influences of individual and situational characteristics on measures of training effectiveness. Academy of Management Journal, 35, 4, 828-847.

May, G. L. (1999, March). Mixed methods: the value of the qualitative perspective in transfer of training research. Paper presented at the conference of the Academy of Human Resource Development, Arlington, Virginia.

May, G. L., Reilly, B. A. (March, 1997). Climate for training transfer: A progress review and recommendations for further research. Academy of Human Resource Development conference proceedings Atlanta, Georgia.

Mayer, R. & Wittrock, M. (1996). Problem solving transfer. In D. Berliner & R. Calfee (Eds.), Handbook of educational psychology (pp. 47-62). London: Prentice Hall.

McCaleb, S. P. (1995). Building communities of learners: A collaboration among teachers, students, families, and community. Mahwah, NJ: Lawrence Erlbaum.

McDonald, B. L. (1995a) Cook Islands teacher development project: Project plan for teacher inservice (special education). Unpublished manuscript, Wellington College of Education, New Zealand.

McDonald, B. L. (1995b). Teacher inservice needs analysis: A Rarotongan survey. Unpublished manuscript, Wellington College of Education, New Zealand.

McDonald, B. L., & Moetaua, T. (1993). Cook Islands Teacher Development Project. Unpublished manuscript, Wellington College of Education, New Zealand.

McDonald, B. L., & Paterson, S. (1994). New Zealand inservice training and professional development questionnaire. Unpublished manuscript, Wellington College of Education, New Zealand.

McDonald, B. L., & Willis, D. (1998). Some cultural challenges facing adult educators. Paper delivered to the Adult Learning Cultures: Changes and Challenges Conference. Wellington, January 1998.

McGehee, W., Thayer, P. W. (1961). Training in business and industry. New York: Wiley.

McGraw, P. (1993). Back from the mountain: Outdoor management development programmes and how to ensure the transfer of skills to the workplace. Asia Pacific Journal of Human Resources, 3, 31, 52-61.

McKeachie, W. J., Pintrich, P. R., Lin, Y., & Smith, D. A. F. (1986). Teaching and learning in the college classroom. A review of the research literature. (Technical report No. 86-B-001.0). National Centre for Research to Improve Post-secondary Teaching and Learning, University of Michigan.

McKeough, A., Lupart, J., & Marini, A. (Eds). (1995). Teaching for transfer: fostering generalisation in learning. Mahwah, NJ:Llawrence Erlbaum.

McSherry, M., & Taylor, P. (1994). Supervisory support for the transfer of team-building training. The International Journal of Human Resource Management, 5, 1, 107-119.

Mead, M. (1928). Coming of age in Samoa. New York: William Morrow and Co.

Metge, A. J. (1976). The Maoris of New Zealand. London: Routledge Kegan Paul.

Mezirow, J. (1991). Transformative dimensions of adult learning. San Francisco: Jossey-Bass.

MFAT (2000). Annual review. Development Co-operation Division [Online]. Available: http//:www.mft.govt.nz/nzoda/annrev2000/general/framework.html.

Miles, M. B. (1965). Changes during and following laboratory training: A clinical-experimental study. Journal of Applied Behavioral Science, 1, 215-242.

Miles, M. B., & Huberman, A. M. (1994). Qualitative data analysis (2nd ed). Thousand Oaks, CA: Sage Publications.

Miles, W. G., & Biggs, W. D. (1979). Common, recurring and avoidable errors in management development. Training and Development Journal, 33, 2, 32-35.

Milheim, W. D. (1994). A comprehensive model for the transfer of training, 7, 2, 95-104.

Milheim, W. D., & Martin, B. L. (1991). Theoretical bases for the use of learner control: three different perspectives. Journal of Computer Based Instruction, 18, 99-105.

Millis, B. J., & Cottell, P. G. Jnr (1998). Cooperative learning for higher education faculty. Phoenix, AZ: American Council on Education, Series on Higher Education, Oryx Press.

Ministerial Review Team (2001). Towards excellence in aid delivery. A reivew of New Zealand's official development assistance programme. Wellington, NZ: Ministry of Foreign Affairs and Trade.

