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“Please Sir, Can We Play a Game?”

Transforming Games Teaching and Coaching:

A Practitioner’s Perspective

A thesis presented in partial fulfilment of the requirements for the degree of

Doctor of Philosophy

At Massey University, Palmerston North, New Zealand

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DEDICATION

This thesis is dedicated to my wife Philippa and my three children; Andrew, Richard and Caroline, the most important people in my life, whom I love dearly.

ABSTRACT

Over the last 30 years, traditional skill-based game teaching models have gradually been supplemented by instruction under an inclusive banner of Game Centred Learning (GCL) but more specifically, Teaching Games for Understanding (TGfU). This thesis uniquely examines from a practitioner's perspective how the development of GCL and its dissemination occurred in New Zealand (NZ) 1945-2015. The multi-method approach establishes through a triangulation of data sources utilising a bricolage approach that the development was not mandated by educational policy but evolved through various combinations of insights from early luminaries in the field and visits to NZ by a key figure in the field (Rod Thorpe). Additionally, a new guard of Physical Educators in pre-service teacher education colleges in NZ were also significantly influential in the dissemination of GCL strategies as was a new socio-ecological perspective in PE syllabi (1999; 2007). An emergent autoethnographic documentation of the author's role further informs this evolution of GCL and TGfU practices in NZ. Bourdieu's concepts of habitus, practice and field are used as markers to signal change and record tensions that ultimately led to adoption of GCL practice in PE teaching and sport coaching in NZ. The thesis findings present implications for PE practitioners through innovative GCL approaches, associated with play, mastery learning and TGfU, that involves transforming play. It is concluded that at a practical and theoretical level, TGfU should be seen in a holistic experiential sense and integrated into PE programmes acknowledging its potential to contribute to and enhance citizenship. The final contribution to knowledge of this research is the presentation of a model of GCL designed to transform play.

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3. **Slade, D. G.** (2010). *Transforming play: teaching tactics and game sense*. Champaign Illinois: Human Kinetics.
4. **Slade, D.G.** (2005). *Teaching attack and defence in team games: A TGfU approach*. Stick2Hockey Ltd., Palmerston North, New Zealand.
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ABBREVIATIONS

CoE	College of Education
FGS	Fundamental Game Skills
FMS	Fundamental Movement Skills
GCL	Game Centred Learning
HoD	Head of Department
HPE	Health and Physical Education Curriculum, 1999 & 2007
HNZ	Hockey New Zealand
MUCE	Massey University College of Education
NCEA	National Certificate of Educational Achievement
NZJHPER	New Zealand Journal Health Physical Education & Recreation
NZJPE	New Zealand Journal of Physical Education
NZPE	New Zealand Physical Educator
PE	Physical Education
PNCE	Palmerston North College of Education
PNTC	Palmerston North Teachers' College
PSI	Personalised System of Mastery Instruction
PTE	Pre-service Teacher Education
RLD	Representative Learning Design
RST	Regional Sport Trust
TGfU	Teaching Games for Understanding

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CHAPTER ONE

INTRODUCTION

1.1 THE RESEARCH TOPIC AND CONTEXT

Over the last 30 years, traditional skill-based game teaching models have gradually been supplemented by instruction under an inclusive banner of Game Centred Learning (GCL), and specifically, within Physical Education (PE), the model of 'Teaching Games for Understanding' (TGfU) (Bunker & Thorpe, 1982). This thesis uniquely reviews from a practitioner's perspective the evolvment and dissemination in New Zealand, 1945-2015, of GCL and the model of TGfU. This is achieved through a research bricolage approach that nests the phenomenon investigated within a social constructivist epistemology, exploring the topic through the use of an emergent interpretation of autoethnography utilising aspects of Bourdieu's (1984) conceptual tools of habitus, practice and field. Rigour is brought to these reflections through the triangulation of data based on the analysis of historical New Zealand National PE curriculum documents and communications. These examine significant personalities in PE and sport who have shaped this development and reviews of academic journal publications, especially of a New Zealand origin and context. The practitioner reflection also traces my early experiences associated with play that perhaps accounted for an intuitive recourse to using games to teach games as a student teacher. Also noted are my experiences as a sportsman, student teacher, teacher and coach, both at grass roots and national levels and finally as a teacher educator and academic with an international reputation in implementing the TGfU model.

The impact of watershed moments, for example, my pedagogical exploration of play, use of individualised mastery learning and my encounter in the 1990s with Rod Thorpe, one of the authors of the original publication on TGfU (Bunker & Thorpe, 1982) are discussed relative to my contribution to the development of GCL models in New Zealand. The thesis concludes with my presentation of a holistic GCL model for transforming the play of novices to more formal games and sports that represents the culmination of my thinking over the course of this study of how games should be taught to novices. I suggest this model overcomes many of the practitioner issues previously associated with implementing the TGfU model by teachers and coaches.

1.1.1 Development of Teaching Games for Understanding (TGfU)

‘Teaching Games for Understanding’ is a concept commonly associated with Rod Thorpe and David Bunker, who are credited with popularizing the term after their paper, *A model for teaching games in secondary school* was published in 1982. The authors admitted, however, that while the term TGfU may have been new, the concept of using games to advance understanding had formally been around since at least the 1960s. Indeed, the authors of the TGfU approach were heavily influenced by fellow educators at Loughborough University at that time; e.g., Wade (1967) and Mauldon and Redfern (1969, 1981). Exposure to these luminaries, as well as publication of Mosston’s ‘Spectrum of Teaching Styles’ that advocated for more student-centred pedagogical methods (Mosston & Ashworth, 1990), helped shape Bunker and Thorpe’s approach to games teaching that presented at the time a quite radical shift in perceived good practice in game teaching models and methodologies.

Butler and Ovens' article, *TGfU and its governance: From conception to special interest group* (2015), documents the development of TGfU. It records how TGfU has evolved from its conception at Loughborough University to an international special interest group comprising members from ten different countries of which the author became a member and New Zealand representative in 2012. Their charting of the development in academic terms is interesting but their research is more than just a chronology of dates and publications. Their evidence aims to recognize the complex form of this development that has encompassed disparate entities from various places that have embraced an approach or philosophy to teaching, especially games, that reflects a holistic rather than a deconstructed pedagogy of individual parts. In doing so they state that "we hope to provide a record that enables teachers, coaches and scholars an appreciation of the TGfU model and the social network central to its popularity" (p. 77).

Butler and Ovens note that in the 11-year period, 1989 up until the first International TGfU conference, 2000, only 37 articles and one book had been written on TGfU. However, the onset of international conferences dramatically changed this situation. In the next two years there were a further 20 articles with publications peaking in the four years between the TGfU conferences of 2008 and 2011 and conferences between 2012-2014, with no less than 353 and 507 articles respectively. Throughout this period 17 books have been published on TGfU, two of which have been published by the author (Slade, 2005, 2010a). Within this period various national PE curriculums have made mention of the use of TGfU e.g., Great Britain, but only one, Singapore, has directed that the method of instruction of game

teaching would be of a TGfU nature.

Butler and Ovens' (2015) comment that the 'social network' that has influenced the popularity of the TGfU model is tangibly illustrated through the observation that despite the lack of any formal coercion from centralised national curriculums, TGfU has become internationally a widely accepted model of game instruction in PE. It has also spawned various adaptations in sport coaching, for example, the notion of 'Game-sense' in Australia (den Duyn, 1997; Light, 2012). It has also provided impetus for related research in both PE and sport, for example non-linear pedagogy (Chow, Davids, Button, Shuttleworth, Renshaw & Duarte, 2007) and Representative Learning Design (RLD) (Pinder, Davids, Button, Renshaw & Araujo, 2011; Slade, 2015). The figures produced by Butler and Ovens (2015) point to the positive effect of conferences as a factor in the development of TGfU, but as Ovens noted (A. Ovens, personal communication, June 18, 2015):

Much of what takes place under the banner of TGfU has been around for a long time but the model (Bunker & Thorpe, 1982) subsequently modified, (Kirk & MacPhail, 2002; Holt, Streat, Garcia Bengoechea, 2002) has provided a voice and a language for discussing this approach to teaching in physical education.

The embracement of the model might also be traced to what Kirk (1996) and Kirk and MacDonald (1998) described as a crisis in PE. The crisis they referred to was a call for a 'back to basics' pedagogy that encompassed a narrow sport skill focus that they felt would only further alienate students from the subject. They argued

that PE's very survival in schools, to be relevant, required it to better reflect young people's everyday experience in sport and games and their needs.

The pathway to becoming relevant from a perspective of critical reflection evolved to transform what constituted learning in PE. A catch cry of that time within New Zealand PE teaching circles became, 'learning in, through and about physical education' (Culpan, 1998). A vision that, to be relevant to an education in the wider sense of the word, PE needed to be more than the technocratic embodiment of teaching isolated movement skills. Through those precepts, in, through and about PE, such learning had to be socially and culturally inclusive. It will be argued in this thesis that the development of TGfU in New Zealand was shaped by these wider changes in the education system, the need to be relevant to the needs of the students, and in particular a desire for a socially and culturally inclusive education. Traditional methods of instruction were not delivering this social and cultural inclusion and GCL models such as TGfU offered a direction to help people develop their confidence and understanding through games, so they could feel part of a wider group of citizens who enjoyed this opportunity within their society. It is in this sense that teaching games in PE came to be justified.

1.1.2 Rationale: Why the topic needs investigating

While there have been two reviews of the TGfU literature (Oslin, & Mitchell, 2006; Harvey & Jarrett, 2014) the process of adoption of the philosophy by a practitioner has not been chartered. As Ovens noted:

How that process evolved is a story that needs to be told as a means for enlightenment and understanding relative to this development of TGfU within physical education (A. Ovens, personal communication, June 18, 2015).

Ovens is not alone in this view. Stolz and Pill (2014) also suggest in relation to the adoption of GCL models and especially TGfU in teaching and coaching that there is a need for a shift from purely “empirical-scientific research to practitioner-referenced research” (Stolz & Pill, 2014, p. 28) in order to truly understand how teachers and coaches respond to models of learning such as GCL. In this current thesis the practitioner’s examination of the evolvement of TGfU is conducted through the lens of an emergent autoethnographical narrative and informed by Bourdieu’s concept of habitus, practice and field.

1.1.3 The objectives for the research

This thesis seeks to explain how and why a reflective PE practitioner/educator used concepts derived from play, mastery learning and TGfU to enhance people’s ability to understand and play games. Specifically, how the author has come to better understand their often-pragmatic positions in the daily task of teaching PE and coaching within an academic context.

1.1.4 Research questions

The overarching research question is: How, from a physical educator and sport coach practitioner's perspective, has GCL practice involving TGfU approaches evolved and been disseminated in New Zealand 1945-2015? Secondary questions are:

- a. How has games practice involving TGfU approaches been used to transform play?
- b. How can the practice of TGfU be applied in a more philosophical and flexible way than a strict ideological interpretation of the model?

1.2 NATURE OF THE RESEARCH: THEORETICAL CONCEPTS

1.2.1 *Justification and definition of key concepts*

It is important to define three concepts central to the thesis, namely, Play, Mastery Learning and the TGfU model. It is acknowledged that each of these is a complex field in its own right and the following brief discussion is intended as a scene setting overview prior to a literature review of each of these concepts. This examination is cast in the light of the development of TGfU, which started off as an idea of David Bunker and Rod Thorpe (1982) and illustrated in Figure 1, has grown to form an international network of teachers, coaches and academics that in 2016, celebrated its 6th International conference in Cologne Germany.

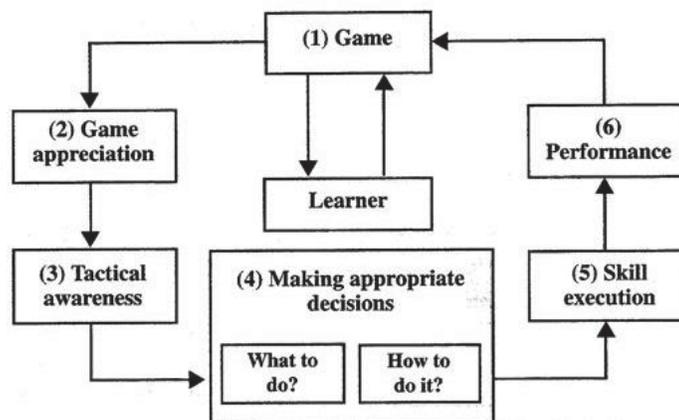


Figure 1 The TGfU Model (Bunker & Thorpe, 1983)

1.2.2 *Play*

Play is quite difficult to define, but the following provides a reasonably concise and generally accepted overview that captures most of what one finds in definitions of play. Play is understood as a free activity outside of formal life, not serious yet utterly absorbing for the player(s). It does not involve material interest or profit. It frequently has boundaries, rules and procedures and promotes socialization.

Garvey (1990) describes play as an activity that is always pleasurable and that the participant cherishes. The motivation is also intrinsic and has no other objective. Play is so central to children it is also sometimes used as a measure of their health. Observing children who do not play or do not socialize can provide indicators of their home life (Bond, Greasey & Abrams 1990; Bowlby, 1988; Bretherton, 1984). With children, exploring, experimenting with objects and playing with toys are central to their development. It is how they learn about themselves, their bodies and their potential for movement. It is a carefree and exhilarating period. It fills most of the pre-school child's day. It is a period that greatly influences cognitive growth. Piaget noted that "imaginative play is a symbolic transposition which subjects things to the child's activity without rules or limitations... it is spontaneous but imitates reality" (Piaget, 1962, p. 87). It is a foundation philosophy for entry into formal games and sports.

Play also has critical stages of development and change and is closely aligned with creativity in children. An early study of play by Parten (1932; as cited in Gabbard, 2012) defined four stages of children's play as: solitary, parallel, associative, and finally, cooperative. In terms of transforming play into more formal games and sports it is the last stage that is especially important in game pedagogy, because it is at this stage that children can play with common goals and different roles and is, therefore, a starting point for more formal games. Milgram (1990) suggests that creativity has to be learned and stored early in life as after childhood the training influence becomes weaker. Huttenlocher (1990) notes that children up to the age of seven years exhibit the greatest absolute number and density of synapses in the human primary visual cortex as well as resting glucose uptake in the occipital

cortex, factors closely associated with creativity. This translates to the position that human potential for the development of creativity is probably at its greatest in childhood.

Memmert (2015, p. 18) proposed that “the distinction between expert decision-making and creativity in sports are closely linked to the theoretical distinction between divergent and convergent thinking concepts.” He noted that in order to develop creative game players, early sport experiences needed to reflect playfulness of a divergent kind, avoid traditional formats based on a sameness in understanding and set solutions to problems in games and sports (Memmert, 2015). Alan Launder considered play so fundamental to teaching games and sports that his by-word for teaching was reflected in the opening words of the titles of the two texts he wrote, namely *Play Practice* (Launder, 2001; Launder & Piltz, 2013). Launder’s position is further explored in this thesis through taking the concept of play and facilitating divergent thinking through transforming play to more formal games and sports (Slade, 2010a).

1.2.3 Mastery learning

Mastery learning was championed as a teaching model in the 1960’s (Keller, 1968), and 1970’s (Bloom, 1976). It was based on the precept described by Torshen (1977) who argued that the “mastery process operates on the proposition that almost every student can learn the basic skills and knowledge that are the core of the school curriculum when the instruction is of good quality and appropriate, [and the student] spends adequate time in learning (p. 41).” Bloom (1976) developed a group-based

model born from his perception that schooling was not making a difference in terms of performance relative to students' initial entry and exit status.

His work (Bloom, 1976, 1984a, 1984b) was subject to considerable controversy because of his claim regarding a one or a two sigma advantage to the group based mastery teaching strategy over conventional whole class teaching methods (Resnick, 1977; Slavin, 1987a, 1987b, 1990). Keller's (1968) Personalised System of Mastery Instruction (PSI) while based on the same precept as Bloom's, namely adequate time to learn occurs when the time required to learn equals the time available to learn, was an individualised programme of learning where progress was at the pace of the individual and not the group.

In sport, mastery programmes have generally been associated with achievement award schemes, for example in gymnastics, life-saving and swimming. Application to team and individual sports was led by Metzler (as cited in Pieron & Graham, 1986). Metzler adapted the Keller (1968) PSI learning programme for tennis instruction. He reported that both in the efficient use of management time and quality motor engaged time (ALT-PE)¹ those students in the mastery programme significantly outperformed those in the non-mastery programme. The self-paced Keller model was also ideally suited to the employment of individual goal setting (Locke, 1967) and a combination of the two models. Incremental mastery of movement skills and goal setting, has become a feature in some sports; for example, martial arts. Mastery learning is essentially aligned with behaviourist models of

¹ALT-PE Academic learning time - PE, is a concept used to describe the measure of time a student is successfully motor-engaged with the specific learning outcomes of the lesson.

teaching and understanding learning. They have since been surpassed in favour of constructivist models of learning and it is difficult today to find academics referring to mastery as a model for instruction in PE with at best an aside to competence in performance. However, this avoids the pragmatic issue and to use the vernacular, is the elephant in the room, when the basic unavoidable position is, that to enjoy games and sports one needs to attain some level of competence. Employing mastery learning strategies in conjunction with goal setting is a proven method of achieving this outcome (Slade, 2006) and is a necessary string to the bow of all teachers and practitioners of movement.

1.2.4 Teaching Games for Understanding (TGfU)

As a marker of change, the TGfU literature review also provides commentary on methodologies and philosophies of game teaching prior to what became the phenomenon of GCL and TGfU in PE. In analysing TGfU the focus provides an overview of its development, and a consensus of what it is from a scholarly perspective. It also provides insights into adapted versions of the TGfU philosophy that were introduced as enhancements to the original work; for example, situated learning (Kirk & MacPhail, 2002; MacPhail, Kirk & Griffin, 2008) and, as adjuncts, e.g., sport education (Siedentop, 1994). TGfU also ushered in a period of critical analysis of what teaching PE and games should look like. Key issues of that debate and the evolution of the TGFU model includes discussion as to the form constructivism should take as the theoretical basis for holistic teaching in PE. This debate is woven into the thesis through the lens of Kirk (1996), Kirk and MacDonald (1998) and Slade, Webb and Martin (2013). One review reveals the defining features of TGfU as a student and GCL model that promotes “flexibility

in manipulating constraints in modified games to enhance interactions between learner cognition, perception, and actions to teach tactical knowledge and skills related to specific tactical concepts” (Chow et al., 2007, p. 253).

1.3 METHODOLOGY

1.3.1 Multi methods

The scope of this study soon made it apparent that a single method approach would be inadequate for addressing the questions posed. Hence, recourse was made to a multi-method approach to support an autoethnographical account of the author's teaching and coaching experiences that enhanced the credibility of the research process and allowed triangulation through cross reference to document analysis, elite coach interviews and games analysis (published in Slade, 2015) to inform the research questions.

1.3.2 An autoethnographical narrative

Ellis (2012) refers to autoethnography as a blank screen on which reflections are written. As a method of research it requires observation and reflexive investigation with both the content and context of the researcher's experience. There is no pretext of detachment by the writer but there is a conceptual framework and discussion of theory and praxis. The method and goal of autoethnography, as described by Ellis, is defined as evocative (Anderson, 2006). As a narrative it provides a story that is personal, filled with passion that embraces personal thoughts, feelings and observations as a means to coming to an understanding of the social context of one's own experience. However, autoethnography need not be confined to evocative writing. The narrative of this thesis reflected an emergent and evolving ethnography within a continuum of where the initial writing was in the style of life-history biography (Angier, 2010), later refined as evocative autoethnography (Ellis, 2012) and subsequently included aspects of analytical ethnography (Anderson, 2006).

Ellingson and Ellis (2008) describe autoethnography as the “opposite of theory-driven, hypothesis-testing research methods that are based on the positivist epistemology.” (p. 450). In this sense, they see autoethnography as a social constructionist project that rejects the deep-rooted binary oppositions between the researcher and the researched, objectivity and subjectivity, process and product, self and others, art and science, and the personal and the political. However, the rigour required for addressing the questions of this research; the need for distance between the author and the data and the need for plausibility within the narrative, required the use of an emergent use of autoethnography.

1.4 MOTIVATION FOR THE RESEARCH

1.4.1 *Overview of my career*

This thesis represents an examination of the researcher's career as a pedagogue in PE and sport coaching. The following overview of my career is presented in order that an initial perspective might be formed on the legitimacy of my use of this methodology against that career with a back-story of involvement as sportsman and an internationally recognised author on TGfU.

The context of my upbringing would always suggest some involvement in sport. As a young person I achieved regional representative honours in hockey, soccer, and cricket and as a junior badminton player before a long and enduring focus on hockey that culminated in twice playing in North vs. South Island hockey matches and touring Australia in the New Zealand Men's Country Hockey team in 1975. My coaching career mirrored my sporting interests and as a teacher included cricket, badminton and hockey and away from the school context, junior soccer², provincial and Senior National level hockey appointments, including two years as Head Coach of the New Zealand U16 Boys Hockey team.

My teaching career traversed Intermediate and Secondary schools including a ten-year tenure as a Head of Department (HoD) in PE at a Secondary School. My first foray into tertiary education included Directorship of Recreation and Sport in a private Japanese International College. My former position in tertiary education included coordinator of the Bachelor of Education, Diploma of Secondary Physical

² In this thesis, I have used the terms soccer and football interchangeably making arbitrary decisions based on what appears appropriate. Football is the universal name and is gaining traction in New Zealand but it has, as in the USA, in NZ typically been referred to as soccer. To avoid confusion with rugby, New Zealand's national game, I either talk of rugby or rugby football.

Education. My current position is as a senior lecture and major leader in Physical Education in the School of Sport and Exercise. I am still actively involved in playing sport. More recently, I was a member of the New Zealand Grand Masters (aged 60+) team securing a bronze medal in hockey at the Grand Masters World Cup in Australia (2016).

Because of my long term teaching and coaching experience I believe I have the knowledge to fill a significant research gap, namely the lack of any single practitioner account of the development of this TGfU model of teaching internationally or within New Zealand. This lack of practitioner insight is not confined to sport pedagogy. Astle (2014) in presenting a perspective of the national development of cricket in New Zealand noted a similar trend in scholarly articles on sport management (Astle, 2014, p. 2). In addressing that gap he did so from his perspective as the first New Zealand Cricket National Development Manager and was able to achieve that unique view as the researcher within the structure.

In writing this thesis I am addressing a similar gap in the research on TGfU; namely to qualitatively consider when and why TGfU developed and emerged in New Zealand, its effect and how it has changed over time. An autoethnographical approach provides a framework for the author to use his personal experience, understanding and insights over four decades as a sportsman, teacher, teacher educator and academic in PE and sport to construct an insider researcher perspective both reflective of his development and the development of the model of TGfU in PE and sport. It is hoped that this research will be of practical help to other practitioners working in this field.

1.5 STRUCTURE OF THE THESIS

This thesis is in three parts. Part A focuses on a literature review, the methods utilised and a review of evolving game practices in New Zealand. Part B provides an autoethnographical practitioner account of developing game practice over a period of four decades, explored with reference to Bourdieu's concepts of habitus, practice and field. Part C presents the key findings from published research on game practice involving 'transforming play' and theoretical foundations towards providing more flexible and holistic approaches, and in the process presents a model of GCL for transforming children's play into formal games and sports.

PART A

Chapter Two: Literature review, focuses on the three corner stones of my philosophy for the application of GCL models in teaching PE. These are play, mastery learning and TGfU. The review focuses primarily on how these concepts have informed GCL practice in New Zealand, particularly their impact on practitioners.

Chapter Three: Methodology, provides a discussion of the conceptual framework of this multi method phenomenological study, acknowledging a qualitative research philosophy and my worldview.

Chapter Four: Evolving Game Practices in New Zealand: 1945-2015, provides an overview of the development of game practices in NZ, 1945-2015. Insights to this development are derived from various historical documents e.g., national PE curriculum statements, the professional journal of New Zealand physical educators

and from the writing of early luminaries in PE and sport who advocated for change in pedagogical practice. Further insights are revealed through the juxtaposition of historical programmes in pre-service teacher education with the thoughts of today's incumbent senior staff in those institutions, who are individuals who have dominated pedagogical practice in PE in New Zealand post the 1980s.

PART B

Chapter Five: My Teaching Journey, Insights into TGfU, autoethnographically provides the back story of my early years, 1950-1960s, documents my becoming a teacher, 1969-1971, and my early beginnings in teaching, 1970s that eventually results in my becoming a teacher educator in PE.

Chapter Six: Head of Department: Game Practice Influenced Curriculum Design, charts my leadership of curriculum and PE teaching development, external influences on teaching development (1980s) and an epiphany that resulted in the integration of individualised mastery learning strategies into my teaching programmes.

Chapter Seven: Teacher Educator: Implementing TGfU, tracks my change of career as a Teacher Educator and another epiphany involving my first encounter with Rod Thorpe, and the subsequent development of my involvement with TGfU. In addition, this chapter documents how I introduced TGfU into the pre-service teacher education at Palmerston North Teachers' College (Later known as the Massey University College of Education) thereby ensuring its introduction into the many schools where our students were sent on teaching placements.

Chapter Eight: Researcher Educator: My impact on TGfU, presents a review of my research-led approach to games teaching (2000s), and its dissemination through international conferences and workshops. This chapter highlights my work as an interpreter of GCL developments from a practitioner's perspective that I was able to pass on to other practitioners in PE.

PART C

Chapter Nine: 'Teaching Tactics' and 'Transforming Play' (Slade, 2010a), discusses my interpretation of the theoretical constructs in my text, *Transforming Play: Teaching tactics and game sense*.

Chapter Ten: Towards a Further Understanding of GCL & TGfU, presents a revised model of GCL and TGfU that I have developed over the course of this study which reflects my current thinking on how to teach games. It incorporates those components summarised in the literature review: play, mastery and TGfU, while strongly advocating for play as a basic building block for teaching games and sports.

Chapter Eleven: Conclusions, focuses on each of the research questions. This chapter also addresses the implications of this study and makes recommendations for future research in GCL contexts.

PART A: CHAPTERS TWO TO FOUR

The first section of the thesis discusses the intellectual, methodological and historical context within which GCL is located, particularly its New Zealand context. In so doing, it sketches the broader scholarly and social network that shaped the author's development as a practitioner and pedagogue, which is the focus of Part B.

CHAPTER TWO

LITERATURE REVIEW

'The most important drive in the ascent of man is his pleasure in his [sic] own skill. He loves to do what he does well, and having done it well, he loves to do it better' (Professor Jacob Bronowski, *The Ascent of Man*, 1973)

CHAPTER OVERVIEW

The literature review addresses the three major components that have shaped my development as a pedagogue in PE and sport and are central to the thesis. These are the concepts and related literature associated with play, mastery learning incorporating goal-setting and the TGfU model. It is acknowledged that each of these is a complex field and the following discussion is intended as a critique of some key texts and journal articles in each field which have informed the author's understanding rather than an exhaustive analysis of every text. Mirroring my journey to this stage the literature will be addressed firstly in play, then mastery learning and goal-setting and finally, TGfU.

2.1 PLAY

The decision to place play at the start of this literature review is several fold. Firstly it is to highlight the importance of play in the development of motor skills, especially those fundamental to applied movements associated with games, sports, recreation and leisure.³ Lifelong participation in physical activity beyond the innate activities of daily living are considerably influenced and one might suggest, even dependent on positive play experiences experienced in childhood (Payne & Issacs, 2002). Motivating creativity around how to play and adaptability to the circle of friends and the context of play is also viewed as a positive outcome of children's play (Harter, 1988). These variables also appeared to contribute to performance in more formal game and sporting settings as players matured and perhaps started to specialise in one or two sporting codes (Côté, 1999; Côté & Fraser-Thomas, 2008). Play therefore appeared to be the basis for enjoyment, fun and expertise in games and sports.