Miraglia, G., Law, R. & Collins, P. (1996). What is culture? [Online]. Available http://www.wsu.edu:8001/vcwsu/commons/topics/culture/culture-index.html [Accessed 2001, September 1]

Misko, J. (1995). Transfer. Using new learning in new contexts. Leabrook, South Australia: National Centre for Vocational Education Research Ltd.

Moli, S. (1993). Some Samoan science student teachers' views of teaching and learning. In E. McKinley, P. Waiti, A. Begg, F. Biddulph, M. Carr, M. Carr, J. Chesney & J. Young Loveridge, SAMEpapers 1993 (pp. 84-103). Hamilton, NZ: Centre for Science and Mathematics Research.

Moon, J. (2001). Short courses and workshops. Improving the impact of learning, training and professional development. London: Kogan Page.

Mortimore, P., Lewis, D., Stoll, L., Sammons, P., & Ecob, R. (1988). School matters: The junior years. London: Open Books.

Myers, C. B. (1996). University-school collaborations: A need to reconceptualize schools as professional learning communities instead of partnerships. New York, NY: American Educational Research Association.

Naylor, J. C., & Briggs, G. E. (1963). The effect of task complexity and task organization on the relative efficiency of part and whole training methods. Journal of Experimental Psychology, 65, 217-224.

Neel, R. G., & Dunn, R. E. (1960). Predicting success in supervisory training programs by the use of psychological tests. Journal of Applied Psychology, 44, 358-360.

Newman, M. (1993). The third contract: Theory and practice in trade union training. Sydney, Australia: Stewart Victor Publishing.

Newstrom, J. W. (1983). The management of unlearning. Training and Development Journal, 37, 8, 36-39.

Newstrom, J. W. (1986). Leveraging management development through the management of transfer. Journal of Management Development, 5, 5, 33-45.

Noe, R. A. (1986). Trainee attributes and attitudes; Neglected influences on training effectiveness. Academy of Management Review, 11, 4, 736-749.

Noe, R. A., & Ford, J. K. (1992). Emerging issues and new directions for training research. Research in Personnel and Human Resources, 10, 345-384.

Noe, R. A., & Schmitt, N. (1986). The influence of trainee attitudes on training effectiveness: Test of a model. Personnel Psychology, 39, 497-523.

Noel, J. L., & Dennehy, R. F. (1991). The learner's manager: The bridge from classroom to workplace. Journal of European Industrial Training, 15, 6, 17-18.

North Central Regional Educational Laboratory [No date]. Five phases of professional development [Online]. Available: www.ncrel.org/sdrs/areas/issues/educatrs/profdevl/ pd2fiph [Accessed 2000, December 15].

Novick, L. R. (1990). Representational transfer in problem solving. Psychological Science, 1, 128-132

Oates, T. (1992). Core skills and transfer: Aiming high. Educational and Training International, 29, 3, 227-239.

Oberg, K. (1960). Culture shock: Adjustments to new culture environments. Practical Anthropology, 7, 179-182.

OECD (Organisation for Economic Co-operation and Development), Centre for Educational Research and Innovation. (1998). Staying ahead. Inservice training and teacher professional development. Paris: Author

Oliver, D. (1989). The Pacific Islands. Honolulu: University of Hawaii Press.

Ormrod, J. E. (1995). Human learning. London: Prentice-Hall.

Ormrod, J. E. (1998). Educational psychology. Developing learners. Upper Saddle River, NJ: Prentice Hall.

Osgood, C. E. (1949). The similarity paradox in human learning: a resolution. Psychological review, 56, 132-143.

Paterson, S. (1994). Teacher inservice preferences: A Wainuiomata survey. Unpublished manuscript, Wellington College of Education, New Zealand.

Patrick, J. (1992). Transfer and retention of skills. San Diego, CA: Academic Press.

Patton, M. Q. (1990). Qualitative evaluation and research methods. Newbury Park, CA: Sage

Pea, R. D. (1987). Socializing the knowledge transfer problem. International Journal of Educational Research, 11, 639-663.

Performance Improvement Quarterly (1997). Special issue,10, 2, 3-168.

Perkins, D., Barell, J, & Fogarty, R. (1989). Teaching for Transfer. Palatine, IL: Skylight Publishing.