However, in relation to this thesis, namely that play is the cornerstone of understanding games, that perspective has been questioned relative to the attainment of elite performance (Ericsson, Krampe & Tesch-Römer, 1993). In essence, the Ericsson et al. argument appeared to be that while play as previously understood may indeed provide enjoyable experiences, those wishing to attain elite performance needed to refrain from play and engage in deliberate practice. Some controversy emerged around this view and in response Côté (1999) suggested that play was indeed an extremely important component in the development of both

³ A subtle but important distinction is made later in the thesis, see especially Chapter 10, on the difference between Fundamental Movement Skills and Fundamental Game Skills.

lifelong sport and recreational involvement, but also in the attainment of elite performance in sport. He suggested three stages of development towards such performance and in the process provided another definition of play as it relates to a transitional period of informal play to sport specialization, namely deliberate play. Côté defined deliberate play as those activities “made up by the players, not usually supervised by adults, provided fun, enjoyment and immediate gratification and specifically designed for enjoyment” (Côté & Fraser-Thomas, 2008, p. 19).

The literature in this section will briefly outline the historical place of play in terms of human development. This is done to provide perspective to the current discourse on the place of play in the development of both recreational and elite performance in games and sports. Play is then defined in developmental terms before discussing the controversy surrounding play and elite performance in sport. The controversy settles on the claims of Ericsson et al. (1993) who suggested that in striving to achieve towards elite performance in sport it is deliberate practice and not play that is important and the converse, especially that proposed by Côté (1999), who stated that play was indeed important, especially deliberate play. Finally, and in summary form, comment will be made on creativity in games, what Memmert (2015) suggests is the mark of the truly elite performer and would also appear to be part of the argument that suggests that play is in fact the cornerstone of both basic competence, enjoyment and elite performance in games and sports.

2.1.1 Historical perspective

Stepping outside the confines of human development in the search for the status of children and associated activities of play one can find interesting answers to these

questions in literature and art. Rogers (2008) notes that pre the middle of the twentieth century, children were portrayed as mini adults. Childhood was not viewed as a separate period of development but a type of apprenticeship in preparation for adulthood. “The sooner the child became an adult, the better.” (Rogers, 2008, p. 42) was the prevailing wisdom. This perspective is perhaps better appreciated if one considers the high mortality rate of children in the 18th and 19th centuries. Rogers acknowledges this condition and suggests that it also contributed to the fact that “the creative processes of discovery, made manifest by play were largely ignored in this period” (p. 42). It was not until the middle of the twentieth century that childhood started to be viewed differently to the perception noted by Rogers.

It was Piaget (1936) who first documented various developmental stages in childhood. Central to his theory of development was the concept of schemas sometimes described as building blocks of knowledge that relate to the world both in concrete and abstract terms (Wadsworth, 2004). Piaget stated that there were four stages of development through childhood and into adulthood, namely, sensorimotor, preoperational, concrete operational and formal operational. Piaget argued that all children pass through these distinct stages and the key to attaining each stage was experience and discovery (Piaget, 1936). Wadsworth (2004) notes how Piaget’s theories have greatly influenced teaching methods such as discovery learning and constructivism.

Vygotsky (1978), a contemporary of Piaget, placed greater emphasis than Piaget on the development of language in a child’s development than Piaget, arguing that

language and cognitive development develop at the same time. To Vygotsky, social context and social interaction with someone more skilful is crucial for this development. Vygotsky described the process of working within the sphere of influence of someone more skilful than oneself as the Zone of Proximal Control (ZPC). The concept has been adopted in various other guises associated with apprenticeships and especially in PE within the perspective of Lave and Wenger, (1991) and situated learning.

Bruner (1966) had more in common with Vygotsky's views of there being continuous development of cognitive ability and that understanding was more linked to individual readiness rather than strict developmental periods applied to all children. He also argued that these processes could be sped up when adults or more knowledgeable peers were available to help. Bruner described this help as 'scaffolding' (Wood, Bruner & Ross, 1976). What is important about these views relative to this thesis is that they mark a change in perception of childhood as a stage of development in its own right. The period of childhood and the concepts of scaffolding, zone of proximal control and legitimate peripheral participation all emerge in theories and models of teaching games that can enhance enjoyment, participation and competence. As Sutton-Smith (2008) notes, "play also includes a frontal-lobe counter, reaching for triumphant control and happiness and pride" (p. 122).

In relation to the teaching of games in New Zealand schools, this changing perception is described by Sutton-Smith (2008) as the beginnings of the 'taming of the playground.' Sutton-Smith described how in New Zealand schools prior to the

turn of the 20th Century, schools' play areas began to be fenced off and playground equipment installed with teachers assuming a more active role in the supervision of games. Ryan (2004) also noted that the 1912 Amendment to the Education Act formally substituted a physical training system for both sexes instead of school cadets. "Under a syllabus issued by R. Garlick, the Director of PE, physical training was to be allocated a definite place in the timetable of every school, and teachers were to be properly trained in its execution" (Ryan, 2004, p. 121). This development within New Zealand schools was not only seen as a contribution to the physical and mental health of young people, but also a perspective on the importance of play, games and sports in the long-term health of society. To achieve these outcomes, it required a different view of children in society and what they needed to learn within formal schooling.

There are currently conflicting messages regarding play within the structure of New Zealand schooling, especially at the pre-school level. Since the late 1960's, and certainly from the 1980's to the present day, understanding the importance of play in child development and as a vehicle for learning in pre-school programmes has been a central part of pre-teacher education courses in New Zealand. It has also been a significant component in human development programmes (J. Deane-Freeman personal communication, 28 July, 2017). Within the New Zealand Curriculum documents (1987, 1999, 2007), play has been emphasized within PE programmes. More recently though, Alcock (2013) notes that "despite play being a preoccupation of most young children... early childhood education and care policy and curriculum documents make little or no mention of play" (Alcock, 2013, p. 19). Alcock views this situation as "the political rise of neo-liberalism with capitalist

values that prioritise economic outcomes redefined as ‘learning outcomes’... simplistic outcomes associated with literacy and mathematics are strongly emphasized [and complex child development outcomes] linked to play are not promoted” (Alcock, p. 28). However, as noted, play is still promoted within PE programmes and understanding the stages of play, especially the final stage of cooperative play (Parton, 1932) is an important factor in the discussion on readiness for game instruction and the debate of early instruction in sport for ultimate elite performance.

2.1.2 The role of play in the development of expertise in games

Deliberate practice

In recent years, nothing has thrust the definition and place of play in game education into debate with academics and practitioners more than the publication and associated claims of Ericsson et al. (1993) in a paper entitled, *The role of deliberate practice in the acquisition of expert performance*. What brokered the controversy was the claim that elite level performance in sport requires deliberate practice from an early age; that such practice was not fun or enjoyable as it “requires effort and is not inherently enjoyable” (Ericsson et al., 1993, p. 368). The idea that motor skill learning required practice or rehearsal was not the issue. Côté, Baker and Abernethy (2007) rightly noted that “practice is uniformly regarded in motor learning literature as the variable having the greatest single influence on skill acquisition” (p. 184). It was, however, some of the related claims and even the definition of deliberate practice that produced the debate.

Ericsson et al. (1993) argued that deliberate practice could achieve continuous improvement in a player's performance and therefore overcome any supposed genetic disposition against elite performance in a sport with the exception of height and build. This claim also suggested that Newell and Rosenbloom's (1981) position on the relationship between the variables of practice and achievement, known as the 'power law of practice', could be negated. The power law of practice conceptualised improvement in sport through practice as being initially rapid before hitting a plateau that subsequently required more and more effort for relatively minor gains in performance. Ericsson et al. argued that deliberate practice could overcome this plateau effect. In conjunction with this claim it was suggested that the skill difference between performers was solely attributable to the relative hours spent in deliberate practice. The suggestion was 10,000 hours of deliberate practice over ten years as the requirement to attain expertise in sport. Furthermore, those who did not embark early on this path of practice would be so disadvantaged they would never match their peers' performance who had embraced this regime of learning at an earlier age in an effort to become an elite performer.

Deliberate play through meta-analysis

Since the publication of this position some 23 years ago the most striking analysis of this position has been through a meta-analysis of the empirical research on the topic by MacNamara, Moreau and Hambrick (2016). In their meta-analysis of 157 effect sizes and a total sample size of over 11,000, they found that "the amount of deliberate practice accounted for less than half of the variance in performance in each of the major domains in which deliberate practice had been studied: games (26%), music (21%) sports (18%), education (4%), and professions (<1%)" (p.

334). They concluded that deliberate practice was an important predictor of individual differences in sports performance but that “substantially more of the variance in performance was not explained by deliberate practice than explained by it” (p. 346). They also found there was no difference in starting age between higher and lesser skilled athletes. They also suggested this reinforced the importance of unstructured play as well as other factors, such as psychological bearing in attaining elite level performance.

The findings of this meta-analysis reinforce the importance of the work of Côté, and colleagues. Research into the development of expertise in sport was also conducted by those who considered that Ericsson et al.’s (1993) position might not be correct both by definition and in terms of the social context of games (See for example, Côté, 1999; Côté, Baker & Abernethy, 2003; Côté, & Hay, 2002). A number of scholars argued for a model that included considerations of being developmentally appropriate and especially provision for deliberate play. Côté and Fraser-Thomas (2008, p. 19) defined deliberate play as those activities “made up by the players, were not usually supervised by adults, provided fun, enjoyment and immediate gratification and [were] specifically designed for enjoyment.” Côté (1999), suggested that deliberate play was an important ingredient in the development of expertise in that it provided the motivation, through fun and enjoyment, to encourage players to invest time and effort into improving performance as they matured.

Côté’s position and that of his colleagues was more holistic and flexible than Ericsson et al. (1993). Côté (1999), also developed a model for the implementation

of his position suggesting three stages of development towards the achievement of expertise in sport. The first was the sampling years, approximately ages 6-12 years. This stage should include a balance of deliberate play and other fun activities versus deliberate practice at a ratio of approximately 80-20%. The next stage, ages 13-15 years, he named the specialising years. At this stage, players should restrict themselves to two or three sports and the ratio between deliberate play and practice should be about even. Finally, ages 16-22, he dubbed the investment years. The focus should be on one or even two sports and the ratio of deliberate play to practice approximately 20-80%.

2.1.3 Creativity in play

Pressure for convergent thinking

Memmert (2015), on creativity in sport, proposed that

The distinction between expert decision-making and creativity in sports are closely linked to the theoretical distinction between “divergent thinking” and “convergent thinking” concepts (p. 18).

He also notes that the superstars of sport, especially in invasion games are those who appear creative, do things differently and see things others do not. Yet, despite such attributes being abundantly evident to all who would observe such performances, games teaching in traditional formats is largely based on achieving a sameness in understanding and solutions to problems in games and sports. Memmert advocated the use of playful activities as part of the development process in order to facilitate creativity. Researchers in human development previously

mentioned in this section all suggest that play is vitally important in the development of human creativity. Specifically, Milgram (1990) suggested that creativity has to be learned and stored early in life as after childhood the training influence becomes weaker. Huttenlocher (1990) noted that children up to the age of seven years exhibit the greatest absolute number and density of synapses in the human primary visual cortex as well as resting glucose uptake in the occipital cortex, factors closely associated with creativity. This translates to the position that human potential for the development of creativity is probably at its greatest in childhood. Play in sport would appear to offer the most opportunity for divergent thinking and the development of creativity in sports that may not be present in the Ericsson et al. (1993) model of typically coach-dominated deliberate practice.

In summary

Play is an outlet for children's creativity. It allows them to pretend, to play out fantasies and to imitate their parents and or adult influences in their lives. Children often play 'school' being the teacher or pupil. Children often wear a version of the shirt of their favourite sports person and in their 'pick-up' games pretend to be that person even though it might only be soccer in the back yard. Play has a very important role in the development of language and cooperative relationships such as socialising. Play has an especially important role in the child's maturing process towards self-knowledge. Play and its associated fun, success and failure, real and imaginary, impacts on the development of self-esteem, self-image, self-confidence and self-concept, all the components of self-influenced play. Beyond play, developing competence in movement and games is extremely important for long-term and on-going involvement of adolescents and adults in games, sport and

recreation. This involvement is important far beyond merely playing. This participation is also about fostering community involvement and good relations and democracy (Butler, 2017). Observing children reach compromises in their invented team games, their version of what is fair and what are the rules, is to observe democracy in action. Child's play is creative work. It is how children explore their movement potential. Through role-play they learn about adult roles in life. Play is a period of great socialisation, developing friends, understanding boundaries, developing lifelong skills. It is or should be about fun.

Children play well, so well in fact they will play for hours on end. Young people and children do not invent play or games that they cannot enjoy and be successful in. In order to transform play towards more structured games, sports, recreation and leisure there is a need to recreate that context in order to capture in children the desire to spend time 'playing' at these activities in a way that makes that transition or transformation almost implicit. By creating that context in game learning of having done something well, the learners maintain a desire to do it better. It is perhaps not quite understanding this need for play that is part of the root cause behind some of the lack of up-take of the TGfU model by teachers. The writing on how to do TGfU with novices and the examples provided are too often about specific sports, but sport is not the first step in developing a lifelong interest in physical activity, play is. Until that is grasped by those who write on this topic their work is always going to create a disconnect between what they suggest for the practitioner at the elementary level of teaching PE and what best facilitates game awareness among novices.

2.2 MASTERY LEARNING AND GOAL SETTING

The mastery process operates on the proposition that almost every student can learn the basic skills and knowledge that are the core of the school curriculum when the instruction is of good quality and appropriate, [and the student] spends adequate time in learning (Torshen, 1977, p. 41).

2.2.1 Models of mastery learning

In the period under discussion, that is between the 1970s and 1990s, there were two primary models of mastery learning being advocated in educational circles. One championed by Bloom (1976), group based mastery learning, and another an even earlier model advocated by Keller (1968), a individualised personal mastery system of instruction (PSI).

Mastery learning defined

Mastery learning within both the Bloom and Keller models refers to the attainment of adequate levels of performance. Adequate means that an individual mastered those things identified as the subjects of instruction and was therefore deemed to be competent. Keller (1968) and Bloom (1976) both argued that the mastery process operated on the proposition that every student can learn the basic skills and knowledge that are at the core of the school curriculum. They stated that this can be achieved when the instruction is of good quality and appropriate for the student and when the student spends an adequate amount of time in learning. Of course, what is good quality in terms of instruction includes the parameters they assigned to mastery learning. They agreed adequate time to learn occurs when the time required

to learn equals the time available to learn. Torshen (1977) interpreted Carroll's (1963) and Bloom's (1976) position as:

Time spent to learn

Degree of Learning = f Time needed to learn.

(Torshen, 1977, p. 49)

2.2.2 Bloom's group-based model of learning

Bloom's (1976) group-based model of mastery learning was derived from his perception that schooling was not making a difference in terms of student performance relative to their initial entry and exit level status. Traditional norm-referenced strategies were not working and an alternative was required to lift the standard of performance of all students. Bloom's answer to this issue was the use of group-based mastery learning. The Bloom model required that on a post-test of a unit of work, 80% of the students in a class must have achieved mastery before the next work was introduced. Students mastering the work quickly, would receive either enrichment activities or they could assist with the instruction of their peers struggling to grasp the concepts. Bloom acknowledged that initially this would take more time to complete work but because almost all students would achieve mastery then subsequent work would gradually require less time to teach because most students had grasped the concepts necessary for work at the next level. His work (Bloom, 1976, 1984a, 1984b) was subject to considerable controversy. It was argued (Resnick, 1977; Slavin, 1987a) that it was a 'Robin Hood' approach to education, stealing from the rich, those who quickly master the work, to give to the poor, those who take longer to understand the content. Others, for example

Anderson and Burns (1987), noted such imbalances in attention to students were the norm in school lessons. However, the major point of controversy with the Bloom model was his claim (Bloom, 1984a) of a two sigma learning advantage, for groups taught in group-based mastery contexts over those taught using traditional methods (See Bloom, 1984a; Resnick, 1977; Slavin, 1987a, 1987b, 1990)⁴. It was perhaps this argument between academics on this claim that proved a sufficient point of distraction to discourage the adoption of Bloom's model on any wide scale in schools.

2.2.3 Keller's model

While Keller's (1968) personalised system of mastery instruction (PSI) was based on the same precept as Bloom's, namely adequate time to learn occurs when the time required to learn equals the time available to learn, it was in some respects fundamentally different. Mastery levels within Keller's PSI model were frequently set at 100% and the individualised nature of the instruction dictated the individual's pace of learning, unlike the Bloom model where students were tied to 80% of the class demonstrating mastery before they could move to the next module of work. The Keller model started with a general class meeting, explaining the learning intentions and then students worked on different levels of the task dictated by their level of mastery. Keller's model was adopted in various guises in colleges in the United States and South America. In particular, the Keller model's use of study

⁴See Resnick, 1977; Slavin, 1987a, 1987b and 1990, for discussion on Bloom's 2 Sigma learning advantage through adopting a group based mastery learning programme. Essentially Bloom stated that individual tutoring could account for a two sigma advantage in learning outcomes over conventionally instructed classes and a one sigma advantage for those taught using group based mastery learning strategies. Some of the argument against Bloom's claims related to variables where the mastery group received corrective feedback which the conventional control class did not.

guides as a means of providing self-paced learning became widespread in universities and is still favoured today as a means of providing individual guidance to students.

2.2.4 Goal setting in an educational environment

Early research in goal setting focused on isolating and then establishing the common conditions under which goal setting was likely to be successful. Once this was established, research centred on the preference for establishing short- or long-term goals - goal proximity. More recently studies have focused on the respective values of self-set or instructor-set goals, self-efficacy and goal commitment. It is these two latter concepts, especially self-efficacy and the teacher's understanding of child-centred learning, of which process goal setting is a part, that aligns mastery learning and goal setting to TGfU and child-centred models of instruction in PE.

Defining goal setting

A goal may be defined as the aim or object towards which an endeavour is directed. However, within the literature goal setting is not merely a general aim that may or may not be achieved. For example, Locke (1966), defines goal setting as an individual's deliberate and conscious intentions that will regulate their actions towards achieving a specific outcome.

Debate surrounding the advocacy of goal setting

Unlike mastery learning, little controversy surrounded the advocacy of goal setting as a factor in improving performance. The only relatively short debate concerned whether improvements in performance were in fact related to goal setting or the

impact of improved access to knowledge of results (KR) as a process of feedback. Locke (1967) concluded that KR would equate with an improved performance over not receiving any KR. He also suggested however, that it was not just KR but indeed the prescriptive nature of the feedback and even more importantly, what students do with the KR that had the greatest influence on performance or behaviour. Locke (1967) suggested that it is where students take the KR and identify and set goals for improvement that the difference in performance occurs. At a pragmatic level it appears it is not enough to establish goals and have students / learners tacitly agree to them, they really have to accept and believe that the goals, while challenging, are achievable.

2.2.5 Mastery learning and goal setting in PE and sport settings

During the period of extensive debate between those who supported the Bloom (1976, 1984a, 1984b), mastery learning position and those who argued against it, (Resnick, 1977; Slavin, 1987, 1990), the research on the application of mastery learning strategies to sport and PE is not extensive. In part this might be explained by the extensive employment of traditional motor skill instruction that already, in many respects, mirrored mastery learning and so, perhaps, to use or not to use mastery learning methodologies was not so much of an issue.⁵ There has long been a presumption by physical educators that mastery of one component of a skill or movement needs to be accomplished before moving to the subsequent one for example, a gymnastic routine. Known as part learning and skill hierarchy sequences, these methods are widely employed in all movement teaching

⁵ For example, swimming has always been taught through mastery progressions. Athletics, in throwing and jumping sequences is also frequently taught in a progressive mastery learning sequence.

environments and are very similar to strategies employed in mastery learning. Perhaps therefore physical educators just ignored the debate.

For those that did not ignore the debate, early published work in this period (Ashey & Lee, 1984; Boyce, 1989), tended to focus on establishing the protocols under which mastery learning could be employed within a PE environment. Other research at this time generally supported the effectiveness of mastery learning over other methods of instruction. For example, Ashey and Lee (1984) found in a study of first grade kindergarten children that forcing learners to demonstrate mastery of subordinate skills was beneficial in promoting mastery of rhythmic rope jumping. Ashey and Lee (1984) reported that 73% of the mastery and only 47% of the non-mastery learners achieved the final skill (Ashey & Lee, 1984, p.61). They also reported on an overarm throwing task that found that mastery learners significantly outperformed the non-mastery control group. Mao, (1997) reported results favouring the use of mastery learning strategies over non-mastery in gymnastic instruction on the long box, parallel and horizontal bars.

Resnick's philosophical question on the role of the school

These results highlight aspects of the philosophical reductionist debate associated with mastery learning raised by Resnick (1977); namely, can or should educational outcomes be confined to chunks of knowledge, memorised and mastered? Clearly, within the sport domain, there appears to be a case for learning discrete skills in this manner but games, with the myriad of variables involved, perhaps cannot be addressed in quite the same way. Indeed, the instructional model, TGfU (Bunker & Thorpe, 1982) evolved from a concern that the teaching of games in the form of

‘chunks of knowledge or discrete skills’ was largely responsible for children leaving school with a poor understanding and negative feelings about games and physical activity.

2.2.6 An evolving position

A new direction for mastery learning and goal setting as a methodology within a teaching PE environment was mooted as early as 1988 (Ames & Archer, 1988) and again in 1992 by Ames. Ames and Archer (1988) argued that achievement in the school environment could best be accomplished by identifying what motivated student learning. Within education, Ames (1992), suggested that there were two types of goals, describing them as mastery and performance goals. She proposed that a mastery orientation produced better outcomes than performance goals, noting that central to mastery learning was a “belief that effort and outcome covary, and it this attributional belief pattern that maintains achievement-directed behaviour over time” (Ames, 1992, p. 262). She asserted that it was essential to develop in learners this attributional belief pattern in order to maintain achievement over time, stating that “it was important that learners recognised that effort will lead to success” (p. 262). In contrast, she felt that a focus on performance led to a belief that “success was related to inherent ability and as a consequence could promote failure avoidance” (p. 262). Ames (1992) further stated that learning and assessment in PE needed to have variety and relevance. Assessment needed to be mastery driven and students should be encouraged to establish individual goals in conjunction with mastery. Students should be assessed against those goals and not their peers. She claimed that this would promote self-efficacy and willingness on behalf of students to take challenges and engage with the content on a more intensive scale. Hogan

and Santomier (1984) demonstrated that the use of mastery swim standards with older adults resulted in increased self-efficacy and that this appeared to transfer to other movement situations. Ames' (1992) perspective was further endorsed by results on a golf-practising study by Dorsel and Slainsky (1990). They reported that while no difference in putting performance was found, perceptions of the usefulness of the practice and a willingness to practise were enhanced by the employment of mastery learning levels especially when these levels were presented to the learners as goals.

2.2.7 Methodologies for promoting equity in PE

New directions in PE were being expressed in syllabi in the late 1990s, notably in New Zealand where the 1999 syllabus promoted a holistic approach based on a socio-ecological perspective (Culpan, 2005). The perspective advocated critical thinking about issues in sport and PE, and that if PE was going to contribute to society in the 21st century it needed to critically embrace social issues to provide a truly holistic physical education.

In support of this view, Papaionannou (1998) noted that if sport and PE were going to promote democracy and equity and other human values, then those that teach it needed to become accountable for such learnings in regard to all students and not just an elite few or those that reflected their own interests. He noted that research that promoted those values (see for example, Deci & Ryan, 1985; Duda, Olson & Templin, 1991; Nicholls, 1989; Vallenrand & Lasier, 1994) were all stressing the “importance of adopting a mastery orientation and intrinsic reasons for achievement in these contents” (Papaionannou 1998, p. 273). Papaionannou (1998) stressed that

PE class environments that placed an emphasis on effort, task involvement and mastery, resulted in indexes that reflected positive student motivation and intrinsic interest. Conversely, where the class environment reflected a performance focus, the students' perceptions were not positive. Papaionannou felt that a mastery learning environment could change both student and teacher perceptions of what was possible. Xing and Lee (1998), in a study of student self-perceptions and achievement goals reinforced Papaionannou's findings. Xing and Lee (1998), argued that it was important to construct PE learning environments that have a task orientation in which "students' belief in their ability can be enhanced through effort and judged in a self-referenced way" (p. 239).

In summary

The relevance of mastery learning and goal setting to PE has been its contribution to establishing a PE class learning environment that defines success as the mastering of the task rather than outperforming other students. Within the literature the evolved position of mastery learning and goal setting are seen as providing a methodological structure that has the potential to promote the learning process by "providing a vehicle for participation at an individual's own level and recognising individual accomplishments" (Xing & Lee, 1998, p. 239). These debates about mastery learning and goal setting contributed to a view that learning in PE needed to be of a child-centred nature. It is necessary to initially ascertain where the student is in terms of the teaching content and then modify it in order that they can both enjoy and master it. Mastery could include the use of goal setting based on challenging but achievable goals. Of course, it is this very presumption that underscored the game-learning model, TGfU, by Bunker and Thorpe (1982).

2.3 TEACHING GAMES FOR UNDERSTANDING (TGfU)

In order to provide historical markers against which pedagogical change in games teaching can be observed, the literature review in this section will start by evaluating the methodologies and philosophies of game teaching prior to the emergence of Game Centred Learning (GCL) models and, in particular, TGfU learning strategies in the 1980s. Post this period this section of the literature review will focus on providing an overview of TGfU's development and an analysis of how it has been perceived from a scholarly perspective. It will also provide some insights into adaptations of the TGfU philosophy that were introduced as enhancements to the original work.

2.3.1 Traditional structure of teaching games in PE

Traditional game learning pedagogy pre-1980 (see Bunker & Thorpe, 1983) focused on isolating the techniques from the performance context, typically within closed skill learning environments and breaking the skills down into their component parts through the application of part learning concepts. This was done because it was generally thought that in order to play games or sports it was first necessary to have mastered the skills and techniques of the activity. There was also an emphasis on the one correct method and much repetition of the technique until it was adjudged by the instructor to be correct. While there is no debate about the need to repeat movements in order to learn complex skills, technique repetition during this period was typically performed in isolation of any legitimate game context. Consequently, context and learner were put aside in the learning equation with the focus solely on one interpretation of what constituted mastery of that skill. For example, skills that would ultimately be performed in dynamic open skill

environments would be perfected in isolation of that context. In field hockey, hitting, pushing or dribbling a hockey ball were rehearsed without opposition or any authentic game pressure (Slade, 1999a, 1999b). In New Zealand, the Department of Education, PE Curriculum Division widely circulated booklets for teaching games under the generic title of the name of a sport, for example, *Tennis*, with the sub title: *A guide book for teachers, students and players*. While the booklets did not provide specific breakdowns of the time for warm up, teaching skills, drills and closing with a game, the structure clearly placed any game at the end of the lesson after skills and drills had been completed. The author's own experience of receiving pre-service PE teacher training in this period, was that almost all of the lesson was to focus on the development of technique. Games did figure in the teaching episodes but they were often as much about a class management role of a reward at the end of the lesson as they were for skill refinement or adaptation.