Perkins, D. & Salomon, G. (1989). Are cognitive skills context bound? Educational Researcher, 18, XX, 16-25.

Perkins, D. & Salomon, G. (1996). Learning transfer. In A. Tuijnman (Ed.), International encyclopaedia of adult education and training. XX Kidlington, Oxford: Pergamon Press.

Phillips, J. (1996). Accountability in Human Resource Management. Houston, TX: Gulf Publishing Company.

Phye, G. D. (1997). Inductive reasoning and problem solving: The early grades. In G. D. Phye (Ed.), Handbook of academic learning: The construction of knowledge (pp. 451-457). San Diego, CA: Academic Press.

PIERC (Pacific Islanders Educational Resource Centre). (1982). A handbook for teachers of Pacific island children. Wellington: author.

Power, C. (1992). Culture, development and education − the role of UNESCO. In B. Teasdale & J. Teasdale (Eds.)., Voices in a seashell (pp.15-23). Suva, Fiji: Institute of Pacific Studies, University of South Pacific, in association with UNESCO.

Pratt, D. D. (1991). Conceptions of self within China and the United States: Contrasting adult development. International Journal of Intercultural Relations, 15, 285-310.

Pratt, D. D. (1993). Andragogy after twenty-five years. In S. Merriam (Ed.), Adult Learning Theory: An Update (pp 15-23). San Francisco: Jossey-Bass.

Pratt, D. D. and Associates (1998). Five perspectives on teaching in adult and higher education. Malabar, FL: Krieger Publishing.

Pressley, M., Snyder, B., & Cariglia-Bull, B. (1987). How can good strategy use be taught to children? Evaluation of six alternative approaches. In S. Cormier & J. Hagman (Eds.), Transfer of learning: Contemporary research and application (pp. 81-120). Orlando, FL: Academic Press.

Ptak, C., Cooper, J., & Brislin, R. (1995). Cross-cultural training programmes: Advice and insights from experienced trainers. International Journal of Intercultural Relations, 19, 3, 425-453.

Purkey, S., & Smith, M. (1983). Effective schools: A review. The Elementary School Journal, 83, 4, 472-452.

Quinones, M. A. (1995). Pretraining context effects: Training assignment as feedback. Journal of Applied Psychology, 80, 226-38.

Ratcliff, D. (1996). Video and audio media in qualitative research. [Online]. Available at http://don.ratcliff.net/video/ [Accessed 2001 1 September.]

Ratner, C. (1997). Cultural psychology and qualitative methodology: Theoretical and empirical considerations. New York: Plenum Press.

Raymond, D., Butt, R., & Townsend, D. (1996). Contexts for teacher development: Insights from teachers' stories. In A. Hargreaves, & M. Fullan, (Eds.) Understanding Teacher Development. New York: Cassell.

Read, S. J. (1983). Once is enough: causal reasoning from a single instance. Journal of Personality and Social Psychology, 45, 323-334.

Reber, R. A., & Wallin, J. A. (1984). The effects of training, goal setting, and knowledge of results on safe behavior: A component analysis. Academy of Management Journal, 27, 544-560.

Redding, N. (1990). Metacognitive instruction: trainers teaching thinking skills. Performance Improvement Quarterly, 3, 1, 27-41.

Reigeluth, C., & Garfinkle, R. (1994). Systemic change in education. Englewood Cliffs, NJ: Educational Technology Publications.

Reissman, F. (1965) The "helper therapy" principle. Social Work, 10, 2, 276-82

Rere, T. (1976). Some aspects of Rarotongan life. Rarotonga: Rangitai Taira.

Rere, T. (1977). Other aspects of Rarotongan life. Rarotonga: Rangitai Taira.

Resnick, L. (1996). Situated learning. In E. de Corte & F. E. Weinert (Eds.), International encyclopedia of developmental and instructional psychology. (pp. 341-347). Oxford, UK: Pergamon.

Richardson, V. (1998). How teachers change. Focus on Basics 2, issue C, 7-11.

Richey, R. (1992). Designing instruction for the adult learner: systematic training, theory and practice. London: Kogan Page.

Ripple, R. E., & Drinkwater, D. (1982). Transfer of learning. Encyclopedia of educational research. 1982, (5th edition), (pp. 1947-1955). New York: Macmillan.