2.3.2 Catalysts for change

However, there were catalysts for change to this approach for teaching games in secondary schools. One source in the 1960s was attributed to the publication of the spectrum of teaching styles by Mosston (1966). Mosston's spectrum provided advice and direction on instructional methods appropriate to the content and context of PE lessons. Among the instructional techniques defined by Mosston (1966) that provided a momentum in the game teaching genre, was the guided discovery method. This method came to be closely associated with curriculum innovation in gymnastics known as educational gymnastics. The influence did not stop there. Griffin and Patton (2005), quote a personal communication with Rod Thorpe

(2000), where he noted the influence of the guided discovery method of instruction on the development of the TGfU model. Thorpe is quoted as saying, “I think, the biggest influence on my games teaching is educational gymnastics. The logic of it...the game sets the problem; you’ve got to see what the problem is, and then you’ve got to answer[it]” (Griffin & Patton, 2005, p. 5). However the most notable catalyst for change emerged from staff at Loughborough College.⁶

Mauldon, Redfern and Wade

Mauldon, Redfern and Wade all taught in PE programmes at Loughborough College in the 1960s and were significant catalysts for change in game teaching. The momentum they brought for change came through their advocacy of understanding games by describing them within categories that reflected their fundamental structure. For example, Mauldon and Redfern (1969) defined games within the categories of net, batting and running games. They also argued (1969) that games typically contained the elements of sending an object away - for example, cricket - gaining possession of an object - football and hockey - or travelling with an object - as in rugby.

The outcome of defining games in this manner was to encourage teachers to present games to students within structural and tactical themes so that novices could recognise tactical similarities and transfer this understanding between games. Mauldon and Redfern surmised that students presented with tactical problems within a single game category but through a variety of sports or games would learn to appreciate that the same tactical solutions might also be applied to other games.

⁶ Loughborough College was granted university status in 1966.

It was this holistic understanding of games rather than the mere mastery of technique that constituted for Mauldon and Redfern (1969), a games education in a PE context. Wade's particular contribution was in his later role as Director of Coaching for the English Football Association. Through his publication (Wade, 1967) he advocated for the use of small-sided games as a means to understand game strategies and in the process greatly influenced football coaching for several decades.

In this period there were isolated pockets of advocacy for change in game teaching. Kirk (2010), however, maintained that in game teaching at this time there was still an emphasis, especially in secondary school PE game teaching that was decontextualized and highly structured around the pursuit of proficiency in technique before any provision for learning within more authentic game contexts were considered.

Bunker and Thorpe: Loughborough University, Teaching Games for Understanding.

The catalyst for Bunker and Thorpe's (1982) TGfU model and philosophy of game instruction, was their observation of and dissatisfaction with how games were being taught in schools (Griffin & Patton, 2005). They believed that the aforementioned standard structure of teaching specific motor skills or technique competence before the introduction of the game context, meant that many students were leaving school disenfranchised in terms of their perceptions of their ability to play games (Bunker & Thorpe, 1983). They suggested that this perception contributed to significant

levels of dissatisfaction by students with learning games in the context of the PE lesson and their disengagement with games and sports immediately post-school.

They had not perfected the skill therefore they could not play and so such activities were not for them but only those who were experts (R. Thorpe, personal communication, December, 2003).

2.3.3 The Teaching Games for Understanding model

The TGfU model of Bunker and Thorpe (1982) was designed to be grounded in a performance and learner context rather than technique centred. Therefore, there needed to be acknowledgement of the learner's stage of learning and an emphasis on tactics and game shape within a performance context. These elements provided a stark contrast to traditional methodologies that focused solely on technique acquisition without considering the three elements of learner, context and content. The original model (Figure 1, p. 20) consisted of six procedural steps to enable learners to become skilful players. The key aspects of the model “lies in the design of well-structured (i.e., conditioned) games that require students to make decisions to elevate their understanding of games i.e., increase tactical awareness” (Griffin & Patton, 2005, p. 2). Step one of the TGfU model consists of *the game* that is typically modified to meet the developmental requirements of the learners but must represent a close approximation of the adult version of the game. Step two, *game appreciation*, requires the modified game to be presented in a manner that ensures players understand the rules and methods of scoring. Rules give a game its meaning and shape, so in designing games it is important to keep that structure in mind. Step three, *tactical awareness*, requires that the modified game be presented in a context

that implicitly leads the learner to consider the tactical implications associated with the game. Understanding game tactics and applying them was also designed to help the learner understand the strengths and weaknesses of their opponent(s). The fourth step, *making appropriate decisions* around *what, when and how to do things*, requires the development of some level of technique. Step five, *Skill Execution*, focused on how to execute specific skills and was viewed to be within the context of the game rather than in isolation. Step Six – *performance*. Bunker and Thorpe (1983) described this step as being independent of the learner. They noted this as being the criteria by which one could describe a player as good or bad but qualified this position as being relative to the learner's development and efficiency within the specific learning context.

Games defined

The evolution⁷ of the TGfU approach continued when Len Almond, a close colleague of Bunker and Thorpe and an extremely influential figure in the TGfU development, further refined the game classification work of Ellis (1983). In association with Werner they further defined games within four categories (Werner & Almond, 1990). The categories were target, net or wall, striking or fielding and invasion territory games. In defining games in this manner they hoped to further clarify and add emphasis to the work of Mauldon and Redfern (1969) and Ellis (1983) in the expectation that learners would begin to see the similarities between tactical components and decision making requirements of games.

Thorpe and Bunker further added to the TGfU model through the introduction of

⁷ See also Werner, Thorpe & Bunker, 1996,

four pedagogical principles (Thorpe & Bunker, 1989). These developments further clarified the processes involved in the original TGfU model and provided guidance for teachers who, as would be later reported, were being captured by the TGfU concept but flummoxed by the implementation (Stolz & Pill, 2014).

2.3.4 Pedagogical principles

The four pedagogical principles introduced by Thorpe and Bunker (1989) consist of sampling, representation, exaggeration and tactical complexity. *Game sampling* is a principle that suggests students would gain a better game education if they sampled similarities and differences between games. This understanding would in turn contribute to their transfer of knowledge between games and sports. The second principle, *representation*, provides a practical direction to what was in the original model step three in the original model, tactical awareness, through suggesting that either through modification or exposure to games of similar structure, students would develop a more in-depth understanding of tactics in games. The third principle, was *exaggeration*. This provides practical direction to the practitioner through suggesting that changing the secondary rules of the game e.g., changing the shape of the playing area (for example, making the playing area long and narrow or shallow and wide) could enhance player understanding; or modifying the rules, for example, no pushing the ball in field hockey. This type of exaggeration contributes to over stating, especially for the novice, the tactics of the game and also implicitly suggests what techniques needed to be developed in order to achieve certain outcomes. The final principle, *tactical complexity* also relates to the game form and reminds practitioners of the need to design games that were developmentally appropriate for the learners.

These pedagogical insights of TGfU also promoted the view that it was possible to play a game with immature techniques. Acceptance that technique mastery at the expert level was not a necessary condition for playing games promoted the view that the game could be the centre of learning rather than a brief excursion near the end of the lesson. As Hopper (2002) noted, the addition of Thorpe and Bunker's (1989) pedagogical principles emphasized that tactics and how to play the game should be understood first and technique should be developed at the pace of the learner (Hopper, 2002). The principles also fashioned a new definition of skill in games by Alan Launder to reinforce this philosophy of instruction, namely "*Tactics plus technique = Skill in Sport*" (Launder, 2003, p. 33).

2.3.5 TGfU grounded in educational theory & Physical Education in crisis

Bunker and Thorpe were essentially practitioners, outstanding teachers of PE, games and sports. Their practitioner's perspective was reflected in their development of the TGfU model that they promoted as addressing in a practical way their perceptions of poor teaching of PE in secondary schools. That their TGfU model is practically grounded rather than theoretically is reflected in Brier's (2014) observation that "TGfU was essentially driven by a practical need and developed in isolation of any theoretical frameworks" (p. 44). Brier was supported in that observation by Griffin, Brooker, and Patton (2005), Griffin and Patton (2005) and Kirk and MacPhail (2002). Later, Griffin and Butler (2005) would also comment that a robust theoretical perspective of the TGfU game teaching model was needed in order for researchers to investigate its legitimacy in terms of promoting learning. However, it was a perceived crisis in PE that mostly provided the momentum for

the search for a theoretical model of learning to underscore the TGfU model.

Two significant issues ushered in a period of critical analysis of what might constitute best practice in games teaching in PE in the decades of the 1990s and early 2000s. One was dubbed a crisis in PE where the eventual response helped cement concepts such as TGfU and the development of an Australian version, Game sense (den Duyn, 1997) as increasingly mainstream methodologies for teaching games in PE classes. The second issue, associated with the crisis, related to student engagement and the relevance of PE. This second issue also generated discourse around grounding PE in general and games teaching in particular, within an educational theory of learning.

The crisis in PE stemmed from publicly stated views in Australia, that young people were not as fit, skilled or active as they once were and that PE in schools was not addressing this issue because it was underfunded by educational ministries. Accompanying this view was a call for a 'back to basics' and teaching of 'fundamentals' to overcome this state of affairs. The publicly stated position received much support from teachers of PE in Australia including their professional body, The Australian Council for Health, Physical Education and Recreation (ACHPER) (Kirk, 1996).

David Kirk, then based at the University of Queensland, responded to the perception of crisis through writing in what he described as the "relative privacy" of the ACHPER's own journal (Kirk, 1996, p. 25). Kirk's position was to refute the argument of poor fitness, skills and involvement in physical activity by young

people in Australia while suggesting a crisis perhaps did exist but this was not one of funding “but by the lack of a single voice and a greatly demoralized profession.” (p. 27). Kirk also called for ACHPER to take a more active role in providing leadership and vision for its members.

The second issue, one not so publicly stated but certainly argued by the academic community (for example, Siedentop & O'Sullivan, 1992), was that the very same back to basics call was in fact what currently transpired in much school PE. It was suggested that it was this structure that was responsible for disengagement from PE by its core respondents, the pupils, who described PE as boring and not relevant to their experiences of sport in communities, either sport-specific or their own recreational pursuits (Kirk, 1996). According to Kirk, this was the real crisis and academics and PE practitioners had to find a means to make PE relevant to students and not just in the acquisition of skilled movements. Kirk suggested that relevance in PE required a curriculum that was holistic in an educational sense and could therefore be justified in the school curriculum. It also needed to reflect how children learn. Kirk speculated that failure to do so would almost certainly consign PE to a forgotten status within the school education programme.

A Quest monograph (Siedentop & O'Sullivan, 1992) assembled many of the arguments for overcoming the so called crisis including the adoption of the TGfU model in school PE programmes. Kirk, while welcoming the promotion of the TGfU model in this way, also argued that a lack of theoretical foundation to the model, based on how children learn, was an oversight in its original development that needed to be amended if PE was to sustain its place as relevant in a holistic

education system. Kirk (1996) argued that this theoretical grounding should drive methodologies that were employed in teaching PE in order to bring about learning in games and other aspects of PE. He articulated this position through reference to the theoretical concept of constructivism, noting that the TGfU model could provide the scope for the application of constructivism both directly through the TGfU model and in conjunction with other applications within a broad philosophical interpretation of GCL, especially situated learning theory (Kirk & MacPhail, 2002).

2.3.6 Constructivism in PE

Kirk and Macdonald (1998) proposed that constructivism offered itself as a “key pedagogical component to inform and integrate pedagogical practices in PE” (Kirk & Macdonald, 1998, p. 376). They noted that the recent focus on observing student performance and successful engagement with the stated learning outcomes in PE, described as Academic Learning Time, Physical Education (ALT-PE), had brought an awareness of effective teaching relative to time on task. While this was an important development in PE teaching they thought there was now a need to build on this awareness through examining constructivism as a means to complement learning in PE (Kirk & Macdonald, 1998). In charting this direction, they helped put in train the emergence of constructivism as the theoretical epistemological foundation for the philosophy of employing TGfU in teaching PE.

Kirk and Macdonald (1998) also asserted that part of the answer to the ‘crisis in PE’ was within the structure and methodology of TGfU, namely, seeking, finding and applying scaffolding to the TGfU method that reflected how students learn in PE. This gave rise to the advocacy within the model of TGfU of situated learning in PE

(Kirk & Macdonald, 1998; Kirk & MacPhail, 2002) and Siedentop's (Siedentop, 1987; 1994) sport education model, especially as argued by Kirk & Macdonald, (1998) and Tinning (1995). While constructivism has many forms, Kirk and Macdonald (1998), provided a general view of constructivism that resonated with the composition of the TGfU model. They stated:

Constructivist approaches emphasize that learning is an active process in which the individual seeks out information in relation to the task at hand and the environmental conditions prevailing at any given time, and tests out his or her own capabilities with the context formed by the task and the environment (p. 376).

In their general discussion of constructivism, Kirk and Macdonald (1998) noted that the concept of constructivism stresses learning in a developmental sense and in this sense it is highly dynamic and requires flexible understanding of the learners and their changing needs. They added that constructivism also provides PE with a much needed holistic educational setting because of its multidimensional nature in that "individuals learn more than one thing at a time" (Kirk & Macdonald, 1998, p. 377).

Further support for the Kirk and Macdonald position was evidenced in a monograph in the *Journal of Teaching in Physical Education* (Rink, 1996). Focused on learning in games and sports it also highlighted TGfU for its context that emphasised appreciating game shape and rules, associated tactics and decision-making while still meeting skill development needs (Rink, French, & Tjeerdsma, 1996). It was noted within the TGfU game-based format that there is an active and changing

process, requiring constant adjustment in the execution of tactics and technique. In this sense it was stated that TGfU challenged the understanding of the learner and did not allow for trite or rehearsed responses. Within this definition one can see the appeal of TGfU as a framework for constructivist approaches to learning in PE.

Although settling on constructivism as a theoretical construct for PE, Kirk and Macdonald (1998) noted its application had been somewhat limited in PE. It was seen as a philosophical position rather than an operational theory (Anderson, Reader & Simon, 1996), and as core theoretical assumptions of research in PE only employed by a handful of authors, e.g., Gréhaigne and Godbout (1995). Indeed, Gréhaigne and Godbout's view of an interdependency between learning based on the relationship between individual, task and environment also resonated with Newell's (1986) theory of ecological relationship and constructivist understanding of learning. This would later form part of further developments in games teaching based on the use of constraints, dynamical systems theory and non-linear pedagogy, notably by Renshaw et al. (2010) as well as complexity thinking in PE (Ovens, Hopper & Butler, (2013). At that time though, Kirk and Macdonald made the case for constructivism in PE through applying Lave and Wenger's (1991) situated learning theory to TGfU.

Lave and Wenger

The key concepts of Lave and Wenger's situated learning theory is the "notion of legitimate peripheral participation in communities of practice" (Kirk & Macdonald, 1998, p. 380). According to Lave and Wenger, being located in a community of practice requires location in "the social world, changing locations and perspectives

of the community, developing identities and forms of membership” (Lave & Wenger, 1991, p. 36). They argued that it is in this context that the constructivist theory for active involvement by persons in the construction of knowledge through meaningful social activity takes place.

The key lesson from this perspective for researchers was to compare this notion of a social construction of knowledge and developing legitimate identity and membership of the community related to games and sports within the standard practice in school PE. The command style of instruction and drilling of skills without the accompanying social construction, a behaviourist perception of learning, did not promote that level of engagement.

Sport Education

The Siedentop (1994) and Alexander, Taggart and Thorpe (1997) versions of sport education provided an opportunity to develop meaningful practices in PE that also employed the TGfU model by providing authentic and constructivist models of learning that could also reflect individual learning styles and developmental stages of learning. This stance on how learning could take place under a constructivist context was radically different to the traditional forms of PE practice described in the opening paragraphs of this review. TGfU, applied through this model of sport education, was also seen as an opportunity for reducing the learner’s dependence on the coach or teacher and assisting learners to construct their own declarative knowledge of an activity, especially from a tactical or strategic position.

2.3.7 Debate of ideas on the theoretical foundation of TGfU

Further development of TGfU occurred when Kirk and MacPhail (2002) and Holt et al. (2002) both provided the first major revisits to the TGfU model and suggested developments, that in Kirk and MacPhail's case, re-emphasised the notion of legitimate peripheral participation as part of the constructivist learning theory associated with situated learning. For Holt et al. (2002) their expanded model was to re-emphasise that in TGfU it was the learner who was at the centre of the model and the methodological debates of the superiority over techniques outcomes, from either a tactical or technique focused model, missed the point of engagement in PE and games and sports. They argued that one of the key outcomes of the TGfU model was related to the affective domain and the incidents of fun and enjoyment that children experienced through a games centred learning approach to learning games and sports.

Radical and empiricist constructivism

While Kirk and Macdonald (1998) introduced the concept of constructivism as a general educational learning theory that should provide a theoretical underscore to TGfU, a more controversial issue emerged in the form of a debate as to just what specific form of constructivism should be adopted. This was an important issue because of its possible impact on practitioner teaching approaches that would stem from that decision. First to offer an opinion on this issue were Richard and Wallian (2005) and, subsequently, Gréhaigne, Caty, and Godbout (2010). Richard and Wallian (2005) noted that constructivism and inquiry go hand in hand. In order to employ a constructivist theory of learning they stated that first the teacher must ascertain what the student knows. Based on this assessment the teacher then plans

experiences, exploration and experiments so that the learner can build their own and new understanding of situations measured against their previous views or appreciations. Finally, they stated, the student must demonstrate this understanding in some way in order to show their development of ideas. In developing these notions with TGfU, Richard and Wallian drew on the work of Cobb (1986) who differentiated between two distinct constructivist perspectives namely empirical and radical constructivism.

Cobb (1986) stated that the distinguishing feature between these forms of constructivism “emerge when the source of the knowledge and the process by which knowledge is constructed are considered” (p. 302). He suggested that “empiricist-oriented constructivists, tacitly or explicitly, locate knowledge in an external environment and see it existing independent(ly)... in the world prior to the person’s action of giving meaning to the world. In other words, all knowledge has its source in an external reality” (p. 301).

Conversely, the radical perspective states that the only knowledge that exists is that constructed by the learner. Hence instruction for the empirical constructivist requires learning basic tasks before problem solving can occur. In contrast, for radical constructivists, learning is a problem-solving process in which the instructional context provides opportunities for the learner to discover and construct their own understanding of facts and relationships.

Richard and Wallian (2005), suggested that they considered that current teaching in TGfU was based on an empiricist-oriented constructivism and that the concept of a

set solution held by the teacher and always sought to be transmitted to the learner was not the intent of constructivist teaching philosophy. In a practical context they introduced the ‘debate of ideas’ (Richard & Wallian, 2005, p. 22) concept that in effect involved not only the questioning already associated with the TGfU model but opportunities for student observation of their own and peers’ work and the ability to explore these ideas even to the point of error because it would ultimately lead to a deeper and more profound understanding of the content. Additionally, this level of understanding would lead to more independent and reflective learners who would be better equipped to apply and transfer tactical solutions to similar contexts even in different sports – the representative pedagogical principle (Thorpe & Bunker, 1989).

Gréhaigne, Caty and Godbout

The development of constructivism as the theoretical basis for TGfU as a journey over the following 12 years is further illustrated when radical constructivism resurfaced in the TGfU literature, this time advocated by Gréhaigne et al. (2010). For them the crisis in game teaching was not so much about getting back to basics or fundamentals or theories of situated learning but the need to again revisit the application of constructivism in TGfU and to once more advocate for constructivism but a purer form than they felt had developed. Their concern, similar to Richard and Wallian (2005), was that constructivism in TGfU had become too empiricist-oriented and as such there was too much teaching and not sufficient discovery of ideas. They claimed that a consequence of this direction was that the deeper learning and understanding forecast for the model was not being fulfilled. They argued that the basic premise suggested by Richard and Wallian (2005), the

debate of ideas and the use of reflective strategies, were not being manifested in the current interpretation of constructivism theory applied to TGfU. Instead of a deep, student-centred construction of ideas through radical constructivism, an empiricist oriented constructivism had emerged and it had thwarted the anticipated deeper holistic understanding of learning intended by the adoption of a radical constructivist philosophy of learning. They felt that the learning in terms of Mosston's (1992) spectrum of learning was more towards the reproduction end of learning than the production end envisaged. In response they advocated for a subtle name change to the TGfU model in order to emphasise this approach, opting for 'Learning Games Through Understanding' (LGTU) (Gréhaigne et al., 2010). In doing so they challenged the long-established TGfU methodology by suggesting that there was indeed too much teaching in the TGfU model.

The position of Gréhaigne et al. (2010), did not go unchallenged. Slade, Webb and Martin (2013) argued against the Gréhaigne et al. (2010), position on the basis that it promoted ideological exclusivity in game instruction. They suggested the dynamic context of learning in games and the individual needs of the learner required a more pragmatic practitioner approach to game instruction. It did not matter whether it was radical or empirical constructivism but that a flexible rather than what they perceived as a straight jacket approach to teaching was required. In support of a more flexible approach Slade et al. (2013) referenced Spiro and DeSchryver's (2009) notion of ill and well-structured domains of learning and the concept of cognitive flexibility theory (CFT). CFT defines domains of learning as either well- or ill-structured. Once defined, the measure for deciding the use of more 'teaching/guidance' (radical constructivism) or more 'teacher directed learning'

(empirical constructivism) can be employed. It is a flexible and overlapping approach because within such definitions and domains the complexity of game learning, includes not just the skill but the context and the learners (Newell, 1986) in a manner that it is never exclusively one or the other approach.

In this sense the Slade et al. (2013) position argued for a philosophy of teaching that embraced the professionalism of teachers to both understand the developmental characteristics of their learners, and the content and context of learning and to employ the form of constructivist learning theory best suited to their analysis of those variables.

Most recently in PE there have been developments in GCL based on constraints theory (Renshaw, Chow, Davids, & Hammond, 2010), non-linear pedagogy (Davids, Chow, & Shuttleworth, 2005), complexity theories of learning (Ovens, Hopper & Butler, 2013), and in sport, representative-learning designs (Pinder, Davids, Button, Renshaw, & Araujo, 2011). However, all of these more recent developments can trace their roots back to TGfU and while Kirk and Macdonald (1998) stated that they were not suggesting that constructivist theories of learning would magically provide the answers to such compelling questions, at the time described as a crisis in PE, it has proved to be a powerful means of thinking about PE in more sophisticated measures than a back to basics approach.

In Summary

TGfU was initially driven by Bunker and Thorpe (1982) as a practical response to improve game teaching in secondary schools, arguing that traditional methods of

game instruction disenfranchised most students from playing and enjoying games. They were supported in this view by, for example, Holt et al. (2002), who noted a key outcome of TGfU was related to the affective domain, namely that students could experience fun and enjoyment in learning games through TGfU and do so even with immature techniques. It was also noted that TGfU was initially developed in isolation of any theoretical framework (Brier, 2014) and Kirk (1996) and Kirk and MacPhail (2002) argued that this lack of a theoretical framework underscoring the model was an oversight in its original development. Their suggestion of constructivism as a theoretical foundation for how children learn through TGfU was considered essential in terms of GCL research and if PE was to sustain its place as relevant in a holistic education system.

Interpreting the application of constructivism to the model has not been without pedagogical tensions (see Gréhaigne, Caty & Godbout, 2010; Richard & Wallian 2005; Slade, Webb & Martin, 2013). However, in the practical application of constructivism to game learning, Vygotsky's work (1978), and Sport Education (Siedentop & Tannehill, 2000) have been championed as providing legitimate and authentic learning experiences in PE (Kirk & Macdonald, 1998). TGfU has also been a catalyst for other GCL approaches, e.g., Game sense, (den Duyn, 1997), constraints theories (Renshaw et al., 2010), and in sport, representative learning designs (Pinder et al., 2011). In essence though it appears that the key features of TGfU, namely its student and game centred model and flexibility in manipulating constraints in modified games to teach tactical knowledge and skills related to specific tactical concepts have driven TGfU's acceptance with practitioner and academic alike.

CHAPTER TWO SUMMARY

The literature review has addressed from a practitioner's perspective the three major components that have shaped my development as a pedagogue in PE and sport and that are central to the thesis. These are the concepts and related literature associated with play, mastery learning incorporating goal setting and the TGfU model. The literature presented on play has highlighted a position that play serves as a building block for future development in playing games and formal sports. It is presented as an innate quality in children that if understood by movement practitioners can be transformed into early game and more formal sport experiences. The literature on mastery learning in conjunction with goal setting is provided as an adjunct to play that allows for the development of competency in movement. This can result in easily achieved levels of competency as an individual process and not a comparative one, that help develop fundamental game skills that heighten the fun and enjoyment that can be part of playing games. Finally, the literature on TGfU provides a broad view of the signposts, starting with traditional approaches to teaching games, that later act as a measure of the development and dissemination of GCL in New Zealand.

The following chapter provides a discussion of and a justification for the multi method phenomenological study in this thesis that examines the questions posed in this research against the backdrop of the literature just discussed. It presents both the research philosophy to ground the study within its epistemological foundations and also the tools required to undertake that research that triangulates the data and arrives at the conclusions of this study.

CHAPTER THREE

METHODOLOGY

CHAPTER OVERVIEW

This chapter provides a discussion of the conceptual framework of this multi-method phenomenological study, acknowledging a qualitative research philosophy and my worldview. A bricolage approach facilitated a synthesis (Kincheloe, 2001) of the phenomenon investigated, that was nested within a social constructivist epistemology and explored through an emergent, evolving continuum of initial, life-story biography (Angier, 2010), evocative auto-ethnography (Ellis, Adams & Bochner, 2010; Hooper, 2011) and, finally, analytical ethnography (Anderson, 2006). This process included reviewing the impact of visits to New Zealand by the co-author of the first publication on TGfU, Rod Thorpe, interviews with elite sport coaches, analysis of historical documents, especially New Zealand national PE curriculum documents, and academic publications set in a New Zealand context. In addition, observations made have been informed through critical conversations using a Bourdieuan perspective, with significant agents also active within the genre of PE and sport coaching within the period of this study. Triangulation of that data has been viewed within social and cultural contexts, with the focus, to use Richardson's (2000) metaphor, on the crystal of understanding that forms from the triangulation that provides the understanding and credibility of the observations and answers to the research questions posed in the work. The final section refers to the data analysis, and the ethics of the research and details the judging of the quality and rigour of a research enquiry that is achieved through reference to the four qualitative criteria of credibility, dependability, confirmability and transferability.

3.1 RESEARCH PHILOSOPHY

The presentation of this thesis is an endeavour from the perspective of a participant researcher to provide insights and to answer the question of how, from a physical educator and sport coach practitioner's perspective, has GCL practice involving TGfU approaches evolved and been disseminated in New Zealand 1945-2015? The primary philosophical approach for undertaking this research is based on the paradigm of social constructivism. Nested within a bricolage multi-method approach, social constructivism was chosen because it encapsulates a qualitative, interpretive epistemology appropriate for conducting the research and for exploring its key questions. In order to address those questions as a participant researcher, there was a requirement for a methodology that facilitated a deeper personal understanding of my evolving habitus and capital (Cassidy, Jones & Potrac, 2016) within the practice and field associated in PE and sports. The context of social constructivism has, according to Denzin and Lincoln (2000), an embedded relativist ontology that allows for what Howe describes as an ontology of self (Howe, 2003). This perspective provides the flexibility necessary to explore the primary research question at a personal level, to make transparent any issues of potential bias and to suggest the transferability of the research (Creswell, 2007), and my own part as an agent of change in the evolving process at a national level.

To achieve these insights, it quickly emerged that a complementary multi-method research design was required that utilised overlapping but distinct facets of the phenomena, the results of which, while not always necessarily converging, provide a context for elaborating, illustrating and clarifying developments within the phenomenon under investigation. Denzin and Lincoln (2000, p. 21) summarised the

position noting, “social constructivism assumes a relativist ontology (there are multiple realities) a subjectivist epistemology (knower and respondent co-create understandings) and a naturalistic (in the natural world) set of methodological procedures”, thus providing a legitimate context for elaborating, illustrating and clarifying developments within the investigated phenomenon of evolving change in teaching games in New Zealand post-1945.

The premise of this study is that the evolving development in game teaching in this period reflected a shift from a behaviourist technique focused means of instruction and teaching, to a more game-centred learning (GCL) approach based on the learning theory of constructivism. As a participant observer through this period I was aware of the philosophical changes in the Physical Education and Health syllabi from that which I was a recipient of as a teacher trainee (1969-71), as a secondary school teacher at the time of the 1987 national PE curriculum publication, and as a teacher educator when subsequent curriculum documents of 1999 and 2007 were published that championed a more critical pedagogical approach to teaching PE. As a researcher of the question on the evolving nature of game instruction in New Zealand, I speculated that the constructivist theory of learning that accompanied the latter two documents (1999 and 2007) perhaps gave rise to and provided momentum for the use of more GCL approaches to teaching games. However, I was not aware that any of these pedagogical developments were ever mandated within any Ministry of Education Physical Education syllabus documents related to the teaching of games within a PE context. I had observed the change and had been a

prominent agent⁸ in that change both in PE and sport coaching, but if it was not mandated change then the assumption was that the change was by some form of tacit consensus between significant pedagogues, influential coaches or programmes of instruction. The nature of this change was not noted but it was observed.

Without any formal mandated path for this development in game teaching, in order to understand the phenomenon beyond my speculative view it required locating myself within the period of this evolution, which was achieved through the adoption of the enquiry method of autoethnography. This approach provided a vehicle for me to make sense of and interpret my own role in this development and to also interpret the development from the meanings that other people and events brought to this evolving process of change in game teaching in New Zealand (Denzin & Lincoln, 1994). Initially, the writing was in the style of life-story biographical history (Angier, 2010), but evolved through a continuum of emergent, evocative ethnography towards analytical ethnography. It also became apparent that it was necessary to situate my personal experiences within the wider context of significant developments in education and game-centred learning in New Zealand. This was necessary in order to understand and explain how my own experiences reflected an emerging community of practice, particularly student-centred learning in education, which, it is argued, indirectly created a more favourable and receptive climate for game-centred learning. The multi-disciplinary approach also resulted in conversations with significant persons within the field and analysis of historical artifacts. The outcome provided a deeper and more compelling distance between

⁸ I have authored several books on the topic of game-centred learning, presented these ideas at conferences, as papers in journals and conducted in excess of 60 practical workshops illustrating learning within this genre both nationally and internationally in the period from 1995 to the present day.

the narrative and the phenomenon investigated and contributed to the plausibility of the outcomes. Philosophically it was social constructivism that provided the epistemological lens for generating this understanding.

3.1.1 Social constructivism

Social constructivism is a worldview employed by individuals to seek understanding through interpreting the world in which they live (Creswell, 2007). The constructed views give subjective meaning to their experiences and within a research context, such meanings are varied, multiple and complex. Research within the philosophy of social constructivism relies “as much as possible on the participants’ views of the situation” (Creswell, 2007, p. 20). The meanings are derived through social and historical negotiation. They are not merely the sole perspective of the individual but are formed through interaction with others (hence social construction) “through historical and cultural norms that operate within individuals’ lives” (Creswell, 2007, p. 21). Social constructivist research does not start with a hypothesis to be tested but rather through exploring self, prominent and significant others, investigating historical documents and through conversations or interviews, it seeks to generate inductively a theory or pattern of meaning to the topic.

Reflecting the previously stated comments that ‘meanings to questions are not the sole perspective of the individual’, this research is, by design, unashamedly interpretivist. Interpretivists share a social constructivist epistemology that states that knowledge in social research must be actively constructed and recognised as culturally and historically grounded, laden with moral and political values and as

serving certain interests and purposes (Cassidy et al., 2016; Creswell, 2007; Fay, 1987).

In this current work the interpretations I make from the data I discover are based on the concept of an ontology of self (Howe, 2003). An ontology of self is concerned with the kinds of entities that exist and the features they possess; i.e., what exists, how selves are formed and whether they are relatively stable or always in a state of flux? Howe considers the divide between epistemology and ontology as quite artificial in that "...how human beings know and are known, as well as what knowledge consist in, is inextricably bound up with the kind of things human beings are" (Howe, 2003, p. 71). Qualitative interpretivist research rejects the behaviourist notion in which "human beings are portrayed as passive recipients of stimuli... Interpretivists hold that human beings are self-creating" (Howe, 2003, p. 71). Hence, because humans construct their social reality, their epistemology of how things are or how they view things is value laden in that their ontology of self reflects who we are, complete with bias and not necessarily whom we think we might be. This epistemological stance marries with qualitative research because it rejects a spectator view of the construction of self where somehow we present some objective, passive, rational human perspective to the formation of knowledge. Our epistemology is our ontology of self and this is not to be disguised but rather to be declared. By doing so it makes the reader aware of any potential bias in the research and hence the efforts made to give credibility to the work and this is achieved through declaring who we are. I attempt to achieve this through backgrounding my world view and in subsequent chapters through the use of autoethnography as a

means to revealing my participant role relative to the questions explored in this research.

3.1.2 Phenomenology

The philosophy of phenomenology gives recognition to the view that a whole set of factors leads to different interpretations of reality. As a paradigm, it underpins all qualitative research design (Merriam, 1998) as it aims through an interpretive philosophy to clarify those interpretations of reality or “situations lived through by persons in everyday life” (Giorgi & Giorgi, 2008, p. 27). It seeks to achieve this end by remaining as faithful as possible to the investigated phenomenon and most importantly to the context in which it appears in the world. Cohen and Manion (1994) elaborate on this position stating:

Phenomenology is a theoretical point of view that advocates the study of direct experience taken at face value; and one that sees behaviour determined by the phenomena of experience rather than by external, objective and physically described reality. (p. 21)

Within this research the use of the methodology of ethnographic reflexivity provides for a phenomenological analysis of how I have tried to make sense of particular experiences and events as they relate to the evolving nature of games teaching in New Zealand (Smith & Osborn, 2008). The ontology of self (Howe, 2003) provided an epistemological framework for exploring the phenomenon and constructing insights from an insider’s perspective (Conrad, 1987). In this sense, the research was a dynamic process where, as the researcher, I took an active role,

but with the need for clarity and credibility of the research, other agents were also consulted. In these instances, the conversations with other agents involved “a two stage interpretation process, or a double hermeneutic” (Smith & Osborn, 2008, p. 53). Those with whom I have a conversation are trying to make sense of their world while as the researcher I am “trying to make sense of the participants trying to make sense of their world.” (Smith & Osborn, 2008, p. 53). In the search for understanding, interpreting the phenomenon requires siding with the participants with whom one has conversations, while also critically considering their responses and interpretations to questions in order to better understand their experiences and address the questions of the research.

This approach was especially important in previous research by the author and is referenced in this study related to whether GCL approaches were being used in elite sporting environments. Supplementary questions to clarify meaning and experiences were important to fully understand the perspective of the coaches and managers interviewed in that research. The adoption of interpretative phenomenological analysis has been done to achieve a richer analysis and to do greater justice to the totality of the persons and their interpretations of the phenomena of this research, the evolving nature of game practice in New Zealand.

3.1.3 Bourdieu

This thesis is informed by the work of Pierre Bourdieu, especially his concepts of field and habitus (Bourdieu, 1984). Harker, Mahar and Wilkes (1990) defined Bourdieu’s concept of habitus as “a set of dispositions, created and reformulated through the conjuncture of objective structures and personal history” (p. 10).

Habitus, they stated, is defined as including a person's own knowledge and understanding of that world, which makes a separate contribution to the reality of the world. In that sense they argue that a person's knowledge has a genuine constitutive power and is not merely a reflection of the real world. Because of the mode of development, habitus is never fixed, neither through time for an individual or from one generation to the next.

Field, according to Bourdieu (1984), refers to the content and context of a person's work. It is not neutral but influenced by their habitus and there is reflection on the struggle between habitus and field in determining their practice. As positions change within fields, so too do the dispositions, which constitute the habitus. The changing face of the status of the field can effect change in associated capital and influence opportunities of becoming a legitimate figure within the field (Harker et al., 1990). Employing Bourdieu's concepts allows for reflection on early socialising events and an exploration of the values and structures that were part of that development and contributed to an individual's habitus. Hence, initially at least, a person is disposed to see the world through the lens of the older generation and most obviously the perspectives of parents and the extended family. It also requires reflection on other mediating structures and influences; for example, education and significant influences from other agents and experiences that contribute to the flux of an evolving habitus.

3.1.4 Bourdieu and the sport genre

Hassanin and Light's (2012, 2015) observation that Bourdieu's (1984) concept of habitus, practice and field, are increasingly used in research in the sports coaching

field lends weight to its use in this thesis. They argue that habitus offers a useful conceptual and methodological tool for understanding how experience comes to shape coaching and in my instance, also applies to teaching practice. For example, my initial fledgling status in applying the concepts associated with TGfU in teaching and coaching to becoming a published author with an international reputation in this field can be given voice through reference to Bourdieu's concepts within the structure of autoethnography. So defined, Bourdieu's concepts help with framing the epistemological insights to my work, providing the context for the grounding of my knowledge through exploring my understanding of my place; i.e., the agent and as such the agency within the didactic struggle between habitus and field. It is this perspective, explored through narrative, that I hope to convey in the course of this thesis and answer the 'so-what?' question. The 'so-what?' is to illustrate how it is possible to challenge constraints, pursue and understand the tensions between ideas and concepts and suggest how through reflection and self-determination this influenced my habitus and contribution to practice reflective of my changing capital within a field.

3.2 QUALITATIVE RESEARCH DESIGN

Qualitative research is clearly defined as an interpretive philosophy. It employs constructivist methodologies to explore subject meanings, the construction of realities and to inductively provide answers to socially complex questions in the particular (natural) contexts in which they occur (Creswell, 2012; Denzin & Lincoln, 2000). In establishing the questions within the historical boundaries of this research, the literature search quickly made it evident that the evolution of game teaching either in PE or sport coaching in New Zealand could not be traced to a single document or policy. As a participant within the period I sensed I knew how games teaching had evolved. However, I could not qualify that understanding beyond the level of sensing how it had happened. To understand this development and to address the questions within the notion suggested by Creswell (2012) in relation to qualitative research and literature searches, was going to require a certain process of investigation. This involved analysing documentary sources, evaluating the works and practices of significant agents and clarifying their role through personal communications, to interpret the value and influence of their work and to understand my own role or place within this development. This analysis would be the triangulation that reflects Richardson's (2000) metaphor of the 'crystal of understanding'.

Addressing the secondary questions of this research also required a multi-method interpretative methodology. It was required to explore how TGfU has been used to transform play and whether it is possible to have a flexible rather than a strictly ideological interpretation of TGfU? The associated perspective that emerged from this aspect of the research, initially suggested by Stolz and Pill (2014), of whether

a less linear progression of the stages in the TGfU model was desirable, similarly required qualitative research methods. Ultimately though, the qualitative methods available were rather dictated to me through my status as a participant researcher.

The primary methodology has been to employ an autoethnographical approach, which developed from a life-history biography along an emergent, evolving continuum from evocative (Ellis, 2012) towards analytical, (Anderson, 2006) informed by Bourdieu's concepts. This qualitative method is appropriate because the research is a situated activity and the methodology of autoethnography places me in the natural settings, allowing me to attempt to make sense of or interpret the phenomenon of my research (Denzin & Lincoln, 2000). However, while Ellis (2012) notes that the methodology of autoethnography rejects all pretext of presenting ethnographic social research as objective, neutral knowledge produced by scientific methods, there is a need, and indeed within this research there is a conceptual framework and a discussion of theory and praxis, to bring context and credibility to the research (Anderson, 2006; Martin, 2008).

To establish a conceptual framework, I have attempted to employ and apply the criteria for qualitative research defined by Denzin and Lincoln (2000), as requiring the study of a variety of materials - for example, personal experiences, introspection, interviews, communications, documentary texts - which describe and contribute to the story of the evolving nature of games teaching in New Zealand. In so doing, I have also subscribed to the position of Denzin and Lincoln (2000) on qualitative research; namely a bricolage approach, of employing a wide range of interconnected, interpretive practices in the expectation of trying to get a better

understanding of the phenomenon and in the process present a perspective that is credible and plausible (Martin, 2008). However, because my position as the researcher plays a fundamental role in forming my findings, the methodology requires that I acknowledge through reflexivity the potential for bias.

Within qualitative research, both in the acknowledgement and use of bricolage methods and subsequent triangulation, I attempt to limit the potential for bias as much as possible. This research process employs a combination of multiple methodological practices - documentary/textual material, perspectives and observations from significant agents. The strands of the research provide the data for what Richardson (2000) described as the inner crystal of triangulation – that which is revealed – provides “a strategy that adds rigour, breadth, complexity, richness and depth to the inquiry” (Flick, 1998, p. 231). Such methods are considered qualitative (Stake, 2010).

3.2.1 My world view

The need for reference to my world view is a requirement in this research, because it makes clear some of the underlying assumptions that as researcher I bring to the research process. Creswell notes that “researchers bring their own world views, paradigms or sets of beliefs to the research project and these inform the conduct and writing of the qualitative study” (Creswell 2007, p. 15). Good research, Creswell continues, “makes these assumptions, paradigms and frameworks explicit in the writing ...and at a minimum, make [author and reader] aware that they influence the conduct of the inquiry” (Creswell, 2007, p. 15). Revealing my world-view

allows me to acknowledge any bias in the narrative, which consciously I have attempted to avoid, but subconsciously may exist.

My background in research has been heavily influenced by extensive involvement in teaching PE and playing and coaching sport. In my secondary schooling I represented my school in three first-team sports; hockey, cricket and badminton. I also indulged in other sports and recreations, for example, tennis, surfing and swimming, so the transition from an interest in things physical as a participant to working in the field as a practitioner was a reasonably easy direction to take. However, my favourite subject at school was not PE but history and, although I studied to become a teacher of PE (1969-1971), my interest away from school has always been in history. As a secondary school teacher my second teaching subject was social studies and at one point, feeling quite disillusioned with my role as a teacher of PE, I embarked on and completed a Bachelor of Arts degree (1985) with a major in history and with the intent of teaching history. This disillusion with teaching PE was fuelled by my previously mentioned didactic struggle within Bourdieu's (1984) concepts of habitus and field. I was attempting to shape my habitus through innovative programmes within the field of physical education yet, outside my immediate sphere of influence aside from a few influential agents, I perceived the field to be stagnant. Despite my best efforts I felt little status or social capital was afforded to those who taught PE. We were, it felt, all tarred with the same brush of affording students an opportunity to burn off energy to better equip them to concentrate in lessons of real importance. My favourite recreational reading genre, history, as a curriculum subject in secondary schools appeared to provide the social capital for those that taught it regardless of their efforts to be innovative.

Retrospectively I consider part of my pursuit of this subject was, interest in the subject aside, partly motivated by a desire to acquire some social capital with my teaching colleagues who appeared to achieve such status by the subject they taught regardless of their level of innovative pedagogy.

My involvement in curriculum developments within PE in New Zealand diverted that attention from history teaching but, nevertheless, my recreational reading is always in history and so the examination of literature and the style of presenting information are very much informed by some of the traditions of that discipline. I am especially drawn to the philosophical convention in historical writing that rejects dogmatism but rather collects evidence, offers at least two views or perspectives of an issue and tentatively suggests a position; a far cry from the positivist more polarized stance that demands an exact position.

That interest in social history and related reading also stimulated my interest in the structure of society and the role of education in a western democracy. In turn this caused me to reflect on what was the contribution that PE in schools could or should make to a democratic society? This philosophy is clearly reflected in the title of my Master's thesis, *'Inequality as affected by pedagogical method in physical education'* (Slade, 2006). My belief being that participation in sports, recreation and leisure post-school contributed to a person's social capital and contributed positively to the degree of opportunity for equality and democratization of society. I also suggested that in order for this participation to transpire it required capturing the interest through play and developing the competence or mastery of young

people in playing games and sports while at school and hence this goal should underscore the philosophy and structure of teaching PE.

It has been this philosophy and world view that has for the most part of my teaching and lecturing career driven my view of what school PE should be. In order to understand the phenomenon of the development of games teaching within New Zealand, I believed that I needed to conduct research that developed my perspective as a participant observer. I needed to develop and present what Richardson describes as that crystal of understanding where, “paradoxically I know more and doubt what I know” (Richardson, 2000, p. 934). Achieving that outcome required assembling triangulated data that could be considered rich, credible and dependable (Stake, 2008).

3.2.2 A bricolage approach

‘Bricolage’ is a French term that describes a method of using all of the tools available to complete a task. In a contemporary sense, “Bricolage... is understood to involve the process of employing these methodological processes as they are needed in the unfolding context of the research situation” (Denzin & Lincoln, 2011, p. 168). The insights and answers generated by the questions associated with this research can be viewed as new knowledge because the understanding of the evolving nature of game practice in New Zealand PE and sport coaching and specifically, the model of TGfU, has never been mandated by a single policy nor investigated in the manner of this research. In order to describe this evolvment, confined in this research to some seven decades, has required investigating a variety of sources in ways that could not be undertaken by employing a single approach.

To do so would have resulted in a parochial and superficial result that would have left more questions unanswered than answered. What was needed was an approach to the research that avoided what Kellner (1995) asserted, as the assumptions, blindness, and limitations of one-sided reductionism. He contended that researchers must seek multiple ways of seeing and interpreting knowledge and, in doing so, more dimensions and consequences will be revealed. In this research the technique of *bricoleur* has been employed to avoid the limitations of singular method research as described by Kellner (1995).

Kincheloe terms bricolage as ‘a blurring of disciplinary demarcation’ (Kincheloe, 2001 p. 683). It was the search from a practitioner perspective, for answers to the questions posed in this thesis that ‘blurred the typical disciplinary demarcations’ and encouraged an evolving use of autoethnography to examine the phenomenon using a multi-method research approach. The outcome has been an investigation that has employed combinations of auto and analytical ethnography and phenomenology, embedded within the philosophy of social constructivism, to make meaning out of the historical, social and culturally evolving processes of game practices in New Zealand. Including my personal experiences through the use of autoethnographic reflexivity and conversations with significant agents provided the social and cultural dimension of this investigation against the examination of historical documents and publications. The interpretive nature of this investigation demanded a research strategy that encouraged what Denzin and Lincoln (2000) attribute to the methodology of bricolage; namely, of producing dialogical texts. The multiplism of bricolage reflects the assumption of Denzin and Lincoln (2000) that there is “an active audience.” Spaces are created “for give-and-take between

reader and writer. They do more than turn the other into the object of the social science gaze” (Denzin & Lincoln, 2000, p. 5). Data for this investigation was sourced from within various social and cultural contexts. However, it was the interdisciplinary synthesis, facilitated by the nature of the bricolage approach, that suggested meaning.

To overcome what some consider to be a critical weakness of qualitative inquiry - that is, it is only partially completed because it so closely reflects the standpoint and experience of the researcher (Denzin & Lincoln, 2011) - the interconnectedness and space between my own reflexivity and the communications with significant agents and potential readers had to be clarified and acknowledged. To achieve this end, I have provided reference points to multiple sources of knowledge and tried to make clear the boundaries of the chosen epistemologies in ways that brought together my knowledge of the theoretical methods, and my practical experience in the field. In addition, various interpretations from the data have been discussed and are included in this thesis in several places and endorse the multi-disciplinary approach employed in this research that is bricolage (Denzin & Lincoln, 2000). The use of a bricolage approach in this investigation has resulted in bringing together diverse theoretical and philosophical notions of the various elements encountered in the research. Achieved by an inductive process, the result is a synthesis of understanding that informs the questions posed in the investigation.

“The fundamental postulate of multiplism is that when it is not clear which of several options for question generation or method is “correct” all of them

should be selected so as to “triangulate” on the most useful or the most likely to be true”. (Cook, 1985, p. 22)

3.2.3 Ethnographic reflexivity

Autoethnography traverses a continuum from biographical life-history (Angier, 2010), through to evocative (Ellis, 2012), and analytical (Anderson, 2006) narratives. Within this thesis evocative and analytical autoethnography is employed, although initial writing reflected a biographical life-history genre. Although the continuum of autoethnography stretches from subjective to objective the nature of the genre is reflexive. Hence, in adopting a narrative that reflects that continuum in several chapters of this thesis, I am announcing that I am using a reflexive approach. A characteristic of reflexivity is that “the researcher understands that he or she is part of the social world(s) that he or she investigates” (Berg, 2009, p. 198). I have endeavoured to do that through my writing which includes reference to my encultured experiences and knowledge of teaching games that has arisen through being situationally located within this evolution for over forty years. While I cannot avoid bringing my history and personal views to the research I have had to question my identity and how my experiences may have impacted and shaped the research process. There is an absolute requirement as noted by Denzin and Lincoln to “reflect critically on the self as researcher” (Denzin & Lincoln, 2011, p. 124).

The critical component of these reflections has been to inform the reflexive writing through gathering ‘systematic observations, partly through participation (Anderson, 2006) and partly through conversational interviews (Werner & Schoepfle, 1987).

In this thesis these conversations are noted as personal communications. In terms of providing credible (Martin, 2008) interpretations of the reflexive writing I have sought to reference my interpretations through archival searches that go beyond the conceptual domain of purely descriptive analysis. As a reflexive ethnographer, with a duty to obtain answers to the questions posed, it is not enough to merely describe events or to report facts but to actively construct interpretations of experiences in the field and then question how these interpretations actually arose (Hertz, 1997; Saukko, 2003; Van Maanen, 1988).

3.2.4 Research questions

The primary generic question from which to inductively explore the evolving change in the practice of games teaching in PE and sport coaching was:

How, from a physical educator and sport coach practitioner's perspective, has GCL practice involving TGfU approaches evolved and been disseminated in New Zealand 1945-2015?

Secondary questions that emerged were:

- a. How has games practice involving TGfU approaches been used to transform play?
- b. How can the practice of TGfU be applied in a more philosophical and flexible way than a strict ideological interpretation of the model?

3.3 DATA COLLECTION METHODS

The data collection methods used in this study were driven by both the primary and secondary research questions. These questions have required the use of historical literature reviews, both electronic and manual, personal communication with prominent New Zealand physical educators inextricably associated with developments in the period under investigation and autoethnographic enquiry from the perspective of a participant observer.

3.3.1 An autoethnographic narrative

Drawing from experience in a family where the importance of sport was only closely rivalled by church-going, the author critically explored his career and experiences in sport both as a sportsman and pedagogue. The story of those experiences unfolds through merging Bourdieu's (1984) theory of the dialectic conflict between habitus and field, the logic of practice and the author's struggle to emerge with an understanding of his practice, both theoretical and practical, over a career spanning four decades. What emerged from this process was my understanding of both the field and logic of my practice, and the extent to which my habitus was also the experience of others in the field in this period.

The conceptual framework for depicting this journey is through an autoethnographic narrative on a continuum from initial life-story biography, through evocative to analytical ethnography (Figure 2). This flexible interpretation applied to autoethnography (Angier, 2010) provides a framework that allows the author to write retroactively and selectively on matters that have represented

epiphanies in his experiences in family, as a sportsman, becoming a teacher and a teacher of PE, a sports coach and most recently as an academic.

Data collection process

Stage 1: The collection process followed four distinct stage. The first stage was to write unimpeded my memories of early influences, associated with play, school and informal sport. Next, I wrote about more formal team-participation and followed this strain into being coached and coaching. In this stage, I also wrote of my pre-service teaching practice, early teaching experiences, thence those as a Head of Department, my work as a teacher educator and finally as an academic. This writing stage was also a period wherein I undertook conversations with colleagues, peers and luminaries, and this process helped shape my memories especially those identified as epiphanies. I defined these occurrences as events that provided revelations and realisation of bench-marks in understanding my practice and its logic within the field of sport or physical education. In writing of this type, Angier (2010), notes the need to both tell a story and maintain distance between the story and fiction. In order to achieve that distance, I undertook a second stage with this writing through the application of a more disciplined autoethnographic style.

Stage 2: In stage two, I divided what I had written of my participation in the development of GCL practice in New Zealand into four distinct periods: my early years and becoming a teacher, my period as a Head of Department of Physical Education in a secondary school, my time as a teacher educator in a pre-service Teacher's College, and finally, my role as an academic in a university. The writing at this stage included general observations and also placed epiphanies, previously

identified in the first stage of the writing, into a perspective that contributed to my reflexive understanding of my emerging practice within the GCL field.

Stage 3: During the third stage I sought collaboration of what I had written in stage two through the triangulation of my historical analysis of archival documents and the literature relating to PE and sport coaching practice, as well as conversations with peers and colleagues in the field. This was an important part of achieving plausibility through creating distance between the story and a level of objectivity.

Stage 4: The final stage was to employ a more analytical ethnography that within Anderson's (2006) criteria I was qualified to undertake. Anderson describes the criteria for a researcher to undertake analytical ethnography as being "(1) complete member researcher (CMR) status, (2) analytic reflexivity, (3) narrative visibility of the researcher's self, (4) dialogue with informants beyond the self, and (5) commitment to theoretical analysis" (Anderson, 2006, p. 378). Within this thesis I was seeking answers to questions, that in order to be deemed credible, required not only my reflexivity but also the manner of Anderson's points four (4) and five (5); namely, the reference to dialogue with significant informants. This exercise was approached in an open-ended discussion that included asking questions and seeking clarifications of the perspectives of significant persons. The process was more than a confirmation exercise of my impressions because with several of those with whom I had conversations, alternative interpretations of my recollections were generated.

One such issue was only resolved after contact with the second author of the original TGfU document, Rod Thorpe, to confirm dates and aspects of his workshops

undertaken in New Zealand in 1995. I was also fortunate to have my thoughts subjected to further interrogation by my supervisors, one of whom had been a student of Rod Thorpe's at Loughborough University in 1983 and had retained notes from Thorpe's lectures. The other supervisor had been a student of mine at Awatapu College and he provided scrutiny of my writing relative to my emerging practice in game-centred learning from his recollections as a student. Importantly, this process confirmed the absence of linear transformation from traditional to game-centred learning practice.

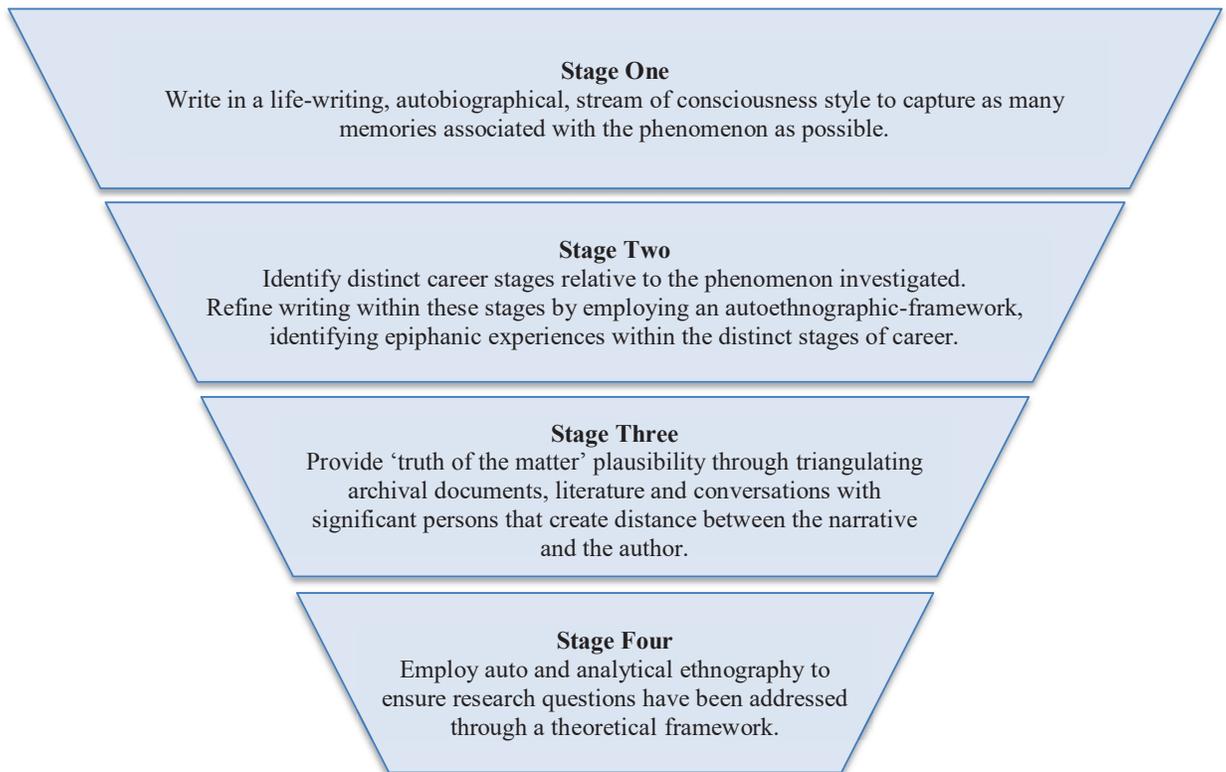


Figure 2 An Emergent, Evolving Model of Autoethnographic Narrative

3.3.2 Document analysis

The research design that focused on historical documents required the identification of sources of data pertinent to the study of the evolution of games teaching and coaching in New Zealand. The major sources of such data were identified as Ministry (previously Department) of Education syllabi of PE, and later, Health and PE and related documents. The second primary source was journal articles and to provide a particularly New Zealand perspective my focus was on the journal of the professional association of physical educators in New Zealand, currently entitled the *New Zealand Physical Educator*. This constraint was taken because the journal was continuously published throughout the period of investigation, and was a professional mouthpiece for physical educators teaching in schools. As an uninterrupted source of peer reviewed articles, it provided both continuity and rigour in this aspect of the literature on the evolving development of game education in New Zealand. In addition, and as noted in later chapters, many of the luminaries identified in the development of game teaching in PE in New Zealand have made extensive contributions to this journal in the role of writers of articles, guest editorials and as editors.