Ritchie, J., & Ritchie, J. (1979). Growing up in Polynesia. Sydney: George Allen & Unwin.

Ritchie, J., & Ritchie, J. (1985). E tipu e rea. Polynesian socialisation and psychological development. Occasional paper no. 28. University of Waikato, Hamilton, NZ. Centre for Maori Studies and Research

Robinson, D. G., & Robinson, J. C. (1985). Breaking barriers in skill transfer. Training and Development Journal, 39, 1, 82-83.

Robinson, D. G., & Robinson, J. C. (1989). Training for impact. San Francisco: Jossey-Bass.

Robinson, D. G., & Robinson, J. C. (1995). Performance consulting. Moving beyond training. San Francisco: Berrett-Koehler.

Robinson, D. G., & Robinson, J. C. (Eds.) (1998). Moving from training to performance : A Practical Guidebook . San Francisco: Berrett-Koehler

Robinson, D. W. (1992). The risk recreation experience: Subjective state dimensions and the transferability of benefits. Journal of Applied Recreation Research, 1, 17, 12-36.

Robinson, J. C. (1984). You should have sent my boss. Training, 21, 2, 45-47.

Rogers, E. M. (1995). Diffusion of innovations, (4th ed.). New York, NY: The Free Press.

Rogoff, B. (1990). Apprenticeship in thinking: Cognitive development in social context. New York: Oxford University Press.

Rosenholtz, S. J. (1991). Teachers' workplace: The social organisation of schools. New York: Teachers College Press.

Rouillier, J. Z., & Goldstein, I. L. (1993). The relationship between organizational transfer climate and positive transfer of training. Human Resource Development Quarterly, 4, 377-390.

Rutter, M., Maugham, B., Mortimore, P., & Ouston, J. (1979). Fifteen thousand hours. London: Open Books.

Ryman, D. H., & Biersner, R. J. (1975). Attitudes predictive of diving training success. Personnel Psychology, 28, 181-188.

Salas, E., & Cannon-Bowers, J. A. (2001). The science of training: A decade of progresss. In S. T. Fiske, C. Zahn-Waxler & D. L. Schacter (Eds.), Annual review of psychology, Volume 52, (pp.471-499). Palo Alto, CA: Annual Reviews Pub.

Salas, E., Cannon-Bowers, J. A., & Blickensderfer, E. L. (1997). Enhancing reciprocity between training theory and practice: Principles, guidelines, and specifications. In J. K. Ford & Associates (Eds.), Improving Training Effectiveness in Work Organizations (pp. 291-322). Hillsdale, NJ: LEA.

Salinger, R., & Deming, B. (1982). Practical Strategies For Evaluating Training. Training & Development Journal, 36, 8, 20-29.

Saljo, R. (1978). Learning about learning. Working party on student learning: aims, processes and outcomes. Paper presented at 4th International Conference of Higher education, University of Lancaster.

Sanga, K. (2000, November). Aid relationships: Getting to the heart of the matter. Paper presented at the symposium on Education for Equitable and Sustainable Development – The Role of Aid in the Pacific Region. Victoria University of Wellington, School of Education.

Sarason, S. (1996). Revisiting "The culture of school and the problem of change." New York: Teachers College Press.

Schein, E. H. (1985). Organizational culture and leadership. San Francisco: Jossey-Bass.

Schlechty, P., & Cole, B., (1991). Creating a system that supports change. Educational Horizons, 69(2), 78-79.

Schmidt, R. A., & Bjork, R. A. (1992). New conceptualisations of practice: Common principles in three paradigms suggest new concepts for training. Psychological Science, 3, 207-217.

Schon, D. (1987). Educating the reflective practitioner. San Francisco: Jossey-Bass.

Scribner, S., & Cole, M. (1973). Cognitive consequences of formal and informal education. Science, 182, 553-559.

Scribner, S., & Cole, M. (1974). Culture and thought: A psychological introduction. New York: John Wiley and Sons.

Sechrest, L. B. (1966). Transfer of therapeutic learning. In A. P. Goldstein, K. H. Heller, & L. B. Sechrest (Eds.), Psychotherapy and the psychology of behavior change, (pp.212.259). New York: John Wiley and Sons.