3.4 DATA ANALYSIS

3.4.1 An autoethnographic narrative

The construct of an emergent and evolving autoethnographic narrative (Angier, 2010), permits me to be both participant-observer and subjective commentator and, while not intended to be empirical in nature, nevertheless the work frames my journey within the conceptual framework of Bourdieu's concept of habitus and practice. The outcome is a perspective of early sporting and family experience in small town New Zealand and the development of expertise in sport from a perspective of play that planted the seed for a later considered position within the academic world that has included various publications in which play and its transformation have been central. It concludes with a perspective on the danger of ideology over pragmatism in the art of the pedagogue in teaching and coaching games and sports; a position most recently also adopted by Smith (2016). It provides an insight into the potential for those who would coach, but especially those who teach PE, through an exploration of critical theory (Brown, Bruce, Chapman & Martin, 2008) to reflect on their role beyond that of a teacher of movement but also someone who is contributing to citizenship and the democratic function in society. In addition, it offers a viewpoint, drawn from the author's view of praxis that suggests that the development of competence and enjoyment should be the beginning point of those who would engage in the role of sport pedagogue. It is made clear that the means of achieving this is to always start from a perspective of play and then, through discrete and layered applications of constraints, to transform play into an appreciation of games and sport.

Autoethnography is a means by which the writer has license to reflect critically

about their own and changing views. It is no disgrace in this format to reflect on earlier positions and note periods of change and even outright rejection of previously held and defended positions. Similarly, it is an opportunity to acknowledge early encounters, however obscure, that later form part of a position that reflection acknowledges as an early influence. In presenting this thesis as a transformation of a student to teacher, teacher educator and academic, autoethnography provides the license to chart changing positions and awakening of ideas and, through the narrative of my writing to reveal both to self and reader the changes in my practice.

3.4.2 Document analysis

Securing relevant Ministry PE curriculum and supplementary supporting publications was a relatively straightforward exercise as they were archived in the Massey University Library and easily identified under headings such as New Zealand Physical Education curriculum or syllabus. In addition, firstly as a teacher trainee and then teacher I had received and retained copies of many of the Ministry publications relating to the teaching of health and PE. Once sourced, the documents were read with a view to firstly locating official philosophical underpinnings of the documents and secondly, any specific references to the nature of teaching games or sports in schools (Shilbury, Ferkins, & Smythe, 2013).

In terms of sport coaching from a New Zealand perspective there were very few publications pre-2000 that offered insights on coaching methods for teaching games. There were publications related to movement, dance and teaching swimming but in this period the sport related genre was largely confined to

biographies of former players and in this regard, especially rugby players. There were the odd exceptions outside of the rugby genre; for example, Cyril Walter's, *The theory and practice of hockey* that provided an in-depth analysis of the game and coaching methods best described as traditional (Walter, 1966), and Joseph Romanos (1987) writing on great New Zealand coaches. The most prominent sport specific publications on games were in fact Ministry of Education sponsored sport coaching booklets. These were of a generic nature often written by acknowledged luminaries in the various sports or through cooperation with the sport governing body as, for example, *Netball, A guide book for teachers, coaches and players* (Department of Education, 1973), where the booklet was approved by the New Zealand Netball Association.

Post this period there have been publications from individual authors - for example, Kidman (2001, 2005) and Kidman and Lombardo (2010), but in the main these have been related to coaching philosophies and general approaches. The author's own publications in this period (Slade, 2003, 2005, 2010a) were against the trend in this form of publication in that they provided methodologies for coaching and examples of how to apply the concepts. Outside of individual authors the former Hillary Commission for Sports, SPARC and now Sport New Zealand provided quite extensive publications on coaching, while major sports often have publications on web sites, but few are authored by New Zealanders.

Journal articles were sourced through three phases. Phase 1 included initial systematic searches of the databases of ERIC and SPORTDiscus under headings of games instruction, TGfU and Game Sense, schools and New Zealand. Phase 2

expanded the search adopting more generic terms from keywords located in recent literature (Game-centred learning; Mastery Learning; Constraining Games; Play; Non-linear pedagogy in PE; Coaching Sports in New Zealand Schools). These findings were cross referenced until a saturation point was reached.

The third phase was to identify those articles that specifically related to a New Zealand context. Using those search headings, the following data were established as reflecting scholarship in this domain. Under the headings game instruction, TGfU, game sense, schools and New Zealand, 20 articles and texts were identified. Of the twenty, seven specifically related to New Zealand contexts and were published in the *New Zealand Journal of Physical Education*. Under the headings of GCL, Constraining Games, Play, Non-linear pedagogy in PE and New Zealand Schools, 71 articles and texts were identified with eight having a direct connection to a New Zealand context. Under the heading Coaching Sport in New Zealand Schools, 87 articles and texts were identified and four were identified as having a direct connection to a New Zealand context. In total this method of data collection revealed 19 (11% of material examined) articles or texts relating to the teaching or coaching of games in New Zealand.

Some further explanation is required for having sourced 178 articles and only identified 19 of those as being pertinent to this research. I took as my cue for a New Zealand participant focus to concentrate, though not exclusively, on the professional Journal of the Association of New Zealand Physical Educators that underwent three name changes in this period namely, the JHPER, NZJPE and NZPE. This is not to say that there were not articles on teaching or coaching outside

of the number identified authored by New Zealanders, but typically they were written within an international context or with some different foci; for example in sport management or a sport science perspective. The *Asia-Pacific Journal of Health, Sport and Physical Education* and the *International Journal of Sport Science and Coaching* were particularly prominent in these areas of research publication from New Zealand academics. In addition, because the research questions clearly stipulated a New Zealand focus, I was motivated to present as far as possible articles that would be recognized by New Zealand physical educators as being authored by prominent and influential New Zealand writers and practitioners in PE and sport.

Having printed and read these articles it became clear that there were references to work that had not been identified within the headings produced by the search engines of ERIC and SPORTDiscus, for example, Maunsell (1985). To ensure I had covered all possible publications in these journals I undertook a fourth phase, which was to manually search all of the PE New Zealand journal publications within the historical period for references to teaching games and sports. This proved to be an especially important step as it ensured that the articles identified did in fact contain direct/indirect references to seminal work on games and sport teaching in New Zealand. The manual search contributed to a final total of 56 articles of primary importance, though not all are cited and seven are of a secondary nature that only made minor comment or had a context that was outside of New Zealand. This manual search gave me some confidence in that I was cognisant of what the profession of New Zealand physical educators was saying in their publications about teaching games in New Zealand within an evolving context.

3.4.3 Credibility & dependability

Triangulation seeks to provide rigour and credibility to a multi-method approach by confirming findings from independent sources of data (Patton, 1990). This enhances the richness of the data, and allows greater flexibility in the research design (Cohen & Manion, 1994; Hussey & Hussey, 1997; Yin, 1994). The qualitative researcher as bricoleur, where “[a] bricoleur is a ‘jack of all trades’” (Denzin & Lincoln, 1994, p. 2), supports an emergent design and the use of multiple methods, as the methods depend on the questions asked, which in turn depend on the context. To critically examine the various articles and documents that might reveal trends in the evolution of games teaching in New Zealand and in order to provide credibility to this process, the work was triangulated through cross reference within a historical time-line post 1945. This included curriculum documents and related publications from the Department and latterly the Ministry of Education, as well as from Sport New Zealand on coaching sports and games. It also involved communications with prominent physical educators of the period, noted in this thesis as personal communications, where pedagogical issues and trends as well as cultural issues were discussed.

Within quantitative research the truth of the matter is judged by reference to internal validity, reliability, objectivity and generalisation/external validity (Guba & Lincoln, 2005). Within qualitative research ‘truth’ matters too, but as the research is heavily weighted towards an interpretive paradigm, and especially in autoethnography, ‘truth’ is presented through a narrative based on experience (Ellis, Adams, & Bochner, 2010). However, whenever an interpretation of events is

provided, that ‘truth’ is subject to change and the same event can be interpreted differently by different agents (Tullis, Owen, McRae, Adams & Vitale, 2009). Hence within qualitative research judging truth is typically undertaken through reference to credibility, dependability, confirmability and transferability (Martin, 2008; Merriam, 1998). In qualitative research reliability refers to the narrator’s credibility. The questions asked to establish credibility need to be of the type such as, “could the narrator have had the experiences described, given available ‘factual evidence’? and does the narrator believe that this is actually what happened to her or him?” (Bochner, 2002, p. 86). Confirmability is closely related to validity and objectivity and in qualitative research evokes the term verisimilitude; that is, the appearance of being true or real. Ellis et al. (2010, p. 10), describes it as the narrative generates “a feeling that the experience described is lifelike, believable, and possible, a feeling that what has been represented could be true. The story is coherent.” Ellis et al. continue: “generalisation in qualitative research is not of the nature of traditional, social scientific meaning that stems from and applies to, large random samples of respondents” (Ellis, et al, 2010, p. 10), but, they suggest, to the extent that the readers determine whether the story relates to their experiences or about the lives of others they know. The flexibility in my writing along the continuum of evocative to analytical ethnography is a key component in seeking to achieve the plausibility factor that Ellis et al. describe as, ‘what is stated here could be true.’ Interpreting qualitative research in this manner; i.e., what is written is perceived as credible, is what ultimately determines how it is received by the readership and whether it is adjudged to be ‘the truth of the matter.’

3.5 ETHICS

According to Howe (1992), ethical behaviour in qualitative research is not governed by hard and fast rules. How participants are to be treated within the conduct of social research cannot be divorced from the over-arching aims that the research seeks to achieve, particularly where the positivist face-value distinction is not available to insulate the two from one another (Howe, 1992). A factor in interpretivist qualitative research not found in quantitative research is intimacy and open-endedness (Howe & Dougherty, 1993). In qualitative research intimacy reduces the gap between the research and the participants; indeed the very use of the term participants over the passive description of subjects, often found in quantitative research, is testimony to a different perspective between the researcher and the researched.

In qualitative research, especially in ethnographic research, there are some who would argue, for example, Lincoln (1990), that because they have repudiated positivism, qualitative researchers are somehow in the clear when it comes to informed ethical consent, but surely this is a step too far. If consideration is given to the tools used by interpretivists in research, the open-ended questions, observations and discoveries not anticipated at the outset of the research, surely requires acknowledgement of the increased ethical hazards inherent in the research methods employed? It is in this light that Smith (1990) for example, suggested that periodic reaffirmation of consent needs to be part of the dialogue of qualitative research. Without this dialogue the lines of consent become blurred and so it is always important to have ongoing evaluation of data and to make known to

participants' any discoveries and to seek permission again in order to act responsibly and ethically in terms of participant consent.

In the chapter that specifically traces the development of game practice in New Zealand (Chapter Four) in order to gain insights on historical data it was important to triangulate the data and my interpretation of it with observation from agents who wrote articles or curriculum documents or who taught in institutions that implemented policies referenced. As I knew these people, the first step was to contact them, inform them as to the point of the conversation, and how it would be used and to seek their approval for using their responses. There followed discussions and I made notes but did not record the conversations electronically. Before concluding the conversations, I reviewed their comments based on my note taking, sought clarification or alteration if anything was unclear and asked again for their permission to use their comments as part of this work. These comments appear as personal communications in this thesis. I also sent them drafts of the work before publishing in order for them to confirm they had been quoted or interpreted accurately.

CHAPTER THREE SUMMARY

This chapter provided a discussion of the conceptual framework of this multi-method phenomenological study, acknowledging a qualitative research philosophy and my world view. A bricolage approach allowed the phenomenon investigated to be nested within a social constructivist epistemology and to be explored through the use of an emergent and evolving autoethnography, analysis of historical documents, and interviews with elite sport coaches. It illustrated the triangulation procedures used for organising and examining the data collected while also justifying the chosen research epistemologies and provided brief overviews of social constructivism and phenomenology. The intent was to provide a framework for the study that ensured a coherent and effective scaffolding of the data collected in relation to the development of game-centred learning approaches in PE and sport coaching in New Zealand from a participant's perspective.

The following chapter examines the sources of data just noted that have been central in providing an evidence-based interpretation of the evolution of games-practice in New Zealand post-1945. This interpretation is based on examining Physical Education curriculum documents, conversations with agents of change, academic publications on the topic of games teaching within a New Zealand context and publication sources. It examines the impact of one of the authors of the first TGfU publications, Rod Thorpe, and his visits to New Zealand. Also analysed were how the curriculum programmes in colleges of education were evolving. This includes insights gleaned from conversations with some of the staff who were responsible for their delivery over this time, and also those chiefly responsible for the education of PE teachers in New Zealand.

CHAPTER FOUR

EVOLVING GAME PRACTICES IN NEW ZEALAND: POST-1945

CHAPTER OVERVIEW

It is possible to trace the evolving pattern of the development in teaching and coaching games and sports in New Zealand in this period, post-1945, from a traditional, essentially command-based format to a more holistic, game and player-centred philosophy by examining several distinct but contributing components. The components that stand out as primary influences in this change are firstly, the national PE curriculum statements and associated documents for the teaching of PE and sport in schools and the community. Secondly, and for the want of a better description, luminaries who were either publishing or influencing changes in how games and sports were being taught and coached. Thirdly, academic writing and publications; in particular, the New Zealand Journal of Health, Physical Education and Recreation (NZJHPER) to ensure a New Zealand perspective. Finally, the practice of tertiary institutions, teacher training Colleges, who were in this period responsible for the pre-service education of those who would teach PE and coaching sports in the community. This chapter concludes by presenting an understanding of this story that is the evolution of games teaching in New Zealand, through the lens of Bourdieu, especially in relation to his theories of field, habitus and capital.

INTRODUCTION

While today we tend to celebrate as a watershed moment the publishing of the Bunker and Thorpe (1982) article that introduced teachers and coaches to the model of TGfU, it would be wrong to suggest that at the time of that publication the world of teaching and coaching sports and games suddenly changed. The international dissemination of information per se and not just academic articles, took longer. There was no Internet, libraries typically used manual card systems and the first commercial, albeit heavy and expensive mobile phones, did not make an appearance until a year later in 1983. In addition, the nature of the work of Bunker and Thorpe was essentially as practitioners providing experiential learning contexts for pre-service PE teachers in teacher training colleges. By way of emphasizing the practitioner perspective of the first published article on TGfU (Bunker & Thorpe, 1982) one notes that the article was not supported by a single reference and it was published in the professional journal, the *Bulletin of Physical Education*, known as the official publication of the British Association of Advisers and Lecturers in Physical Education. The 1982 work of Bunker and Thorpe was clearly published by practitioners for practitioners.

How the spread of the TGfU model and related concepts came about in the first instance is perhaps best described by reference to Lave and Wenger's (1991) term, 'a community of practice' (CoP). Those who made up that community, the first receivers of this wisdom, were staff and students who were at this time attending Loughborough University (formerly Loughborough College and then University of Technology). In turn, the model was spread by the graduates and their colleagues who witnessed their practices as teachers. Later still, TGfU was spread through

attendance at in-service courses conducted by Bunker and Thorpe. Today this dissemination of the TGfU concepts as a social theory of learning might be more aptly described as dissemination through a 'Landscape of Practice' (LoP) (Wenger-Trayner & Wenger-Trayner, 2015) because the communities were not discrete but multi and complex. The actual widespread interest and uptake of the model does not occur until much later.

Butler and Ovens (2015) register the concept of the power of the conference as being the momentum maker for the spread of the influence of the model in academic circles. They note publication outputs on TGfU increased exponentially post the first international conferences on TGfU in 1999 and 2003 and continued to do so with subsequent conferences. However, this 'power of the conference effect' did not emerge until almost two decades after the original publication. Rod Thorpe, who until the most recent International TGfU Conference in Cologne (2016), attended the previous five, frequently noted in key note addresses or in casual conversation, so it became quite well known to regular attendees of those conferences, that neither he nor David Bunker ever anticipated the level of international interest in the TGfU model that eventually emerged from their seminal work. The evolving nature of how the teaching of games and sports in New Zealand developed follows a not too dissimilar pattern to that just outlined.

4.1 PE CURRICULUM DOCUMENTS: POST 1945-1986

4.1.1 *Early developments*

In relation to the teaching of games in New Zealand schools, one of the earliest formal directives, the 1912 Amendment to the Education Act, was referred to by Brian Sutton-Smith (2008) as the taming of the playground. Sutton-Smith used this metaphor for describing specific provisions within the Act for the teaching and participation in games as the work of teachers and not merely the natural play instincts of children. Ryan (2004) also noted that the 1912 Amendment to the Education Act formally substituted a physical training system for both sexes instead of school cadets; “Under a syllabus issued by R. Garlick, the Director of PE, physical training was to be allocated a definite place in the timetable of every school, and teachers were to be properly trained in its execution” (Ryan, 2004, p. 121). This development within New Zealand schools was not only seen as a contribution to the physical and/or medical health of young people but also a perspective of the importance of play, games and sports in the long-term health of society. In order to achieve that health benefit, a different view of children in society was required and a difference in what they needed to learn within formal schooling.

Given the socio-political context at the time of publication of the PE syllabi in New Zealand immediately post-1945, the secondary school PE syllabus, the *Post Primary Syllabus of Instruction for Physical Education* (Department of Education, 1945) and the primary school syllabus, *Primary School Syllabus* (Department of Education, 1953), it is perhaps to be expected that there would be a degree of command structure in the delivery of lessons and a focus on a correct way of doing things. Note too, that while the 1912 Amendment to the Education Act

differentiated between PE and cadets, the practice of cadets did not disappear until perhaps the social unrest of the 1960s finally committed it to history. Certainly cadets, complete with school rifle range and armoury, was experienced by the author at Gisborne Boy's High School in the mid-1960s. The drill and order, indeed the inculcation of the relationship of power within schools, that is the authority of the teacher and the subservience of the pupil, albeit unconsciously exercised,⁹ were no doubt reinforced by cadets, and perhaps also influenced the thinking around structure and practice of teaching in movement and games. During this period, 1960-1980s, while there was not a new syllabus per se there were several publications that were designed to facilitate the teaching of PE in schools and the teaching and coaching of sports, including a publication, complete with stick drawn diagrams for girls PE (New Zealand Schools Publication Branch, 1970).

4.1.2 Supplementary publications

The driver behind the supplementary publications in the period of the late 1950s to 1980's was the Department of Education Physical Education Division under the enthusiastic and energetic direction of Margaret Campbell. She oversaw several publications that included aspects of teaching games and sports. Foremost amongst those were the teaching and coaching manuals for over thirty sports and recreational activities entitled, '*A guide book for teachers, coaches and players.*' The pedagogical format of these publications, first published in 1954, were with one or two exceptions, practiced by most teachers and coaches of PE and sport in this period, namely a command-based drilling approach to technique development.

⁹ At a more conscious level, corporeal punishment or its threat was liberally exercised.

In 1964 *The Standard 2 to Form 2 Handbook* for teaching PE (Department of Education, 1964) was published for teachers and while it had a formal sport section that was quite prescriptive it also contained some 50 pages of minor games. Minor games “came to New Zealand via English PE” (Stothard & Culpan, 2012, p. 128) and were often based on major games or sports. For example, the minor game *Non-stop cricket* used cricket equipment, though typically a tennis ball was used but it was, as is cricket, a striking and fielding game. There were also New Zealand invented minor games in this publication that clearly demonstrated concepts associated with decision-making and all of the aspects now attributed to game making, for example non-linear pedagogy or constraining games. For example, *Tapu Ae* (*The Standard 2 to Form 2 Handbook*, p. 238) or *Skittle Ball* (p. 236) both required passing techniques associated with netball, but also tactical understanding of zone defence and man-to-man defensive systems.

4.1.3 Fitness for living

A major publication that had some impact on the evolution of teaching games in New Zealand schools was the *Physical Education in Secondary Schools: Fitness for Living* (Department of Education, 1980) series. Again it must be stated that this was not a national syllabus in PE but it was a major publication that reflected, according to the then Director General of Education, W.L Renwick, a “culmination of work in physical education that extends back over thirty-five years” (*Planning for Physical Education in Secondary Schools: Fitness for Living*, p. iii). Of the nine publications in that series the one that most reflected teaching of games was the publication entitled, *Ball Activities*. The preface to this publication noted that its necessity was based on an almost universal popularity associated with ball games

and even suggested that: “New Zealanders have a natural interest in and fascination with mastery over the ball that has developed to a stage where ball games occupy a large proportion of our leisure activities either as active participants or as individual spectators” (Fitness for Living, Ball Activities, p. 2).

In terms of the evolution of teaching games in New Zealand, the *Fitness for Living* series pedagogically provided a significant shift in perception regarding teaching and coaching. The title, ‘Ball Activities’ was immediately suggestive of a new approach to game instruction and indeed the thematic approach in that publication was a new direction. Thinking of games and sports based on a generic concept, in this instance the major implement to be used, a ball, was a major shift in conceptual thinking in how to teach games in New Zealand schools. This generic and thematic concept does not surface again in the teaching games literature until in a development of TGFU where games were generically described based on tactical intent or the most fundamental component of the game; e.g., invasion or net/wall game (Casbon, 1991; Thorpe, Bunker & Almond, 1986). While *The Fitness for Living* series in general, and in particular the publication on ‘Ball activities’, in many ways still deferred to a traditional approach to game instruction through, for example its ready reference to the generic publications series ‘*A Guide Book for Teachers, Coaches and Players*’ for pedagogical advice, it also proved to be something of a benchmark of a changing focus from traditional to more child-centred holistic models of game instruction that would dominate, several decades later, the PE syllabi of 1999 and 2007.

Though the *Fitness for Living* (Department of Education, 1980) publication did not delve deeply into the pedagogical changes that started to occur in New Zealand on a wider base in the late 1990s, there were small acknowledgements to the use of goal setting, game modification and problem solving (pp. 12-13). Also, as a first in such publications, two methods of instruction were being advocated - for example cooperative learning and guided discovery (p. 9). In relation to the guided discovery method there was for the first time in a Department of Education publication on teaching games in PE, questions of a tactical nature. For example, in ball striking activities, and using volleyball as an example, a question posed was: “Where is the most advantageous position for the ball to be prior to the third hit? How can we get the ball there?” (p. 9). That this approach was innovative is witnessed in that as an enquiry method it pre-dates David Hadfield’s (1994) ‘*Query Theory*’ approach to coaching and similar strategies advocated by another influential New Zealand academic and writer on teaching games and coaching sports, Lynn Kidman and her text (Kidman, 2005), on athlete centred coaching.

Also suggested in the *Fitness for Living* series was the use of students ‘inventing games’, and doing so on the basis of asking students questions such as: “What is the game problem? How do we need to play relative to the problem? What rules have you made and why?” (p. 10). Putting this 1980s approach in perspective, Joy Butler recently published a text, *Playing Fair: Using student-invented games to prevent bullying, teach democracy, and promote social justice* (Butler, 2016). Interestingly, while some of the concepts associated with democracy were not made as obvious in the *Fitness for Living* publications, the series suggests that teachers use: “A planned and incidental examination of factors affecting interpersonal

relationships and codes of behaviour.” It continues, “Teachers should discuss values arising from games and their relationship to everyday life” (Fitness for Living, Ball Activities, p. 21). It is perhaps not too long a bow to suggest that what is currently being published as innovative, has its roots in similar ideas and concepts being promoted in New Zealand 36 years prior to Butler’s 2016 publication. In addition, as Culpan (I. Culpan, personal communication, 19 January, 2016) noted, the *Fitness for Living* series also introduced concepts associated with decision-making, game modification and small group games and ideas (Fitness for Living, Ball Activities, p. 11). The assessment structures were also evolving with suggestions on evaluating team performance, though a model to work from was not provided and the focus of evaluation was more on the affective domain rather than technique and tactics that later emerged with the *Game Performance Assessment Instrument* (GPAI) by Oslin, Mitchell and Griffin (1998).

That these developments were indeed only the early steps towards game-centred learning is reinforced within the document when specific sports are discussed. For example, when discussing the teaching of netball, the traditional approach is still largely present with the extensive use of a distinctly behaviourist drills format with no hint of small-sided games to develop passing and catching. For example, the suggestion for developing passing in netball is to: “throw the ball against a wall” (p. 17). Also, the lesson structure was still in the main a traditional game teaching methodology with the suggested structure being: warm-ups, teach new skill, practise the skill, apply in a minor game and evaluate. However, within those categories there were suggestions that warm-up might be a minor game or the application be a student invented game that allowed one to judge the extent to which

the students were understanding the nature of the game (p. 6). It was though in the main a traditional game construction as defined by Kirk and MacPhail (2002) and Metzler (2011).

4.1.4 Teaching sport

The lesson structure or sport practice at this time also always started with a warm-up followed by a demonstration of skills, skill practice and then if time permitted, a game at the end of the lesson (Slade, 1999a & b). In terms of technique there was a set method and this ideal was what everyone receiving instruction was required to attain. No better illustration of the hold that traditional teaching approaches held over teaching practice is perhaps in regard to the use of the double-handed backhand in tennis. The use of this shot came to prominence in the 1970s and early 1980s through its use by 11 times Tennis Grand Slam champion, Bjorn Borg. However, despite his success with it and a rapidly expanding up-take by other tennis players, such was the focus on a standard accepted technique that it did not immediately result in ‘permission’ to instruct young players with this technique. Indeed, after an analysis of the shot by Engels (1978), published in the NZJHPER, the concluding comment questions whether this technique should be taught to young tennis players. This document also appeared to emphasize the difference between PE and sport, an argument not much aired pre-1980 (Stothard, 2000a)¹⁰

However, as the *Fitness for Living Series* illustrates, there were those who thought differently about teaching and coaching games and although there was no formal

¹⁰ The difference between sport and PE was also promoted following the boycott of the 1976 Olympic Games by many African nations after the tour of South Africa by New Zealand’s national team, the All-Blacks, and further major political domestic disruption when the South African team, the Springboks, toured New Zealand in 1981.

mention of the term TGfU at that time, there were sufficient references in the supplementary documents on teaching games from the Department of Education that read like TGfU so that when it did actually arrive or become known in New Zealand many practitioners were primed to be receptive vessels to its approach. How that became known had much to do with staff in colleges of teacher education, post-1987.