Sergiovanni, T. J. (1994). Building Community in Schools. San Francisco, CA: Jossey-Bass.

Sergiovanni, T. J., & Corbally, J. E. (Eds.) (1986). Leadership and organizational culture: New perspectives on administrative theory and practice. Illinois: University of Illinois Press.

Sevele, F. (1987). Aid to the pacific reviewed. In A. Hooper, S. Brotton, R. Crocombe, J. Huntsman & C. Macpherson (Eds.), Class and culture in the South Pacific (pp. 71-77). Auckland: Centre for Pacific Islands Studies (University of Auckland) and Institute of Pacific Studies (University of South Pacific.)

Seyler, A. M., Holton, E. F., Bates. R. A., Burnett, M. F., & Carvalho, M. A. (1998). Factors affecting motivation to transfer training. International Journal of Training and Development, 2, 1, 2-16.

Showers, B., Joyce, B., & Bennett, B. (1987). Synthesis of research on staff development: A framework for future study and a state-of-the-art analysis. Educational Leadership, 45, 3, 77-87.

Simmons, J. M., & Schuette, M. K. (1988). Strengthening teachers' reflective decision making. Journal of Staff Development, 9, 3, 18-27.

Simons, P. R. J. (2001). Bridging the gaps between learning and working: Some dangerous statements [Online]. Available http://www.uni-regensburg.de/Fakultaeten/phil_Fak _II/Paedagogik/conference/simons/sld001

Singh, G. (1997). Conditions for teaching and learning in pacific primary schools. Directions, 19, 2, 67-81

Singley, M. K. (1995). Promoting transfer through model tracing. In A. McKeough, J. Lupart, & A. Marini (Eds.), Teaching for transfer: Fostering generalisation in learning (pp.69-92).Mahwah, NJ: Lawrence Erlbaum Associates.

Singley, M. K., & Anderson, J. R. (1989). The transfer of cognitive skill. Cambridge, MA: Harvard University Press.

Smith-Jentsch, K. A., Jentsch, F. G., Payne, S. C. & Salas, E. (1996). Can pretraining experiences explain individual differences in learning? Journal of Applied Psychology, 81, 909-36.

Smylie, M. A., & Conyers, J. G. (1991). Changing conceptions of teaching influence the future of staff development. Journal of Staff development, 12, 1, 12-16.

Smyth, W. J. (1991). Teachers as collaborative learners: Challenging dominant forms of supervision. Milton Keynes : Open University Press, 1991.

Southwest Educational Development Laboratory News (1999). At the heart of the matter: Improving teaching and learning through professional development. Sedletter, 11, 2 [Online]. Available http://sedl.org/pubs/sedletter/v11n02/.

Sparks, B. (May, 1997). Doing cross-cultural research in adult education: methodological and epistemological considerations. Paper delivered to the AERC Conference in Stillwater, Oklahoma.

Sparks, B. (1998). The politics of culture and the struggle to get an education. Adult Education Quarterly, 48, 245-259.

Sparks, D., & Loucks-Horsley, S. (1990). Models of staff development. In W. R. Houston (Ed.), Handbook of research on teacher education (pp. 234-250). New York: Macmillan.

Sparks, G. M. (1986). The effectiveness of alternative training activities in changing teaching practices. American Educational Research Journal, 23, 2: 217-225.

Special Education News (2000). Poverty and disability: two strikes against? [On-line]. Available: http://www.specialednews.com/disabilities/disabnews/povanddisab 031200.html [Accessed 2001, June 16].

Stenhouse, L. (1975). An introduction to curriculum research and development. London: Heinmann.

Sternberg, R. (1984). How can we teach intelligence? Educational Leadership, 42, 1, 38-48.

Sternberg, R. J., & Frensch, P. A. (1993). Mechanisms of transfer. In D. K. Detterman & R. J. Sternberg (Eds.), Transfer on trial: Intelligence, cognition, and instruction. Norwood, NJ:Ablex.

Stolovitch, H. D. (1997). Introduction to the special issue on transfer of training – transfer of learning. Performance Improvement Quarterly, 10, 2, 5-6.