4.1.5 Colleges of Education Pre-1987: PE Educators

There were, as McGregor et al. (1978) noted, official programme guidelines for teacher education colleges. The programmes established by the Department of Education covered pedagogy as it related to the PE curriculum and the need to fulfil the criteria for being awarded a Diploma of Teaching from a teachers' college. However, within those quite broad guidelines, teachers' colleges largely operated independently of each other and symmetry between colleges was perhaps reflective of similar philosophies and experiences of the staff running the programmes on each campus rather than a specific intent to provide parallel programmes. For example, Guy McGregor at Auckland Teachers' College, Jack Kurney, previously at Ardmore and then at Hamilton Teachers' College and, to a lesser extent, Brian Maunsell at Palmerston North Teachers' College, were all of a similar era and their programme structures reflected that background. This perception is reinforced through the publication by McGregor et al. (1978) that provided summary comments from each of the Heads of PE Departments in all of the teachers' colleges¹¹. All the colleges provided a generic curriculum paper and all offered

¹¹ Teachers' Colleges in NZ at this time were: Auckland, North Shore, Hamilton, Palmerston North, Wellington, Christchurch and Dunedin.

courses in aquatics and general movement activities. For those students in the courses majoring in PE there were offerings in anatomy, physiology, philosophy, psychology, outdoor education, first-aid and individual programmes in recreation and dance. In terms of game education, Dunedin Teachers' College was the only one to specifically mention, in their summary, minor game instruction with an emphasis on basic skills, what we might now refer to as fundamental movement skills (FMS), instead of traditional sport specific skills (McGregor et al., 1978, p. 30). The Dunedin summary also discussed a child-centred approach to instruction in games with encouragement for teacher trainees to understand that there were different forms of instruction available to them and not merely the traditional command method. In terms of movement education teachers colleges during this period were embracing cooperative and discovery learning but game education at teacher's colleges was, as noted by Jones (1978), was still largely based on direct instruction of a traditional kind.

4.1.6 Subsequent curriculum development: Post 1987

The division of the evolving development of game and sport education in New Zealand into periods of post-1945 and pre and post-1987 is an arbitrary one. The year 1987 was chosen because it saw the first publication of a PE syllabus document sufficiently removed from the period and influence of the Second World War to reflect trends that might reflect a developing holistic view of teaching PE. In many ways this was achieved in the syllabus through a comprehensive programme from pre-school to the final secondary school year. The themes of the syllabus of child-centred learning through understanding the individual's physical growth and development, motor skill development and personal and social development went

a considerable distance to achieving that end. The syllabus also included direction for students with special abilities and those with disabilities. In addition, it introduced concepts associated with sport and in doing so acknowledged the link between the subjects. However, a supplementary document, *Physical Education: A Guide for Success* (Department of Education, 1987) took these headings and suggested, some might say prescribed, levels of attainment based on stages in schooling. This syllabus document, coming as it did with a change in the senior school PE syllabus that in 6th Form Certificate was part of an assessment trial using criteria referenced assessment, did perhaps have the outcome, whether intended or not, of encouraging goal setting and mastery learning outcomes. It must be noted though that neither the 1987 PE syllabus or the previous document *Fitness for Living* (1980) prescribed a particular teaching model or methodology. If thematic or discovery learning approaches were applied to games instruction in school PE programmes it was more a reflection of the individual school programmes rather than a national directive from the Department of Education. My own reflection of this publication was that it was accepted positively with many practitioners. However, without any directives towards teaching methodologies in the area of games and sports it also perhaps encouraged the status quo, which was at the time still quite traditional in application. Another document specifically focused on sport at this time, *Sport for New Zealand Children and Young People* (Department of Education, 1987b), laid out further guidelines for teaching and coaching sport. It emphasized fun and modified games and equipment but did so within a policy format without offering any other pedagogical direction.

A subsequent syllabus was published in 1999 that had a much stronger health component in its format and also included the topic of Home Economics. The epistemological starting point of it was within a socio-ecological context and required a holistic and integrated approach to pedagogy. One of the writers of this syllabus, Ian Culpan (2000), noted that this document was a shift from technocratic imperative to a position that “overtly favoured a more socio-critical pedagogy to the whole movement culture” (Culpan, p. 19). It was not enough to teach a game but students were also expected to be exposed to the related concepts associated with social and ecological issues. This curriculum document also included seven key learning areas associated with education, one of which was sport, though again the document did not prescribe a pedagogical preference for game and sport teaching. However, Salter (1999), in providing one of the first references to TGfU in the NZJHPER made an early case based on the structure of the syllabus for the use of both Sport Education and TGfU models as being appropriate for interpreting the new syllabus for teaching games and sports. In terms of game teaching, Salter stated that the child-centred learning philosophy of this syllabus lent itself to the TGfU approach. In the article he also speculated a position others would also voice in the future (Lauder, 2001; Kirk, 2016); namely, that perhaps the non-specialist primary school teacher of PE would not have sufficient in-depth knowledge of games and sports to implement the TGfU approach.

The most recent New Zealand Health and Physical Education (HPE) curriculum document, *The New Zealand Curriculum* (Ministry of Education, 2007), has followed a trend based on the 1999 publication that stresses a socio-ecological perspective and within a holistic based pedagogy stresses critical thinking. It

suggests topics focused on play, inventing games and integrating concepts associated with positive attitudes, the impact on self and others of games and sports, the place of science and technology, challenges and social and cultural factors associated with movement concepts and motor skills.

Within the development of curriculum documents related to PE over this period there was clearly a shifting of the platform from a prescribed command based methodology towards a child-centred critical thinking pedagogical approach. Early documents provided advice on lesson structure that included basic components such as warm ups and minor games, but the later documents increasingly became documents of policy. In this sense, the PE curriculum documents had established guidelines and parameters for teaching games and sports but without prescribing in more detail both the content and delivery of game and sport programmes, and this has resulted in schools' interpretation of the documents as being reflective of the individual preference and professional judgement of teachers and coaches.

Because of these developments just how these documents might be interpreted has become very much a case of the influence of those who educate the educators – those in teacher training colleges. However, in these institutions there too has been something of a revolution. Several of these institutions have been closed down and those that still exist have increasingly become amalgamated within the structure of universities and, as such, the content, delivery and the people delivering pedagogy related to sports and games has changed considerably. Part of that change is reflected in publications in the NZJHPER that was renamed the New Zealand Journal of Physical Education (NZJPE).

4.1.7 Kiwidex and Kiwisport

Two other developments in New Zealand in this period that had widespread effect on practice in coaching and teaching PE were Kiwidex and KiwiSport. The Kiwidex manual of games and movement activities was developed by the Hillary Commission for Sport, Fitness, and Leisure (later SPARC) in 1992, with further editions from Sport and Recreation New Zealand (SPARC) in 1997, 2005 and 2007. The original conceptual work was undertaken at Sport Waikato by Stephanie McLennan after preliminary work by Karen Palmer. The Kiwidex manual was a popular teaching adjunct to a promotion by the Department of Education to achieve daily PE in primary schools. It contained a section under games that was mainly populated by examples of chase and tag activities. However, despite the fact that an edition was published in 2007, 25 years after the first TGfU publication, within the 38 pages of 'games' there was not one reference to any structure that might suggest an understanding of game categories; for example, invasion or net games. There was no mention of or direction given to questioning strategies, reviewing tactics or evaluation of performance. The educational philosophy on which it was predicated was strongly oriented towards behaviourism.

One games teaching development that suggested a more innovative and learner centred approach was the development of Kiwi Sport (Hillary Commission, 1988). The Hillary Commission for Sport, Fitness, and Leisure was the government developed agency that in later years became SPARC and subsequently Sport New Zealand, and they developed a programme which that was sport specific but was very much a modified child-centred introduction to games teaching. The

programme emphasized scale modification in sizes of playing areas, equipment, team numbers, rules and playing periods. It advocated process over product and in doing so suggested rotating players into various positions and that team selection should perhaps reflect skill or technique development rather than size and age other than where safety might be an issue. The publications received much support, especially in primary schools and trainee teachers in colleges of education were often encouraged to acquire Kiwi Sport Certification.

The weakness of the programme from a GCL perspective was that the methodologies advocated by the Kiwi Sport programme were still very traditional with an emphasis on drills and skills and only a game once proficiency in technique was demonstrated. In discussing the programme with Rod Thorpe (R. Thorpe, personal communication, July 14, 2012) he echoed the observations just made re the potential of the Kiwi Sport programme but also noted the instructional methodologies as lacking in an enquiry method and an almost complete lack of opportunity for novice players to discover anything about the tactics of the game or decision-making. Kiwi Sport is still operated by Regional Sporting Trusts in New Zealand and is seen as an important measure for giving sporting opportunities to all New Zealand school aged children.

4.1.8 Curriculum development and the dissemination of TGfU

There were three New Zealand PE curriculum documents published from the 1980s to 2015. In addition, there were several supplementary documents from the Ministry of Education (formerly the Department of Education) as well as publications from what was the Hillary Commission for Sport, Fitness, and Leisure. All of them

contributed to an enhanced understanding of what PE was or could be from the quite prescribed curriculum document of 1987 to the more philosophically policy driven formats of 1999 and 2007. Despite the TGfU model being in existence for 25 years there was no mention of it in any Department or Ministry of Education published documents pertaining to teaching PE. It may have been if the later documents had been similar in structure to the 1987 curriculum format but the latter two documents were distinctly different. However, in terms of dissemination of GCL strategies and TGfU in particular there is some irony on which to speculate as to the positive effect the latter two documents may have had on the dissemination of GCL models. On the one hand, without the direct references to this model of game instruction it could be argued that the documents did not promote the dissemination of this model of teaching while on the other, in placing an emphasis on critical thinking and without dictating to teachers a model of instruction, those who went looking for curriculum models to achieve those outcomes probably found TGfU. In this way it could be speculated that the later curriculum documents did contribute to the dissemination of GCL models in NZ schools.

4.2 UNHERALDED AGENTS OF CHANGE: LUMINARIES

In New Zealand during this period, various National Sporting Organisations (NSO's) employed National Coaching Development staff, but the NSOs did not always prescribe comprehensive development programmes across various age groups. There was no set way or programme advocated by the NSOs and so change was very much reliant on the impact that might be generated through a visit from the national coach either to a sport organization or to a school. Such coaches were employed as role models and how they instructed was considered the standard practice to be followed. During this period as a teacher of PE in secondary schools, I experienced such visits by the National Hockey Coach, an Australian, Des Wise, and in cricket, an Englishman and former MCC representative, Martin Horton. Both provided experiences that were what one would classify as a traditional approach to coaching with a major emphasis on drills and skills. In hockey, New Zealand's most celebrated men's coach of the 1960's and 1970's, 'CV' Walter, was also an extreme advocate for traditional skill drilling practice structures. However, there were coaches operating on the fringe of academia and within the communities of sport who were suggesting another approach. Three prominent coaching luminaries of this period undertaking this role were All Black coach JJ Stewart, New Zealand hockey trainer of the Olympic Gold Medal team Brian Maunsell, and New Zealand Football coach, Barrie Truman¹².

¹² Maunsell and Truman were also lecturers in PE at Colleges of Education and Truman especially was a visionary in the development of game-centred learning at the Wellington College of Education.

4.2.1 JJ Stewart

The coach of the New Zealand rugby team, 'The All-Blacks,' is a position considered by many to be more exalted than that of Prime Minister or Governor General of New Zealand. Hence, pronouncements by the All-Black's coach are national news and are scrutinized and very often acted upon. It is therefore perhaps a little surprising that what the All-Black coach of 1973-76, 'JJ' Stewart, suggested re a modified games approach to rugby, was not acted upon with more vigour. Writing in the NZJHPER and apart from a barb at football/soccer as being appropriate for "younger and less robust boys," (Stewart, 1974, p. 11), Stewart had this to say about the game of rugby for young people. He noted that rugby for young players appeared to lack fun and the 15 aside per team meant that too few players got to handle or touch the ball. He also observed that the 15 aside game in a constricted playing space meant the game was too crowded. His alternative was that youth rugby should be played without rugby boots and there should be no more than 9 or 10 players per team. In terms of coaching he thought too much emphasis was placed on technique and not just playing the game. He also observed that coaches placed too much emphasis on winning and this expectation was exacerbated by unhelpful comments from overzealous parents on the side lines. Officials did not escape his ruminations either, suggesting that youth rugby was refereed too zealously.

One could argue that in terms of a strict interpretation of the Bunker and Thorpe (1982) model this was not TGfU, but, conversely, one can see that the philosophy behind these suggestions was indeed about facilitating opportunities for players to understand the game, leading to more opportunities for individuals to make

decisions about what to do and when to do it, the tactics to employ, how to understand the game shape while also developing techniques within the context of the game, and having fun. If your approach is philosophical then these comments by the most prominent sport coach in the country at that time were a significant step in the evolution of coaching models in New Zealand.

4.2.2 *Brian Maunsell*

Brian Maunsell, primarily a sport scientist, achieved considerable success and associated prominence as the trainer of the 1976 Olympic Gold Medal winning New Zealand Men's Hockey team. Almost a decade on from that triumph Maunsell, then coach of the New Zealand Men's Hockey team, contributed two publications and one specific practical undertaking that chartered a new direction in youth coaching in hockey. In the first example he introduced a change in direction in the Department of Education guide books for teachers, students and coaches when he supplied the text for a revised hockey publication (Department of Education, 1982). In it he called for the use of game-like scenarios for coaching hockey whenever possible. However, a more significant influence occurred based on a published article entitled, '*Sport for Children*' (Maunsell, 1985). In it Maunsell promoted the use of small-sided games, modified equipment, scaled playing space and game duration.

Maunsell had two influences in establishing this direction, namely Barrie Truman from the New Zealand Hillary Commission for Sport, Fitness and Leisure and, secondly, the Australian Hockey Association, whose introduction to hockey for young novices was a modified scaled version of the game called "*Minkey*" (*MINi*

hocKEY). In the Australian programme the field size was scaled and player numbers were reduced, seven and not eleven, but no mention was made in their programme of specifically modified hockey equipment. Additionally, rule changes appeared to be more out of concern for safety rather than any tactical focus. At a practical level, Maunsell successfully advocated for these concepts to be applied to the junior programme of the Manawatu Hockey Association and managed to get a change in format of junior games that are still in use today.

4.2.3 *Barrie Truman*

In New Zealand the most significant early influence in changing how people taught games that most resembled TGfU came from Barrie Truman. Truman came to New Zealand as a Loughborough University graduate and having previously been employed as an English Football Association Staff Coach and lecturer in PE at the Leicester College of Education, UK. He took up a position with the New Zealand Football Association to both coach the National team but also to conduct coach education courses in schools, colleges of education and football clubs. His principal influence at Loughborough was Allen Wade who was already espousing in this period many of the ideas that would transform football coaching through his text on coaching football *The F.A. guide to training and coaching* (Wade, 1967). As Truman noted (B. Truman, personal communication, January 13, 2016) those who experienced classes as a student with Allen Wade and then read his text, completely changed their ideas on coaching and certainly the text changed the manner in which practice was thought of in football. In particular Wade's advocacy of the use of small-sided games, the use of grids in team practice and the need for games in practice that reflected actual game situations - what we now refer to as coupling

between perception and action in games described by Pinder, Davids, Button, Renshaw, & Araujo, (2011) as a representative learning design (RLD) - were at the time, quite revolutionary.

The previously mentioned Department of Education coaching series of booklets that ran to approximately 30 different sport publications, '*A guide book for teachers, coaches and players*' were as noted almost universally based on a command style of instruction and a skills and drills methodology. Only occasionally in these booklets was there any deviation in the emphasis on technique before playing the game or the use of small-sided or modified games being advocated within the teaching structure. Indeed, in one booklet the author at no stage even suggested that learners actually play a game. The one exception to this rule was the booklet for Association Football (Department of Education, 1975), written by Barrie Truman.

The following comments taken from Truman's authored Department of Education booklet suggest that he was truly ahead of his time in his work in game education. In this booklet he advocated for the use of small-sided games and he also pre-dated Bunker and Thorpe with his use of the term problem-solving (Department of Education, 1975). Writing for the Department of Education (1975), Truman's work transcended almost all of the components and concepts of what is now referred to as TGfU or Game-sense, non-linear pedagogy and dynamical systems theory (Davids, Button & Bennett, 2008; Renshaw Oldham, Davids, & Golds, 2007) and RLD (Pinder et al., 2011).

Some of Truman's comments on teaching method for soccer in the Department of Education 1975 publication were:

- *For every ounce of talk there needs to be a ton of activity.*
- *Children's introduction to the game must be enjoyable.*
- *Practices must have essential features of the full game.*
- *There is no set technique: technique always adapts to the context.*
- *Skill is the successful application of technique to the game situation.*
- *Drills are for experts, learners learn through playing.* (Department of Education, 1975, pp. 54-56)

Truman's focus was on the coach creating and adapting learning situations, and the players' then problem-solving in the practices and games:

Association football is a game, which is player oriented rather than coach dominated. The problem solving coaching method is especially suited to soccer as so much initiative is demanded from the player during the game... The coach should look upon himself [sic] as the creator of learning situations with the players, where possible, learning for themselves. In light of the players' success or failure the coach adapts the practice... Whatever way the coach adapts the practice the players will have been both mentally and physically involved in meeting the problem set. (Department of Education, 1975, p. 56)

Rossi and Carroll (2013) advocate for this very adaption, suggesting that skill mastery might require a reduction in the degrees of freedom, adopting albeit briefly,

a linear type focus on motor development. In reviewing Truman's work in this series it stands in such stark contrast to anything else that was written in these booklets that it is hard not to acclaim him as perhaps one of the pioneers, along with in England, Mauldon and Redfern (1969) but certainly in New Zealand, of a game-centred approach to teaching games. Certainly his philosophy as outlined in the game series booklet appeared to be the first published work in New Zealand of a genre that was to become TGfU. His small-sided realistic or authentic game contexts, problem-solving and player centred learning structures are all part of the structure of what we currently read by those writing about RLD, dynamical systems theory, constraining games and play practice (e.g., Chow et al., 2007; Launder & Piltz, 2015; Pinder et al., 2011; Renshaw et al., 2010; Slade, 2014a).

A final comment regarding Truman's position as an innovator in the evolution of games teaching and coaching in New Zealand is provided by Ian Culpan of Canterbury University (I. Culpan, personal communication, 16 January 2016). Professor Culpan noted that he, as a student in teacher education, experienced a visit to the then Christchurch College of Education in the 1970's by Barrie Truman where Truman provided a practical workshop on a model of instruction for teaching football (soccer). Culpan stated that, Truman's use of grids and small-sided games was up to that time the most revolutionary and best game teaching programme he had seen. He still maintains that the lesson by Truman is the best skill teaching he has seen.

4.2.4 Disseminating games practice approaches

Truman was obviously influential in his advocacy of this form of teaching in his role as a lecturer in PE at the Wellington College of Education and as part of a Rothman's coaching initiative that took prominent coaches and sports people around New Zealand; e.g., Peter Snell, three time Olympic Champion¹³. However, his impact was also seen with other prominent coaches, for example, Brian Maunsell who adopted Truman's use of grids for games instruction and also for that period in an unexpected quarter, namely Rugby Union. In 1978 I attended a rugby coaching session taken by Bill Freeman, the then New Zealand Rugby Football Union (NZRFU), Director of Coaching. Freeman introduced that day a rugby interpretation of the use of grids. In doing so he made reference to both Truman's influence and Allen Wade's (1967) FA Coaching manual. The acknowledgement of Truman, a football coach, was, based on my experience of that time of working alongside colleagues who coached rugby, almost unprecedented in that a rugby person would acknowledge a contribution from another sport. It says much about Truman's influence that he should have been acknowledged in this way.

It would be wrong though to suggest that other than in small pockets of interest there was a universal adoption of these coaching methods and a move towards what came to be understood as TGfU. For example, in a rewrite of a Department of Education series *Hockey, A Guide Book for teachers, students and players*, (Department of Education, 1982), the first such publication for hockey being in 1973, there was a very strong hint towards a game approach. Brian Maunsell who

¹³ Because Rothmans was a cigarette company there was some resistance from PE professionals regarding their sponsorship of this coaching initiative. Truman (B. Truman, personal communication 13 January 2016) noted authorities at Otago PE School would not allow him to work with their staff or students while wearing a tracksuit top that advertised Rothmans products.

supplied the text for this publication clearly suggested an alternative direction to merely using skills and drills in teaching hockey. “Make drills game-like wherever possible – make extensive use of modified games use a ‘problem solving approach to teaching” (pp. 11-12). Maunsell also documented the use of grids first developed by Wade (1967). However, the practical activities and the sequence of learning provided by Maunsell were still largely a traditional practice structure. Similarly, in a publication by the New Zealand Rugby Union in 1982 on skills and tactics, (Vodanovich, 1982), there were small gems within the various chapters that required decision-making. For example, a chapter by Hiwi Tauroa on ‘Back Play’ (pp. 119-124) implored players to think. But equally, one of the former greats of New Zealand rugby, Ron Jarden, was quoted in the book, as suggesting that it was not possible to improve the mental agility of players and that this was natural talent but the techniques can be developed. However, despite players and coaches of the game no doubt being aware of the open skill nature of rugby at no point in the publication, and that includes the work by Tauroa, was there any hint of starting an activity from an unstructured context. On the contrary, almost all the practices were completed in closed skill environments and for the backs in the team, often unopposed. Even as late as 1996, in research on goal shooting and coach practice in field hockey, Slade (1999a, 1999b), noted that practices were in the form of drills and almost always unopposed and as such were hardly representative of the game.

4.3 ACADEMIC PUBLICATIONS

In reviewing the academic literature on TGfU as a barometer of the evolving nature of how games and sports were taught and coached in New Zealand at this time it is perhaps important to first be reminded of the work of Butler and Ovens (2015) and their paper that explores TGfU and its governance, from conception to special interest group. Butler and Ovens make the distinction between chronology and narrative in their review of this development of TGfU because they note that the development is a story and as such needs to be told in this way. In New Zealand part of the narrative of the story of the evolving practice of games teaching and coaching is found within the journal of the professional association of Physical Education New Zealand, whose name evolved over time to become *The New Zealand Physical Educator*¹⁴. However, neither the narrative nor the chronology in New Zealand is initially extensive. This is not surprising given international trends in academic writing on PE generally and teaching games specifically at this time. Locke in 1977 noted that there was that this time no “sequential, replicative, consciously grounded in theory and, above all cumulative, research on teaching in PE”. (Locke, 1977, p. 2)

Research in the area was one off and according to Locke seldom found use beyond the qualification for a degree or space on a shelf. Locke, again, “In the case of physical educators there is no evidence at all to suggest either that researchers are responsive to the questions which teachers ask, or that practitioners pay any heed to the research on teaching that is available” (p. 3). Research on teaching in PE was

¹⁴ The New Zealand Physical Educator is the professional journal of physical educators in New Zealand. Previously it was known as the New Zealand Journal of Health, Physical Education and Recreation (NZJHPER) and the Journal of Physical Education New Zealand (JPENZ).

to rapidly expand after this period but any focus in PE was typically of a science-related nature or, if within games, focused on the usefulness of methods such as whole versus part learning or massed against distributed learning.

Within the New Zealand Journal of Health, Physical Education and Recreation (NZJHPER) from 1965 to the publication of the 1987 Curriculum document, aside from scientific articles dealing with issues of physical endurance and other association matters there was little to suggest that Locke's view of publications by physical educators in the United States of America was any different to what transpired in New Zealand. In a review of papers published in the NZJHPER from 1967 to 1978 by Jones and Masters (1979), there was a single brief article on athletics relating to the run up in performing a long jump, but there was a notable absence of any reference to teaching games until 1974. In 1974, and typical of the tenor of any article at that time with reference to sport, was an article by Fawcett who reviewed the validity of volleyball tests (Fawcett, 1974) or from Enoka who examined the effect of different lengths of run-up on the height to which a spiker in volleyball could reach (Enoka, 1971). From that date to 1981 there were only four articles that might be construed to address specifically aspects of game play in PE and sport. These included another article on teaching volleyball that evaluated part versus whole, part, whole learning approaches (McIntosh, 1976) and an article on coaching elite level tennis players (Morrison, Morgan, Heatron & Williams, 1978). Mehle and Davis (1978) broached the subject of game modification for young people and also raised the question around fun in sport and for whose benefit is sport? Evans (1988) also suggested that the play of children in adult games should be observed, deficiencies noted and the game modified on the basis of those

deficiencies with a view that children would find the game easier and more enjoyable to play. However, in academic literature of this period with a specifically New Zealand focus there was very little that was published that suggests game play in PE or coaching was of any concern to those in academia.

Many of the contributors to the Journal from within New Zealand were staff at Otago University in the School of Physical Education. In an analysis of authorship in the NZJHPER, Adams (1990) noted that of the 134 articles published in the decade of the 1980's, 50% were authored by Otago University lecturers from the School of Physical Education, 20% from overseas authors and 8.2% by New Zealand College of Education lecturers. This may in some way suggest why so many of the articles had a scientific focus. While the Otago School of Physical Education was responsible for the content component of many students who later became secondary school teachers of PE, the practical programme was largely based on gymnastics, dance and athletics. Very little time was spent on game education. However, nearing the end of this period there were one or two clues that suggested changes were afoot both in the general coaching public but also in the preparation of teachers of Physical Education at Otago.

The first clue to change documented in the NZJHPER was an article by Thomson (1979) that reviewed the programme on game instruction in the Faculty of Physical Education at Otago University and a subsequent article by Thompson (1981) that documented what she considered to be the practical essentials in New Zealand secondary school PE classes. At the Otago School of Physical Education, the previous emphasis on athletics, gymnastics and dance was now reported by

Thomson (1979) to be quite heavily supplemented across a myriad of sports and games. This development reviewed in quite extensive detail by Thomson perhaps heralded an acceptance by the Otago Faculty that programmes in schools were much more comprehensive and holistic than their most recent diet and some change was required in order to keep their graduates current. Thompson's work strongly recommended: "Students at the School of Physical Education who intend to teach in New Zealand Secondary schools, should be opting for courses mainly in the area of team games" (Thompson, 1979, p. 58). The article gave no clue as to the nature of the methodologies employed in the teaching of undergraduates about these games and sports.

By further way of summary, Adams (1990) recorded that of the 134 articles that were published in the NZHPER in the decade of the 1980s, 50.7% had a focus on recreation, 41% on PE and 7.5% on health (Adams, 1990, p. 21). Within the percentage of articles based on recreation, 38.2% were sport related however within that percentage there was not a single article that had as a main focus, the teaching of games.

4.3.1 Increasing academic discourse

Butler and Ovens (2015) as noted, stressed the importance of conferences when it came to the promotion of academic discourse in the form of journal activity. The figures they quoted for the surge in publications on TGfU and Games Sense post-1999 are significant. While the numbers of such articles published in the NZJPE and the subsequently named The New Zealand Physical Educator, (NZPE) definitely increased there was nothing like a similar percentage increase that was

observed as taking place internationally. However, as a trend and developing interest and recognition, what is published was important in terms of the evolution of teaching games and coaching sport in New Zealand.

Apart from the NZJHPER, in this period there were very few publications of books on TGfU and GCL philosophies. The first such publication (Slade, 2003) that received wide spread circulation in New Zealand schools was not a text but a CD-ROM that interpreted the TGfU model for the teaching of hockey to novices. Also in this genre was a publication by Ovens and Smith for teachers, coaches and students that produced in video format an interpretation of the TGfU model with a major emphasis on GCL (Ovens & Smith, 2004). While the philosophy of the Ovens and Smith publication was based on the TGfU model it also reflected in its structure concepts developed by Kirk and McPhail (2002) associated with situated learning. Also at this time there was another publication by Slade (2005) '*Teaching attack and defence in team games: A TGfU approach*,' that was used widely in schools and in colleges of education both in New Zealand and Australia, that adopted a non-specific games approach to teaching games in schools. The model in the Slade text for achieving this was to deviate from a sport specific focus to develop games that were solely based on a tactical outcome, e.g., Zone Defence (Slade, 2005, p. 28).