Strauss, A. & Corbin, J. (1990). Basics of qualitative research: Grounded theory, procedures and techniques. Newbury Park, CA: Sage Publications, Inc.

Swanson, B. L., Watkins, K. E., & Marsick, V. J. (1997). Qualitative research methods. In R. A. Swanson & E. F. I. Holton (Eds.), Human resource development research handbook (pp. 88-113). San Francisco: Berrett-Koehler.

Swanson, R., & Nijhof, W. (1994). The transfer of the learning process: Before, during and after educational programmes. Adult Learning, 5, 4, 24-30.

Sweeney, M. (1994). Developing participatory methodology for a Cook Islands - New Zealand special education teacher training initiative. Wellington: Wellington College of Education.

Sylwester, R. A. (1995). Celebration of neurons: An educator's guide to the human brain. Alexandria, VA: Association for Supervision and Curriculum Development.

Taba, H. (1962). Curriculum development: Theory and practice. USA: Harcourt, Brace and World.

Tannenbaum, S. I., Cannon-Bowers, J. A., Salas, E., & Mathieu, J. E. (1993). Factors that influence training effectiveness: A conceptual model and longitudinal analysis. Naval Training Systems Center, Human Systems Integration Division, Orlando, Fl. Technical Report # 93-011.

Tannenbaum, S. I., Mathieu, J. E., Salas, E., & Cannon-Bowers, J. A. (1991). Meeting trainees expectations: The influence of training fulfilment on the development of commitment self-efficacy, and motivation. Journal of Applied Psychology, 76, 6, 759-769.

Tannenbaum, S. I., & Yukl, G. (1992). Training and development in work organisations. Annual Review of Psychology, 43, 399-441.

Taufe'ulungaki, A. M. (2001). The tree of opportunity: re-thinking Pacific education. Pacific Education Symposium, University of the South Pacific, Suva, Fiji.

Taylor, E. W. (1994). Intercultural competency: A transformative learning process. Adult Education Quarterly, 44, 3, 154-174.

Taylor, E. W. (1998). The theory and practice of transformative learning: A critical review. Information Series no. 374. Columbus: ERIC Clearinghouse on Adult, Career, and Vocational Education, Centre on Education and Training for Employment, the Ohio State University.

Taylor, J. W. (1974). Ten serious mistakes in management training development. Personnel Journal, 53, 5, 537-362.

Taylor, M. (1997). Transfer of learning. Planning workplace education programmes. Quebec: NLS Publications.

Taylor, M. (June, 2000). Partners in the transfer of learning: A qualitative study of workplace literacy programs. Proceedings of the 1999 AERC (Adult Education Research Conference) in Vancouver, British Columbia.

Tennant, M. C., & Pogson, P. (1995). Learning and change in the adult years: A developmental perspective. San Francisco: Jossey-Bass.

Tesluk, P. E., Farr, L., Mathieu, J. E., & Vance, R. J. (1995). Generalisation of employee involvement training to the job setting: Individual and situational effects. Personnel Psychology, 48, 607-632.

Thaman, K. H. (1996a). Towards cultural democracy in teacher education. Keynote address, New Zealand Council for Teacher Education annual conference, College of Education, Dunedin, New Zealand.

Thaman, K. H. (1996b). Reclaiming an education: Culture, learning and teaching. Keynote address, New Zealand Symposium on Pacific Island Learning, Auckland, New Zealand.

Thaman, K. .H. (2001) Towards culturally inclusive teacher education with specific reference to Oceania. International Education Journal, 2, 5, 1-8.

Thomas, R. M. (1990). Transfer of learning. In R. M. Thomas (Ed.), The encyclopedia of human development and education: Theory, research, and studies (pp. 259-260). Oxford: Pergamon Press.

Thorndike, E. L. (1903). Educational psychology. Lemke and Buechner: New York.

Thorndike, E. L. (1923). The influence of first year Latin upon the ability to read English. School Sociology, 17, 165-168.

Thorndike, E. L., & Woodworth, R. S. (1901). The influence of improvement in one mental function upon the efficiency of other functions. Psychological Review, 8, 247-261.

Tough, A. (1971). The adult's leaming projects. Toronto: Ontario Institute for Studies in Education.

Tracey, J. B., Tannenbaum, S. I., & Kavanagh, M. J. (1995). Applying trained skills on the job: The importance of the work environment, Journal of Applied Psychology, 30, 2, 239-252.

Trost, A. (1982). They may love it but will they use it? Training and Development Journal, 36, 1, 78-81.

Tsoi Hoshmand, L. L. S. (1989). Alternate research paradigms: A review and teaching proposal. Counseling Psychologist, 17, 1,3-79.

Tubiana, J. H., & Ben-Shakhar, G. (1982). An objective group questionnaire as a substitute for a personal interview in the prediction of success in military training in Israel. Personnel Psychology, 35, 349-357.

Tufue, R. (1998). Perceptions of Pacific Island New Zealand resident educators on transfer of training strategies. Wellington College of Education, Wellington, N.Z.

Tupuola, A. (1993). Raising research consciousness the Fa'a Samoa way. New Zealand Annual Review of Education, 3, 175-189.

Tyler, R. W. (1949). Basic principles of curriculum and instruction. Chicago, Ill: Chicago University Press.

Tziner, A., Haccoun, R. R., & Kadish, A. (1991). Personal and situational characteristics influencing the effectiveness of transfer of training improvement strategies. Journal of Occupational Psychology, 64, 167-177.

Underwood, B. J. (1951). Associative transfer in verbal learning as a function of response similarity and degree of first-line learning. Journal of Experimental Psychology, 42, 44-53.

USA Department of Education (1998). Goals 2000: Reforming education to improve student achievement (Building bridges: The mission and principles of professional development). Washington, DC: Author.

Usher, R. S. & Bryant, I. (1989). Adult education as theory, practice and research: The captive triangle. New York; Routledge.

van der Vegt, R., & Knip, H. (1988). The role of the principal in school improvement: Steering functions for implementation at the school level. Journal of Research and Development in Education, 22, 60-68.

Van Rossum, E. J., Deijkers, R., & Hamer, R. (1985). Students' learning conceptions and their interpretation of significant educational concepts. Higher Education, 14, 617-641.

van Tulder, M., van der Vegt, R., & Veenman, S. (1993). Inservice education in innovating schools: A multi case study. Qualitative Studies in Education, 6, 2, 129-142.

van Tulder, M., & Veenman, S. (1991). Characteristics of effective inservice programmes and activities: Results of a Dutch survey. Educational Studies, 17, 1, 25-48.

van Tulder, M., Veenman, S., & Sieben, J. (1988). Features of effective inservice activities: Results of a delphi study. Educational Studies, 14, 2, 209-223.

Vandenput, M. A. E. (1973). The transfer of learning: Some organisatinoal variables. Journal of European Training, 2, 3, 251-262.

Veenman, S., van Tulder, M., & Voeten, M. (1994). The impact of inservice training on teacher behaviour. Teaching and Teacher Education, 10, 1, 303-317.

Vera, J. & Arias, M. (2000). Aid and education: The squandered opportunity. London: Oxfam International.

Victoria Link (2001). Partnership in education: Cook Islands education sector review. Wellington, NZ: Author

Vroom, V. H. (1963). Some personality determinants of the effects of participation. In Smelser, N. J. & Smelser, W. J., (Eds.), Personality and social systems. New York, NY: John Wiley and Sons, 1963.

Vulliamy, G., Lewin, K., & Stephens, D. (1990). Doing educational research in developing countries: Qualitative strategies. London: The Falmer Press.

Vygotsky, L. S. (1978). Mind in society. Cambridge, MA: Harvard University Press.

Walberg, H. J., & Genova, W. J. (1982). Staff, school and workshop influences on knowledge use in educational improvement efforts. Journal of Educational Research, 76, 69-80.

Walker, R. (1985). Doing research. London: Methuen.

Wallace, P. R. (1992). An incremental transfer approach to instructional design. In J. G. Hedberg & J. Steele (Eds), Educational Technology for the Clever Country: Selected papers from EdTech'92, 151-155. Canberra: AJET Publications.

Watson-Gegeo, K. A. & Gegeo, D. W. (1994). Keeping culture out of the classroom in rural Solomon Islands schools: A critical analysis. Educational Foundations, 8, 2, 27-55.