In terms of awakening the giant that is sport coaching to embrace player centred coaching it was a publication by Lynn Kidman, *Athlete-centred coaching: Developing inspired and inspiring people* (2005) that was perhaps most responsible for this development. The success of the publication was perhaps partly due to the

fact that Kidman edited chapters from current coaches in New Zealand sport spanning the codes of rugby, cricket, hockey netball, volleyball, basketball and softball. The coaches were all prominent with considerable capital in their fields and as such demanded attention from those who also coached within their codes. In addition, there was a chapter from Rod Thorpe that helped put the TGfU model in a conceptual perspective alongside the pragmatic interpretations by the contributing coaches. While Kidman did not entitle this publication TGfU or Game-sense, but in naming it *Athlete-centred Coaching* she got to the heart of the matter of the move towards holistic nonlinear methods of coaching that would also, at a later date, become a focus for coach development by the newly constituted Sport and Recreation (SPARC) from the previously named the Hillary Commission for Sport, Fitness and Leisure

Within this area of influence and within the time frame of this research, the only other major text on TGfU or game sense by a New Zealand author was also by Slade (2010a). This expanded on his 2005 publication but placed a major emphasis on a philosophy of play and then the process of transforming play through a gradual morphing into more structured games and finally sports. All of these publications became widely used within New Zealand and in some cases overseas and played a part in the developing momentum away from a purely command drill based teaching and coaching structure in New Zealand and disseminating GCL models of a more holistic game and athlete centred learning structure.

4.3.2 The Journal of Physical Education New Zealand

During the period post-1987 and before 1999, there were very few articles published in this journal that gave a hint towards a child-centred, holistic game based approach to instruction in games and sports. This is not to say that the methods were not being employed by coaches or teachers but they were not being published in any great number. The journal under the editorship of Bevan Grant¹⁵ and Peter Lind developed a strong teacher education and sport education focus. Articles in the journal tended to focus on teacher education and effectiveness in instruction from a time on task perspective and within Grant's particular interest, sport education with concepts associated with situated learning. During this period though there were few publications that focused on models of instruction in games and sports.

Articles by Evans (1988) on strategies associated with team selection and by a major TGfU contributor Len Almond, who in 1979, had spent a year in New Zealand at Otago University, School of Physical Education, on an alternative model for teaching athletics, hint at a wider view of the role of PE in game education but neither article specifically mentioned TGfU or game sense. Articles by Ikulayo (1991) and Mazenco and Gross (1991) suggested a holistic interpretation of teaching games but instead focused traditional aspects of such teaching around

¹⁵ The strong Sport Education focus in the New Zealand Journal of Physical Education at this time may be attributed to Grant's close collaboration with Professor Daryl Siedentop. Professor Siedentop, a strong advocate of the Sport Education model as a teaching strategy in Physical Education, spent a year in New Zealand in 1991 as a guest of the Hilary Commission to promote Sport Education. One result of that time was the publication, *Sport Education in Physical Education: A teacher's guide* (Grant, Sharp & Siedentop, 1992). No mention is made within this guide to the TGfU model of instruction.

technique. Indeed, the first mention in the journal of TGfU was by MacDonald and Leitch (1994), twelve years after the Bunker and Thorpe publication but the focus was on senior school PE in Queensland that certainly had a message for New Zealand schools but not in terms of teaching or coaching games and sports.

The first publication with a specific mention of TGfU in the NZJHPER within a New Zealand context was penned by Salter (1999). Salter's work discussed the merits of TGfU and the Sport Education model as models for teaching games relative to the newly published Health and Physical Education syllabus, (HPE, 1999). Salter concluded that games and sport in the New Zealand HPE curriculum should be relevant, meaningful and enjoyable for all students. Salter added that regardless of whether either or both of Sport Education and TGFU were used, the role of the teacher is clearly of major importance in achieving relevant and meaningful outcomes for the students.

That the new syllabus proved to be a conduit for considering alternative models of instruction in teaching games is illustrated by the significant advocacy for the use of TGfU and game sense published by Rossi (2000). Rossi argued that TGfU was an appropriate model for instruction in games within the new HPE curriculum because it could, through socially critical pedagogy, still produce skilled performers. Rossi also noted part of the issue of adopting a game-centred learning approach by teachers was that teachers of PE often saw themselves as role models of movement. He stated that PE teachers often demonstrated the technique they wanted students to learn. Rossi argued that this approach was incompatible with models of instruction that developed skilled movers and game players based on a

process of learners exploring and understanding movement within a non-linear process (Rossi, 2000, p. 51). Complementing the work of Rossi was an article by Ussher and Gibbes (2002), who expanded the concept of facilitating understanding and the process of learning skills not through direct command based instruction but rather through Vygotsky's (1978) concept of zone of proximal development and scaffolding as an adjunct to TGfU and student centred learning. These concepts associated with instruction in games in PE potentially represented major philosophical changes in both the delivery of lessons and associated understanding of the process.

4.3.3 Integrating learning in PE 2003-2005

In this period while there were only three articles published in the NZJHPER that had as a focus game teaching, they did all suggest a more holistic approach to both teaching in PE and specifically in game education. Light (2003) speculated on the need for joy in learning especially as it relates to marginalized groups in PE e.g., females, and how the employment of the TGfU model could facilitate this change. In collaboration with Georgakis, Light expanded on this concept (Light, & Georgakis, 2005) through a study of pre-service female teachers who reported that the TGfU approach completely changed their attitudes to PE from negative to positive. Evans (2003) made comment on the need to keep play in learning games and also the need for relevant school space to achieve this outcome, and Martin and Gaskin (2004) provide a wide picture of the potential of TGfU within an integrated model of PE especially within experiential learning contexts.

Internationally at this time, many of the articles being written on TGfU were of a comparative nature in order to suggest the model's superiority over more traditional means of instruction (see Rink, 2001 for comment) and also to try and establish a theoretical framework for discussing TGfU. There appeared to be a perception that practitioners felt that TGfU worked but that they lacked empirical evidence to support their instinct. Within the NZJHPER, Davids, Chow and Shuttleworth (2005) published an article that provided a theoretical framework around the structure of TGfU and game sense that they suggested went some way to overcoming a lack of a strong theoretical base for employing TGfU and games based learning models for instruction in games. They suggested that constraints based and dynamical system theories achieved that theoretical base for TGfU and Game sense.

4.3.4 Significant publications

Perhaps the most significant publication on TGfU and Game sense in the NZJPE occurred shortly after Alan Ovens became editor in 2006. Following on from the second international TGfU conference in 2003, Ovens invited Richard Light to edit a journal issue dedicated to TGfU and Game sense. Published in 2006, the publication brought together many of the prominent writers on the topic at that time and included seven articles on varying topics associated with TGfU (Henninger, Pagnano, Patton, Griffin, & Dodds, 2006; Hubball & Butler, 2006; Launder & Piltz, 2006; Light, 2006a, 2006b; Maxwell, 2006; Ovens & Smith, 2006).

In 2007 the NZJHPER adopted a policy of including a games section within the journal and several such examples occur over the next few years. However, it was

not until Gordon (2008 & 2009) published a two-part article on TGfU, fully 26 years after the original publication by Bunker and Thorpe (1982), that the first reproduction of the actual model of TGfU appeared in the journal. In the first part of the article Gordon tended to fly a little in the face of many other commentators on TGfU (Lauder, 2001; 2003) when he states TGfU was not a difficult model to understand or implement and was a teaching approach for all teachers (Gordon, 2008, p. 19).

From 2011 to 2015 with the exception of a body of work by Slade that contributed in applied game formats and related topics, 14 articles on a TGfU or a games sense theme, there were few articles based on teaching games. Webb and Pearson (2012) published a TGfU related article on thematic and integrated learning in PE (Webb & Pearson, 2012) and Brown also produced game related articles associated with Hauora and a Māori dimension to learning in PE (Brown, 2013).

What is revealing about this review of the articles in the professional journal of physical educators in New Zealand post-1987 was that there was a gradual increase in publications, culminating in a journal issue in 2006 solely dedicated to the genre, but there after little specific reference to TGfU or Game sense was observed. Does this mean that the message was not being absorbed into the teaching practice of physical educators in New Zealand? On the contrary there is evidence that it was but it was subtle. For example, in 2011, PENZ subject advisor, Lesley Park, invited four experienced Heads of PE Departments in four different schools, Tauranga Boy's College, Tauranga; Ellesmere College, Leeston; Waimea College, Nelson, and Diocesan School for Girls, Auckland, to respond to questions about their junior

PE programmes (Park, 2011). The heading that includes '*Food for thought*,' gave no clue that TGfU or game sense models or philosophies would appear in the articles. However, without exception, in the four schools' junior programmes published from schools scattered around New Zealand, in each programme it was there either by name, TGfU or by generic title, e.g., Understanding of tactics and strategies of invasion games (Park, 2011, p. 23. p. 25).

If the publication of articles suggested some of the narrative about the development of holistic evolving approaches to game teaching in New Zealand, where perhaps was the real momentum? To find that requires seeking out those agents with status in this field, those whose habitus gave them the opportunity to influence those starting out in their PE teaching careers. To do that requires once again to visit those educating the educators and the visit of Rod Thorpe.

4.4 EDUCATING THE EDUCATORS: POST-1996

4.4.1 *Rod Thorpe's visits to New Zealand, 1996/2000: A ripple effect*

The acceleration of the evolving nature of game teaching and coaching in New Zealand needed something more than one or two practitioners working with their students. It required something concrete and recognizable by practitioners. That something was the visits to New Zealand in 1996 and 2000 by Rod Thorpe. If in hindsight we perceive the publication of the Bunker and Thorpe 1982 paper on TGfU as a watershed moment in the development of game-centred learning in the UK and subsequently internationally, then Rod Thorpe's visits to New Zealand might also be seen in the same manner in the evolving nature of game instruction in New Zealand. Thorpe came to New Zealand for a conference presentation and then visited several colleges of education to deliver addresses on TGfU and to conduct practical workshops. These presentations are well remembered by staff still employed in these institutions. For one person's visits to provide a moment that people can recall as being a time for a major rethink of their practice in game teaching suggests something about the message, the status within the field of the person delivering it and those who were the receptive audience.

In addressing the question regarding the receptive audience, appointments to colleges of education in this period were typically not related to journal outputs or publications but the applicants' record as a practitioner. Those appointed were universally recognized by their peers as being innovative in their teaching practice and as well respected practitioners. Rod Thorpe was also a practitioner and so his presentation was likely to resonate with this audience. What TGfU did to those who heard Thorpe's message on those visits was to provide them with a model,

something concrete that described all or much of what was their practice. The model brought legitimacy to their work and this in part explains why it was so enthusiastically embraced in colleges of education and also justifies describing Thorpe's visits to New Zealand as a watershed moment in the development of TGfU in New Zealand.

While it might be difficult to pin-point the impact of Rod Thorpe, TGfU and GCL in the development of PE curriculum documents, the impact of presentations by Thorpe were most readily felt in those tertiary institutions that offered pre-service teacher qualifications in PE; notably, Canterbury, Auckland, Waikato, Wellington and Palmerston North. Rod Thorpe could have been one of those staff members as indeed he was in the UK. Hence those who attended his presentations immediately experienced empathy both with the message and the messenger. Another important factor that will be commented on a little further into this review is that there had been a 'changing of the guard' in heads of departments in teacher training colleges PE departments and the associated staff. This was a major factor relative to the content of programmes in this period that differed quite markedly from that referenced earlier by McGregor et al. (1978). In almost all of the insights provided on programmes in colleges of education and education departments now within universities, there is a theme of adoption of GCL strategies but not ideology.

4.4.2 Christchurch College of Education

In PE circles in New Zealand the person most associated with PE at the former Christchurch College of Education, now University of Canterbury, College of Physical Education, Sport and Olympism programmes is Professor Ian Culpan.

Culpan's interpretation of the evolving nature of game education in New Zealand and specifically TGfU's integration into their programmes is not too dissimilar to stories from other colleges. It was not so much the direct adoption of a TGfU course but the provision of the philosophy and the method associated with the model that was important to Culpan and colleagues (I. Culpan, personal communication, 19 January 2016).

Culpan's receptiveness to the TGfU model was also primed through his thinking about education in general and PE in particular being heavily influenced by Jerome Bruner (1966). Bruner's position on teaching was that learning was an active process, a two-way exploration and not merely the imparting of knowledge from one source to another. Hence Culpan had already been an advocate of teaching and coaching methodologies that required learners to be exposed to contexts of learning that enabled them to experiment and construct their own understanding of content or concepts based on their current or previous knowledge. Culpan noted (I. Culpan, personal communication, 19 January, 2016) that the role of the instructor was to provide scaffolding to the direction or focus of the topic or activity to be learned. Instruction should start from the point of where the learner was, facilitate rather than provide direct instruction in order to allow the learner to discover that knowledge for themselves. Many physical educators may remember Culpan's 'Experiments in PE' (Culpan, 1982, 1985, 1987, 1988), which were almost entirely based on Bruner's philosophy of learning through inquiry. Part of Bruner's work on cognition in relation to context for children's learning suggested that the context and experiences should encourage the student to learn within structures that are easily grasped while also encouraging further exploration by the student.

Philosophically there is very little distance between what Bruner was saying and what is implied within the TGfU model.

In reflecting on this period of the mid to late 1990s Culpan observed that the visit of Rod Thorpe in 2000 gave many people a new perspective on games teaching. However, he also noted that at the Christchurch College of Education progress towards the adoption of TGfU or GCL in this period was still quite slow, but colleagues and practitioners became more aware of it and more open to the model of instruction post the Thorpe visit.

4.4.3 Auckland College of Education

At the Auckland College of Education, the two most influential agents of change towards a TGfU model of instruction were Professor Alan Ovens and Associate Professor Wayne Smith. While Ovens and Smith are now primarily involved in research in PE, at the time they were essentially practitioners and their approach to working with pre-service teachers in PE reflected that immediate background. Ovens (A. Ovens, personal communication, June 18, 2015) noted that his and Smith's work in the field of TGfU reflected their experience as teachers of PE that required them to adapt and modify game learning experiences to cater for the wide range of abilities and interest with classes of 30 students whose presence in PE was a school requirement rather than a voluntary decision. Ovens also recalls students in school PE lessons and their good natured questioning of the likely lesson in games of whether it was to be Ovens' basketball or Ovens' softball or Ovens' soccer – and when can we just play the real game?

Ovens also vividly remembers the visit by Rod Thorpe in 1996 to the Auckland College of Education, and his lecture and workshop that show-cased TGfU. He recalls, as others have also noted, that some of what Thorpe was advocating he had done previously and was what he and Smith were already advocating for students in their lectures. Ovens stated that neither he nor Smith ran a course called TGfU but both were using the concepts and related readings, he through his curriculum work and Dr Smith through a paper he taught on motor skill learning. The impact of Rod Thorpe and the TGfU model was the rendering of a more complete explanation of an approach to game teaching that they were now able to reference in more concrete terms than they had previously had at their disposal. The fact that there were publications in support of their perspective helped provide the legitimacy of what as practitioners they had previously referred to as good practice.

Thorpe's visits reinforced the notion that the evolving nature of game education was multifaceted and the TGfU model brought many of these concepts into a coherent whole. Ovens also noted the influence of several others' writing at this time that impacted on their teaching of games in the curriculum for students. Specifically, he noted situated learning and the work of Lave and Wenger (1991), Kirk and MacDonald (1998) and Kirk and Kinchin (2003). He thought the paper by Kirk and MacPhail (2002), especially in their revision of the TGfU model and the inclusion of the concept of situated learning fitted well with his and Smith's developing position on teaching games in secondary school PE lessons. In response to their deliberations they produced a video for teachers, coaches and students entitled *Game Centred Learning* (Ovens & Smith, 2004) that, while not explicitly using the name of TGfU, reflected the original Bunker and Thorpe (1982) model

but also included other influences, such as concepts associated with situated learning of Kirk and MacPhail (2002). Ovens also pointed out that in later teaching of game education at the Auckland College of Education considerable use was made of concepts developed by Alan Launder and his (2001) publication *Play Practice*.

4.4.4 Waikato University

The amalgamation of the Hamilton Teachers College with the University of Waikato in 1991 brought together several personalities that have had a considerable influence in teacher education and sport coaching in New Zealand. These are notably, Professor Bevan Grant, Associate Professor Clive Pope, and lecturers George Salter and Bill Ussher. Rather like Culpan's association with the philosophy of learning advocated by Bruner (1966), Professor Grant had researched and maintained a strong affiliation with the work of Siedentop (1987, 1994) and his model of teaching in PE, Sport Education (Grant, Sharp & Siedentop, 1992). Grant's influence helped promote a more holistic interpretation of the potential of PE, especially in relation to how one should approach the teaching of games and sports in PE. In particular, the later model of TGfU (Kirk & MacPhail, 2002) that included the concept of situated learning resonated with the promotion of sport education in the delivery of PE in its practical guise.

Further evidence of the integrated nature of how PE and sport coaching was interpreted by physical educators was reflected in the work of another member of Waikato University's Physical Education programme, George Salter. Salter, (G. Salter, personal communication, 3 February, 2016) a graduate of the Loughborough University in Physical Education noted that he had been a student of Rod Thorpe

and David Bunker. Following Thorpe's first visit to New Zealand Salter had a sabbatical at Loughborough and on his return to New Zealand and Waikato University he included in his teaching of curriculum classes in PE, TGfU and GCL philosophies. It was also at this time that he published an article (Salter, 1999) advocating for the use of TGfU and Sport Education in PE lessons, as he felt that they interpreted well the intent of the recently published PE syllabus. Part of the breadth of Salter's position in relation to the potential of game teaching in PE is that he also included aspects of Hellison's (1995) responsibility model.

Salter also introduced through TGfU a bicultural approach to learning movement. He did this through combining the models of TGfU and Sport Education as a tool for the use of Te Reo Kori in the 1990s. Salter, as Light and Georgakis (2005) were to discover at a later date, also discovered that this approach, where he developed a concept for a model of teaching he named a personal identity model, was especially apt for women whose schooling experiences of games in PE classes had not always been positive (G. Salter, personal communication, 3 February, 2016).

Yet further evidence offered in the holistic interpretation and dissemination of game education in New Zealand and perhaps the spark provided by Thorpe's visits to marry these concepts, is seen in some of the work of Associate Professor Pope. Pope has written widely on all aspects of PE and sport and has also challenged many conventional views on the nature of the PE learning experience. For example, one of his papers suggested that the dimension of affect had become a forgotten component in junior sport in New Zealand (Pope, 2006). Within this paper Pope advocated for the adoption of TGfU and Sport Education models as opportunities

to ensure that the dimension of affect, for example, fun and enjoyment, and providing opportunities for play within game learning was important in developing young people's understanding of games and sports. Clive Pope (personal communication, 3 February, 2016) has also for many years taught a paper at Waikato University on children and young people in sport that included TGfU content. He suggested that the major catalyst for the integration of the TGfU model in curriculum PE and sport papers was the visits of Rod Thorpe in 1996. He also noted the contribution of Bill Ussher and George Salter who were involved in teaching within the paper on youth sport and other PE curriculum papers that included aspects of the GCL and TGfU.

4.4.5 Palmerston North College of Education (PNCE)

The impact of Rod Thorpe's visit on teaching and coaching of sport practice at the PNCE is discussed in some detail in later chapters of this work. Suffice to record here that his visit had a profound effect on myself the author in the sense of a model of learning that seemed to reflect what I was doing. The effect saw major changes in the content of papers I was responsible for, including the requirements for pre-service teachers to employ the model in their lessons when they were placed in schools. It also reinforced the positive views of this approach to game instruction held by lecturer Anne Kingsley. Kingsley, a long-time advocate of discovery learning was another who had her practice reinforced by the visit to Palmerston North College of Education (PNCE) by Rod Thorpe, especially in regard to the eminent position she bestowed on play as a fundamental concept for the teaching of all movement to young people. Another to have his views reinforced by the visit

of Rod Thorpe was Dr Barrie Gordon¹⁶ who as an early advocate of the TGfU model was influential in directing students' work towards this genre. Gordon was also influential in the development of the evolving nature of games teaching at the PNCE though his motivation of staff to examine their practice relative to what they believed and delivered in their lecture programmes as it applied to TGfU. Gordon also supervised one of the first postgraduate degrees in New Zealand with the use of TGfU as its focus (Watson, 2001).

A trend that emerges from this study of the TGfU literature within New Zealand was that the people in universities, often formerly of colleges of education, who were engaged in teaching the PE curriculum or coaching sport were not ideologues. They appeared to be imbued with a view that in teaching or coaching you needed to look at both the context and content of what you were teaching. You marry that with the individual needs of those receiving the instruction and, based on that assessment you draw from your vocabulary of models or methods of instruction/learning and apply it. The practitioner influenced perspective and the concept of the place of ideology in game teaching is explored in further detail in later chapters especially in the presentation of my own model for teaching games.

¹⁶ Dr. Gordon on taking a position at Victoria University Wellington carried on this influence in the use of the TGfU model of instruction in undergraduate but especially graduate Diploma of Teacher Trainees.

4.5 A CONSTITUENCY OF AGENTS FOR CHANGE

All of the people mentioned as being influential in adopting and disseminating concepts associated with change in how games were taught in PE and sport in New Zealand were also involved in PE curriculum change in New Zealand in the late 1980s and 1990s. They had been identified as people with the cultural capital and freshness of ideas to instigate and influence change in PE. They held strong views on methods of teaching PE but were open to critique those ideas and in robust discussion influenced and were influenced by others' views.

Another key component in their roles as developers and disseminators of changing methods in teaching games and sports was that as practitioners they had already moved towards a model of teaching that was very similar to TGfU. They were acutely aware of the need to cater for individual differences and used modified small-sided games in their lessons. In this sense, as noted by several of the respondents in conversation, exposure to the TGfU model and Rod Thorpe's visits provided a concrete model to theoretically justify much of what they had been doing previously as teachers in schools and now in their positions as teacher educators.

Also interesting is that as a group they were educators in and through PE and not strictly what Kirk (2016) would refer to as those teachers of PE who clung to a position that they were expert teachers of sport techniques within the science of biomechanics. In discussion with them there does not appear to be a strict dogma attached to the experiences they offered pre-service teachers or sport coaches.

The curriculum and coaching papers they offered have a focus on the learner and understanding their needs and their way of learning. TGfU and sport education as presented in the four institutions examined in this review all seem philosophically similar in that they were seeking to equip the teacher or coach to teach to individual needs and to use a game-centred approach that reflected good pedagogy around teaching and learning. The difference between Canterbury, Auckland, Waikato and my own institution at the time, Palmerston North College of Education, was my incorporation of an individualised mastery programme in conjunction with the TGfU approach and sport education concepts.

Kirk and MacPhail (2002) made the comment that TGfU had the potential to make a significant positive difference to how PE was taught in schools. They also noted in relation to Kirk's view (1996) on a crisis in PE that PE needed to make these changes in order to stay relevant. The ability to stay relevant was, in my view, captured by the constituency of those charged with delivering PE programmes to pre-service teachers in colleges of education. Learning experiences were changing in schools;¹⁷ for example, at this time the influence of Vygotsky's (1978) methods, especially as they related to scaffolding, situated learning and constructivism. These concepts and philosophies were very much part of curriculum courses in pre-service teacher education courses in colleges of education at this time as they moved from traditional formats that focused on content for knowing to content within a critical thinking landscape of learning.

¹⁷ For an overview of this development in New Zealand see St. George, & Bourke, (2008).

The PE curriculum documents authored by Culpan in 1999 and 2007 reflected those changes too. The socio-ecological and critical thinking concepts embedded in the document required PE teachers to look for methods and models to interpret this direction chartered by changes in teaching in general and interpreted specifically in the PE curriculum by Culpan. Although TGfU had been available as a model since 1982 it was very much ahead of its time – as indeed were those individuals mentioned as a constituency of physeders who would react so positively to Thorpe’s visits to New Zealand. But, by the turn of the century, influenced by other developments in teaching and education the time had come for PE to embrace another form of delivery for teaching games, sports and movement in PE. TGfU and subsequent other similar GCL models were discovered as a model in waiting to fulfil that need.

In the narrative of this story the names of Bevan, Pope, Ovens, Culpan, Gordon, Slade, Smith and Salter quickly become familiar because they appear either as authors of articles or involved in curriculum development or positions of responsibility within colleges of education or universities that have been responsible for the pre-service education of teachers. Their influence includes influential positions in the professional organization of physical educators in New Zealand, Physical Education New Zealand (PENZ). They have all either been editors, guest editors or authors of articles in the professional journal of New Zealand Physical Educators. They have all influenced the evolution of the practice of how game education has evolved in New Zealand from at times an exclusively command based, movement content focus to an ecologically critical model that has

changed the dimension of what it means and what is entailed in the teaching of games and sports in PE classes.

In order to accommodate that change when teaching games, they have turned to game and learner centred learning practices of which TGfU and Game-sense are prominent. Their work over this period has been so well received that they have accrued sufficient capital within this field to have their interpretations accepted and implemented in schools and other institutions throughout New Zealand. It is their work that brings the pieces of the individual components of this story together and provides the narrative that is the story of the evolution of teaching games and sports in New Zealand over this period.

CHAPTER FOUR SUMMARY

This chapter examined the development in teaching and coaching games and sports in New Zealand post-1945. It noted changes from a traditional command format to a more holistic, game and player centred philosophy. A review explored curriculum and supplementary documents published by the Department, subsequently, Ministry of Education and government sponsored national sport organizations noting their contributions though stressing that neither game centred learning (GCL) nor the TGfU models were ever directly referenced by these bodies. However, the critical enquiry method advocated in the later health and physical education (HPE) curriculum documents (1999, 2007), contributed to PE teachers searching for ways to interpret the curriculum and ‘discover TGfU.’ Also examined were contributions from nationally recognized coaches who advocated for non-traditional games teaching. The professional/academic journal of NZ physical educators, the NZJHPE, has had just a single edition dedicated to GCL (2006) and although there have been frequent articles of an applied nature post-2010, the Journal has not provided an extensive disseminating voice for GCL. The impact of Rod Thorpe’s visits to NZ provided considerable momentum to the dissemination of GCL and TGfU in CoE PE programmes. Generic changes in education encapsulating a move towards constructivist enquiry methods of teaching meant that GCL’s time had come as the most appropriate medium for interpreting these changes in teaching PE. In this next section I examine, through the lens of autoethnography, my pre-service, early teaching experiences, positions of influence in the PNTC and finally, my perspective as an academic that I suggest provides parallel insights representative of the constituency of influential personalities who contributed so positively to the dissemination of GCL and the TGfU model in NZ.

PART B: CHAPTERS FIVE TO EIGHT

The second part of this thesis provides an autoethnographic perspective of my engagement with game-based learning and my contribution to its dissemination over almost five decades. My journey, influenced both implicitly and explicitly by others, was also shaped by my emerging belief that promoting physical competence and confidence among students benefited both their personal and physical development while contributing to democratic values associated with social capital derived through involvement in community sport and recreation.

Chapter Five provides the back story of my journey from implicit awareness in my formative years of the capacity of games to bring people together and form social bonds, to a tacit awareness as a teacher trainee and beginning teacher of teaching games and PE in a game and student centred manner.

Chapter Six covers my ten-year tenure as a HoD PE, the incorporation of mastery learning into my teaching, and the publication of my first text (Slade, 1993; 1999).