Waugh, R. F., & Punch, K. F. (1987). Teacher receptivity to system-wide change in the implementation stage. Review of Educational Research, 57, 3, 237-254.

Wenz, A., & Adams, C. (1991). Life after training: A look at follow-up. Journal of Staff Development, 12, 1, 60-62.

Wertheimer, M. (1959). Productive thinking. NY: Harper and Row.

West, N. (1992). Classroom observation in the context of appraisal: Training manual for primary schools. Harlow: Longman.

Wexley, K. N., & Nemeroff, W. (1975). Effectiveness of positive reinforcement and goal setting as methods of management development. Journal of Applied Psychology, 64, 239-246.

Wexley, K. N., & Thornton, C. L. (1972). Effect of verbal feedback of test results upon learning. Journal of Educational Research, 66, 119-121.

Williams, T. C., Thayer, P. W., & Pond, S. B. (1991, April). Test of a model of motivational influences on reactions to training and learning. Paper presented at the Sixth Annual Conference of the Society for Industrial and Organizational Psychology, St Louis, Minnesota.

Willis, D. (2000) Adult learning and the professional development of teachers. Unpublished paper, Victoria University of Wellington, New Zealand.

Willis, D., & Bourke, R. (1998, December). Catching the slow train: Teacher development programmes and real change. Paper presented at the 20th Annual NZARE Conference, Otago University, Dunedin.

Willis, D., & Evaroa, B. (1995). Cook Islands special education project: Evaluation report on the impact of two special education courses on the classroom practice of participating teachers. Unpublished manuscript, Cook Islands Teachers College on Raratonga.

Wilson, A. L. (1993). The promise of situated cognition. New Directions for Adult and Continuing Education, 57, 71-79.

Wittrock, M. (1967). Replacement and non-replacement strategies in children's problem solving. Journal of Educational Psychology, 58, 2, 69-74.

Wlodkowski, R. J. (1985). Enhancing Adult Motivation to Learn. San Francisco: Jossey-Bass.

Wlodkowski, R. J. (1999). Enhancing adult motivation to learn. A comprehensive guide to teaching all adults. San Francisco: Jossey-Bass.

Wlodkowski, R. J., Ginsberg, M. B. (1995). Diversity and motivation: Culturally responsive teaching. San Francisco: Jossey-Bass.

Wolf, T. H. (1973). Alfred Binet. Chicago: University of Chicago Press.

Woodrow, R. S. (1927). The effect of type of training upon transferance. Journal of Educational Psychology, 18, 159-172.

Wright, W. S., & Fraser, M. (1988). Staff development: A challenge of privatization. Journal of Continuing Social Work Education, 4, 4, 137-159.

Wubbels, T. (1992). Taking account of student teachers preconceptions. Teaching and Teacher Education, 8, 2, 137-149.

Xiao, J. (1996). The relationship between organizational factors and the transfer of training in the electronics industry in Shenzhen, China. Human Resource Development Quarterly, 7, 1, 55-73.

Xiao, J. (1999). Alternative learning approaches in an emerging economy: An experience in Shenzhen, China. Educational Practice and Theory, 21, 2, 27-49.

Yamnill, S., & McLean, G. (1999, March). Theories supporting transfer of training. Paper presented at the conference of the Academy of Human Resource Development, Arlington, Virginia.

Yelon, S. (1992). MASS: A model for producing transfer. Performance Improvement Quarterly, 5, 2, 13-23.

Yelon, S., Desmedt, J., & Williamson, J. (1988). Integrating principle-based rules into skill instruction. Performance & Instruction, 27, 10, 33-38.

Yelon, S., Reznich, C., & Sleight, D. (1997). Performance Improvement Quarterly, 10, 2, 134-155.

Youker, R. B. (1985) Ten benefits of participant action planning. Training, 22, 6, 54-56.

Zaltman, G., & Duncan, R. (1977). Strategies for planned change. New York, NY: John Wiley and Sons.

Zeaman, D. & House, B. (1963). The role of attention in retardate discrimination learning. In N. R. Ellis (Ed.) handbook of mental deficiency. (pp. 159-223). New York: McGraw–Hill.

Zemke, R., & Gunkler, J. (1985). 28 techniques for transferring training into performance. Training, 22, 4, 48-63.