Chapter Seven focuses on my period as a teacher educator and the epiphany-type experience of meeting Rod Thorpe and its associated impact on my teaching until then, i.e. from an implicit understanding of the principles of TGfU to an explicit demonstration and understanding that subsequently resulted in three major TGfU publications (Slade, 2003, 2005; 2010a).

Chapter Eight notes my dissemination of GCL strategies based on academic publication, conference presentation and invited international engagements. The picture that emerges is of my maturing philosophical perspective on the place of PE in schools based on play, mastery learning and TGfU, along with the need for integrated programmes that have the potential to contribute to citizenship.

CHAPTER FIVE

TOWARDS TGfU, A PRACTITIONER'S TALE

CHAPTER OVERVIEW

An underlying tenet advanced in the previous chapter was that within the Bourdieuan concept of cultural capital there was a constituency of prominent agents in the field of PE who advocated in their institutions for a change in how games might be taught in PE and sport contexts. In part this was because philosophically many of them had already taught in a game centred learning (GCL) manner, and their exposure to a model of teaching that encapsulated that philosophy gave them further confidence in their already established practice. As someone who shared similar practitioner experiences to that cohort, this chapter provides insights into the specific circumstances of my early years' experiences in sport and PE that may account for my too being less bound by acculturation and more open to new pedagogical approaches in PE and sport. That is, a person less inclined to adopt what Lortie (1975) described as a custodial approach to how I had been taught. This chapter highlights my awareness as a youth to the appeal of games, my early experiences in learning from playing, retrospectively noting the socialising and community strengthening aspects of games and sports. I note aspects of what I learned at Ardmore Teacher's College, namely that games could be used in training, that students enjoyed them and that my lecturers endorsed my approach. I also learned, albeit implicitly from George Jones about student-centred learning – a philosophy at the heart of TGfU. Also revealed are some of the tensions or conflicts that arise between established and developing habitus; in this instance my evolving views of how games might be taught and how this was actually practised by those who instructed me at Ardmore Teacher's College

5.1 THE EARLY YEARS, 1950-1960s

Give me a child until he is seven and I will give you the man

(Socrates or, allegedly, Francis Xavier, founder of the Jesuit Order)

This well-known saying, noted above, is variously attributed to several sources but the focus of the statement suggests that early childhood experiences, the formative years, are likely to provide a strong indication of the child as an adult. The observation considered valid centuries ago might now be located in Human Development courses and presented as part of the arguments that have troubled the minds of great philosophers, - for example, Plato, Aristotle, Descartes, Locke and John Stuart Mill - over the nature versus nurture debate involving the traits we see in ourselves or others that we might attribute to being either inherited or shaped by the environment in which we were raised. Current thought suggests there is no one position on this question, but that development is shaped by both there being mutually interactive influences (Kail & Cavanaugh, 1996). My own history in a life-long interest in games and sports, both playing and developing, would appear to reflect the current position on this debate. A father who was a prominent and outstanding sportsman, older brothers who played sport to a high level and an environment that Côté et al. (2007) would suggest gave me the opportunities to be involved in games and sports. These opportunities were heightened by growing up in a small provincial city, playing a range of sports, often with adults where I filled in to make up numbers, to participate and discover games and sports in a way that nurtured understanding.

This chapter provides some insights into that development. However, more importantly for the theme of this thesis that I hope will become clear is that aspects of my upbringing and my early years of playing sport provided a habitus (Bourdieu, 1990) that subconsciously positioned me to be extremely receptive to the TGfU model that I was to discover later in my career in teaching, first intuitively and secondly through academic reflection.

5.1.1 Growing up in Gisborne

I was born in the small city of Gisborne, most noted for its beaches, horticulture, maize, corn and, more recently, especially for wine production. My family placed a premium on sport, well, to put it more bluntly, my father did. My mother was always interested in what we did in sport but she often articulated that she was a sporting widow. By that she meant my father was always involved in sport at some level, variously fulfilling roles of player, administrator, referee, radio commentator across rugby, hockey, soccer, cricket, basketball and bowls! Records and trophies indicate that he was outstanding across all of these sports and so we children were all encouraged to play sport. Within my family the brothers Slade (3) all represented our province (Poverty Bay) in hockey and played other sports notably soccer/football, cricket, basketball, tennis and softball and now a sport but more at the time a recreation, surfing. My sister's sporting involvement, heavily influenced by my mother's views, was confined to what went on at school: netball and swimming.

Primary School

Like most children of my era, I learned all of my fundamental movement skills (FMS) and applied sporting movements through playing games. PE at Mangapapa Primary School was swimming in the summer and games such as bull-rush (now banned in many schools), softball and longball or any form of rounders. Rugby for boys and netball for girls were the main winter sports. Classes were issued with sports gear for morning intervals and lunch times and cricket and throwing and catching games were always prominent. One game other than cricket that I especially enjoyed was Tennikoits. The origin of the game was from Deck-Tennis, a hybrid game of quoits and tennis played on-board cruise ships. Played over a net set at about chest height one threw and tried to catch a rubber ring, the quoit, but if not caught, it was a point to the throwing team; rather like badminton without racquets. The game implicitly taught one how to catch and tactically where space was in net games. Interestingly this concept, but played with a volleyball, would form part of my instructional strategy for introducing novices to the game of badminton forty plus years later (Slade, 2010, pp. 88-93). At primary school there were lots of sport in the lunch time interval - it was always about eating lunch as quickly as possible in order to get up and go and play games. I recall one cricket match played over several lunchtimes where we even had a note book and kept an official score. I also played for the MCC Bat¹⁸ in cricket for my school team but unlike my father, did not experience the success of winning in our challenge. At Ilminster Intermediate school, while I was heavily involved in sport, PE did not receive much attention from the teachers. This though was a period in my life where

¹⁸ The MCC Bat was a cricket bat donated by the MCC as a trophy for inter-school primary school cricket in Gisborne. Played for since the 1920's a citation presented to my father suggested that his school's holding of this trophy during his time at the school was almost entirely due to his single-handed efforts with both bat and ball.

my friends and I explored both our town and various games, some of which we invented ourselves.

Our own soccer pitch

One of the more outrageous sporting occasions our 'neighbourhood gang' organised took place around a two-week school holiday break. Someone had the idea that we would play soccer. We decided that the neighbour's lawns did not quite meet our expectations for a decent sized field and so we rode our bikes to a local park that today might be called a natural park. It had a large overgrown grass area of several acres, along with a small stream and massive native and indigenous trees. Space was not a problem but the long grass was. Twins in the gang decided to return home and bring their father's lawn mower down and we would cut our own ground. This they duly did, and we, rather in the tradition of Huckleberry Finn and white washing his fence, took it in turns to mow strips of the playing area.

The 'ground' completed, we then 'borrowed' from a bamboo grove at the entrance to the park, enough substantial shoots for goal posts and corner flags and thence to our games. I don't have specific recollections of the outcomes of those games but, again, on reflection, what was amazing was that for at least some part of most days over those two weeks most members of the gang would assemble and play soccer, even though only one or two who took part would have listed soccer as their primary winter sport code. At the end of the fortnight our playing area was flat and resembled a soccer pitch. But what is also remarkable about this period is that no one in any town authority took it upon themselves to tell us we could not mow out a field to play on in this town park, or that any adult passing by ever thought that in

marking out our ground we had caused any vandalism to the park. Our gang travelled all around Gisborne. We played bicycle polo on the local football ground and explored other games in the bush and trees on Kaiti Hill that overlooks the city.

In the winter my bicycle also took me to ANZAC Park, at about 8.00am for early morning soccer games, then across town to Roebuck Road Reserve around 9.15 am for hockey. In the summer, having cycled to cricket in the morning it was home for a quick lunch and then on my bike to see if I could get some games of tennis at the local tennis club, even though I was not an official member. As I got a little older, at around 13 -14 years of age, having achieved to the satisfaction of my mother sufficient swimming proficiency through the Gisborne Swimming Club to look after myself in the sea, an aluminium modelled trailer attached to the bike took me and my heavy surfboard to the beach where supplied with lunch I would spend most days of my summer holidays surfing.

Secondary School

At secondary school at Gisborne Boy's High School (GBHS) our PE classes had a distinct game focus that reflected the expertise of the one PE teacher I had through my years at secondary school, Mr John McFarlane. Interval and lunchtime games generally amounted to four square, a game where you hit with your hand a tennis ball into one of several squares. Although extremely basic in design you learned from that game to anticipate the likely repertoire of shots a receiver would play based on the direction or velocity or bounce of the ball you were receiving. You also learned what other players brought to the game; for example, their favourite

shot. All of this in an informal setting implicitly taught participants much about understanding games and opponents.

Formal sports at Secondary School

At GBHS I played in the first hockey, cricket and badminton teams. I had been playing cricket and hockey ever since I could remember but I had never practised in a cricket net until I went to secondary school. In badminton, not once did I ever receive coaching that required me to repeat shots in a practice session in order to better execute them. I never experienced hockey drills until my fourth year of secondary school and my third year in the school first XI. My hockey coach at Gisborne Boys High School for two of my three years in the first team was the Head of Science, Derek Bird. A tall Englishman, a thespian, he was perhaps more at home in amateur theatricals than on a sport field. At practice, he was keen for the forwards to play the backs. On reflection, what we did in those practices was small-sided game scenarios reasonably akin to a representative learning design (RLD) as described by Pinder et al. (2011). I recall at the time being caught between two ideas. Our forwards versus the backs games did not seem like ‘proper coaching’ – we didn’t do drills that I knew other teams did but on the other hand I, and most of the team would have agreed, loved the game scenario because it was fun. Goodness it was like the game!

Impromptu hockey practice in Auckland

A little later in life, while attending Ardmore Teachers College and being selected in the Auckland Colts hockey squad, I attended an indoor practice once a week where we only ever did drills. However, on occasions I met up with four or five of

that team on a Friday afternoon at the main hockey ground in Auckland, which at the time, was Hobson Park. The nature of our practice was jerseys down for goals and we played hockey. At least three of those players who came along won Olympic gold medals in the New Zealand team at Montreal in 1976, another also represented New Zealand but retired early to focus on a career in accounting and I, having shifted to a smaller provincial centre, represented New Zealand in the New Zealand Hockey Minor Association's team.

10,000 hours and deliberate practice

Later in my career as an academic (Slade, 2011) I read with considerable interest arguments for and against the position of the need for early introduction to a specific sport and the need for deliberate practice of approaching 10,000 hours spread over ten years, in order to attain elite performance (Gladwell, 2008; Ericson, 2003; Ericsson, Krampe, & Tesch-Romer, 1993). I mentioned this in the literature review on play focusing on the publication of Macnamara, Moreau and Hambrick (2016) whose meta-analysis concluded that while deliberate practice was an important factor in predicting elite performance it was less significant than many other characteristics and experiences of the athlete. My interest extended to surveying members of the New Zealand 1976 Olympic Gold Medal hockey team as to their recollections of their time spent playing hockey, especially as to whether they played other sports. I was keen to know whether their experience reflected the views of Ericson et al. (1993), around deliberate practice and, for example, were practice sessions devoid of fun or enjoyment?

The results of this survey indicated that a majority of that team excelled at several

sports. Tony Ineson who captained the New Zealand team that won Gold at the 1976 Olympics, won a New Zealand-wide super sport competition across ten different sports and activities. Another member, Arthur Parkin, was and still is an extremely accomplished golf player. Many others in that team excelled at golf, cricket, tennis, table tennis, cross country running, sailing and squash (interesting not one recipient listed swimming as a sport they excelled in). I also found in surveying the equivalent team of almost 35 years later, the NZ Men's Hockey team at the 2010 World Cup, that in this team too, the profile was more to do with expertise as a junior across several sports rather than just hockey, and the mix of sports was similar to that noted by the team of 1976. Indeed, my insights were more in keeping with the findings of Côté (1999), Baker, Côté, and Abernethy (2003), and Weiss and Williams, (2004), who suggested in the development stage that deliberate play - i.e., small sided games with rules and competition but also very enjoyable - was more representative of future elite performers than deliberate practice.

Tuned in to play in playing games

In this period in New Zealand, 1950s-1960s, the experiences just described were not unique to me. There were constraints on activities that tended to promote people making their own fun. For example, there was very little commercial activity on Sundays – hotels were not open and whether movie theatres should open were major political issues in towns. Organisations that promoted outdoor activities, for example Scouts for boys and Girl Guides for girls, were extremely popular. While the constituency of other physeders I have referred to would not have exactly replicated my experiences, they would have experienced similar activities and

attitudes to games and sports. It is my contention that because of the experiences of my formative years in playing sports, and I mean that in the widest sense and not just in the acquisition of sport techniques, meant that instinctively I was tuned-in to playing games. This was from our front to back lawn, my primary and secondary school experiences and especially in the nature of practice that I received over those formative years. Practice consisted of playing the game or a version of it. My game experiences extended well beyond the accounts I have given but, on reflection, I can see how when faced with problems to solve in sports, or to find ways to make sport enjoyable and also a learning experience, I reverted to my childhood and adolescent experiences; that is, to solve the tactical questions posed by the game or the opposition, I went back to playing games. In effect I became the embodiment of the quote I headed this section with; my early game experiences shaped my receptiveness to a philosophy of teaching games through a game centred approach; essentially I was captured both by the nature and nurture of my early experiences.

5.2 BECOMING A TEACHER, 1969-71

In the previous section I illustrated through reference to my upbringing relative to sporting experiences, *'The early years'*, why I believed those experiences made me extremely open to concepts associated with GCL. By inference, I have also similarly implicated the constituency of other prominent PE practitioners of this period, who through their adoption of GCL teaching strategies facilitated the dissemination of TGfU in NZ. In this section I reinforce this perception through reference to my pre-service teacher training through the years 1969-71.

The motivation to become a teacher

It would be nice to say that I became a teacher because I always had a desire to teach or coach and help others. Truth is, at seventeen years of age I was good at sports and games and wanted to leave a provincial city to further my sporting experience. My first vocational choice of sport journalism meant staying at home, but becoming a teacher of PE was at the time, forty plus years ago, was my only pathway into anything approaching professional sport. I do not recall ever receiving any career advice from my school but the implicit advice was definitely that one either went to university or stayed home and opted for a trade. I do recall it being suggested to me that four years at secondary school was really enough and I should get out and make my own way as my siblings had done.

Auckland was my destination of choice for my sporting ambitions, but as university was out of the question without another year at school, my passport to Auckland was through a teachers college. At that time teachers colleges offered scholarships and I could specialise in PE, and these factors represented for me compelling

reasons to apply to this institution. So I duly applied, was interviewed and accepted. Gisborne, my hometown, was part of the Hawkes Bay / Poverty Bay Education Board and anyone embarking on a career in primary school teaching from that Board was sent to Ardmore, a fully residential Teachers College situated about 5 kilometres out of Papakura, making it approximately 37 kilometres from the CBD of Auckland City. This was an exciting time for one so young leaving for a big city and the prospect of top level sport. But I had no idea what would be required of me at the teachers college. I was keen to do well, to fit in and do what was required. However, my background in games and play was soon to be challenged by the teachers college environment, both in PE and general structure of lectures. I responded, as others probably did, in ways that mainly reflected the nurture component of my upbringing.

5.2.1 Ardmore Teachers College

Although my games background was in play, my home life was reflective of structure both in the views of my father and the church we attended. In some of my classes at Ardmore Teachers College I often felt lost as to where the structure and continuity was and what I was meant to understand from the lectures and tutorials. It often seemed haphazard. However, within the PE programme run by Jack Kurney, Frank Sharpley, George Jones and Valarie Pemberton, I felt a sense of order and structure, especially with Messrs Kurney and Sharpley. I discovered I enjoyed structure and within such contexts I did well. Paradoxically though, the staff member I had the most interaction with, George Jones, was probably the least structured of all the PE staff. He was, though, also the staff member who challenged me the most, especially because he wanted his students to think critically.

The ‘George Jones’ philosophy

George Jones challenged me to think differently. I recall one comment he said to me that at the time made little sense. It was: ‘*You’ll never be a great teacher until you can boil the billy’ for the worker.*’ Putting George’s philosophy into perspective, he had taken our PE class to the Westfield Freezing Works in Otahuhu¹⁹. At the time this was one of the largest such abattoirs in NZ, employing approximately two and a half thousand workers. George’s motivation for what seemed a rather unusual visit for a PE class, was not to see anything to do with fine or gross motor control of the workers, but indeed to see the workers and where they worked. Although he never spelt it out this way I am sure that one outcome George wanted to achieve from this visit was to shift us from the cocoon of middle class suburbia into the ‘real world’ of the worker.

Student-centred learning underpinning TGfU

As I developed as a teacher I sometimes reflected on what George Jones had said and took from it that I had to understand who I was, what my baggage was, and who I was teaching. I had to understand my habitus. I also had to be humble, I had to see needs, understand the culture and the habitus of those who would be in my classes and teach for them and what they needed and not just replicate my own values and views. At nineteen years of age I wasn’t quite yet ready for that message. These were tensions that I did not understand. However, again, it needs to be said that implicitly George Jones was saying that education is for the student and the student should be at the centre-of-education, not someone else’s prescribed

¹⁹ A Freezing Works was the local name given to what in other countries is called an abattoir. It was so called because the carcasses were stored frozen in ‘freezing’ chambers.

curriculum. It is arguable that there is here an implicit connection between what George Jones advocated and TGfU, because TGfU puts the participant at the centre of the learning and seeks to make the participant solve the problems and improve themselves, in comparison and with reference to their own performance. Although I may have missed the message at an explicit level at that time it is part of the story that reinforced my readiness for such a philosophy in the teaching of games and sports.

Behaviourist instruction vs. an intuitive first step to TGfU

In contrast to George Jones, Jack Kurney was measured, tightly organised and insisted on a certain way of doing things. He always made it clear as to what was required and all you needed to do was follow his way and all would be well. I embraced much of the Kurney standard model of teaching in PE - warm-up, stretching, technique development and finish with a game. This model of teaching, known as the 'Command Model' (Mosston, 1966), at this time dominated the teaching of PE throughout the western world and is now referred to as the traditional model (Kirk, 1998, 2005; Metzler, 2005). It was almost the only method of instruction I was exposed to at Ardmore Teachers College. However, like many before me, I found that while the command methods advocated by Jack Kurney may have been easily applied, the outcomes sometimes achieved by this application left much to be desired. I was to discover that sometimes I needed more of the holistic teaching philosophy of George Jones and the application of the discovery learning method advocated by Valarie Pemberton for teaching educational gymnastics to achieve the results I sought.

Valarie Pemberton lectured in creative dance and educational gymnastics at Ardmore Teachers College and advocated a discovery learning method for this part of the PE curriculum. Interestingly it is this method of instruction that Rod Thorpe attributes (Griffin & Butler, 2005, p. 5) to the formation of his ideas around how to teach games in schools. However, at Ardmore her approach to teaching educational gymnastics was never applied to instruction in other practical teaching components of the PE curriculum, and so as trainee teachers we were never challenged to consider this approach to game instruction. My discovery of the need for and application of a more holistic approach to instruction in games came through undertaking a required coaching project for third year PE majors at Ardmore Teachers College.

5.2.2 Coaching project

Within the third year course for PE majors at Ardmore Teachers College was a requirement to undertake a coaching internship. I chose to do my work with the Papakura High School 1st XI Hockey team. Twice a week over the season I coached the team and when I could, attended their matches on a Saturday morning. Much of my coaching practice reflected how I had and was being coached in my hockey teams. However, this was to change after watching my team's first competitive game where we were soundly beaten. Despite all the 'skill work' I had undertaken with the team the players did not understand where to position themselves in the game. Indeed, this is one of the oft-quoted stated reasons provided by Bunker and Thorpe (1982) for exploring an alternative method of instruction. Specifically, Bunker and Thorpe argued that a method of instruction that required the demonstration of competency in the techniques of the game in a manner that was

isolated from the way of playing the game resulted in few learners experiencing success in games. My early practices definitely reflected the practice described by Bunker and Thorpe were reinforced by the teaching I received from most staff at Ardmore Teachers College. The issue with the team was not in the basics of ball control but in the tactical and strategic understanding of the game and the behaviourist model of instruction I was employing was not going to improve that understanding and ultimately the team's performance.

I need to stress that at the time I had no theoretical concept of what I was doing and I did not have a model to follow. My thinking was: "*they don't know what to do in the game situation, they make poor decisions and I have to get them to understand what is required and what I had been doing, isolated skill practices, is not going to achieve that end*". My intuitive solution was to incorporate game scenarios into my practices and it was this that represented my first conscious foray into coaching and teaching games from a perspective of using games to teach the game, an approach that I came to understand as TGfU. Reflectively, I believe I can legitimately make this claim, regarding my use of a game sense model of instruction, but at the time, all I saw in my practice was a solution to a problem in the performance of the team I was coaching.

My initial GCL sessions resembled the following: after a basic jog and stretch warm up, I would assemble the team on the ground at half way and then call a game scenario and the team had to run to where they thought they needed to be as if that particular play was unfolding in a match. Once in position, I would check to see if everyone was where I thought they should be. Initially, and reflective of a still

prominent behaviourist philosophy, if they weren't we would repeat the activity until they got it, and sometimes this included directing them back to where those positions were. As the season progressed I persevered with this method and again, without knowing the theoretical point of what I was doing, I shifted to asking players why they were positioned where they were and in this sense employed a constructivist (Brier, 2014) method of instruction. In turn this progressed to getting the players to call the scenarios and explain their choices of positions.

The players quickly grasped these basic formations and seemed to enjoy this practice structure. However, the enjoyment factor went much higher when, either through my own or player initiative, it was decided to play out the scenarios. Now I would call an attacking scenario and leave the defenders to position themselves in response, and then physically play out that context. Similarly, with the defence, I would state a scenario where they had secured the ball and require the attack to either defend against it or position themselves to receive the ball from the defenders. This certainly added to the fun and excitement of the practices and provided for a more seamless practice structure. I still did drills in-between these scenarios and perhaps if Alan Launder had been present he would have thought this was play practice (Launder, 2001; Launder & Piltz, 2013). I wish I had thought to use the small groups in that situation to discuss what was going on; what was working, how to respond to changes etc., but alas I was still to some degree caught in the direct instruction mode and prescriptive feedback (Schmidt & Lee, 2014). Typically, I would tell them what was going well, what wasn't and how to fix it. Perhaps I responded to questions but while at this stage I was using something that I would later recognise as GCL (Kidman, 2001 & 2005; Kidman & Lombardo, 2010), at

that time it lacked some of the dimensions of student centred-learning as it is understood today. I was still a long way off declaratively knowing what Pinder et al. (2011) would describe as a representative learning design (RLD) but as I think of it now, it was definitely game-sense and a useful, intuitive, humble beginning to my journey with game centred learning (GCL).

5.2.3 Implicitly developing a Community of Practice in hockey.

The saying that hindsight is 20-20 is indeed a legitimate one and as such it is important to be careful in autoethnographic writing not to claim too much in reflective writing and these next comments are not intended to do that. They are my mature observations of what I was in fact doing implicitly at this time in relation to concepts associated with situated learning and communities of practice. However, for continuity in this thesis they need to be mentioned here in much the same way as explaining my early experiences in games helped explain my receptiveness to game-centred learning. Without doubt what I was doing, relative to being explained in terms of communities of practice and situated learning, was at the subliminal level, nevertheless the seeds were being sown that would later shape my philosophy to instruction in PE and as such need to be noted here.

Situated learning and community of practice

While I was yet to encounter the concepts of legitimate peripheral participation, situated learning practices and communities of practice (Kirk, & MacPhail, 2002; Lave, 1993; Lave, & Wenger, 1991), I can now see that I was embarking on a philosophy of game instruction based on a holistic understanding of play that in turn meant I was shifting my teaching from isolated technique focused

interpretations of learning, to situating the learning within a socially constructed learning practice – situated learning theory. Without an awareness of any underlying theoretical concept I was in fact modifying my approach to instruction to try and bring the team members into a community of practice of hockey players in the sense that I would read at a much later date in the work of Lave and Wenger (1991). Relative to those whom I was coaching (Papakura Boys 1st XI Hockey team), my participation within the community of practice (Lave & Wenger, 1991) that constituted those who played hockey, was at an advanced stage. The team members I was coaching were functioning but peripheral members of that community. Their status or social capital within the school community of male hockey players afforded them some status, but their performances in that opening game clearly demonstrated their membership, despite being able to undertake many of the basic skills, was, holistically and importantly at the performance level of the game, at the level of novices. To improve their performance and to become more fully integrated into the community of practice of hockey players, I had to find a means of facilitating that transition and transforming their understanding from merely knowing the techniques of the game to understanding the game. I needed to find a way of teaching them, exposing them to that knowledge, so that in turn it would become their understanding. In doing so I was adopting a form of instruction that I would later advocate for in terms of pragmatic approaches to instruction; namely a continuum of empirical to radical constructivism (Gréhaigne et al., 2010; Slade et al., 2013). This manifested itself in my instruction based on an understanding that hockey knowledge existed in an external reality to that which these players understood, a position associated with empirical constructivism, but the discovery of this knowledge could be both directly taught or taught within a

radical constructivist perspective, through providing a context where they could discover this knowledge.

Feedback suggests approach innovative

By the time Jack Kurney came to observe my coaching practice these ideas and practices had developed into quite a sophisticated practice structure. I recall Jack being quite pleased, perhaps even surprised that I had put so much effort into this work. My required notebook, the first of many, was full of diagrams with Xs and Os that have plagued my offices and houses ever since. I also had plenty of notes with more than enough of the drill component to what I did to satisfy that aspect of Jack's expectations. He did though tell me: *"He thought my approach interesting, I was responding to the needs of the team and the team were enjoying it and he commended me on my innovation."*

My assessment of Jack Kurney at that time was that he was a creature of habit not taken to radical innovative concepts. That he said what I was doing was innovative was to me at the time a relief but retrospectively it occurs to me that it was in fact, a huge compliment. I can now see that Jack Kurney's habitus in game instruction was clearly what one now describes as traditional (Kirk, 1996, 2005; Metzler, 2005). It also reflected his capital, structure and tight organisation and what he in turn looked for and valued in his students. It also reinforced the view I have developed through this research; namely that at that time, GCL was not mainstream in PE teaching and sport coaching circles in New Zealand.

My review of influences on the development of TGfU internationally and within New Zealand (see Chapter Four), from what might be called the *Loughborough Group*, especially the work of Alan Wade and his publication the FA Football Coaching Guide (1967), suggests that access to this form of thinking about instruction in games was available to the PE staff at Ardmore Teachers College. In addition, other opportunities to think beyond the traditional at this time included work by Barrie Truman. Truman a Loughborough graduate, was employed by the New Zealand Football Association and the Rothman's Sport Foundation, was visiting teacher's colleges and was advocating Wade's philosophy of a small sided game approach to game instruction. Additionally, as previously noted, within the Ardmore PE staff Valarie Pemberton's advocacy of a discovery learning approach to instruction was no doubt also known to other PE staff. However other staff members were not making the leap from her interpretation of teaching dance and educational gymnastics to instruction in the PE games curriculum. Hence, while it was flattering to have my work described by Jack Kurney as innovative, in hindsight, it also perhaps explains a particular position that suggested that there was a belief held by the PE curriculum lecturing staff about instruction in PE; that there was a way of doing this teaching and they were not too keen on exploring alternatives.

Teaching development

What Jack Kurney did not do at this time was direct me to any other sources of reading, or expand on my ideas or suggest I document what I was doing in any way other than as my assignment. I do not reflect on this as a major omission on his part as I don't think at the time that was expected of teachers college lecturers. They

were employed because they had displayed expertise in their teaching, and perceived wisdom of the day suggested the path towards being a good teacher was through observation of other role model teachers. It was about observing and being like that teacher. Reinforcing this notion was the fact that travelling to observe teachers was a major part of the teacher education programme at Ardmore Teachers College. At that time in pre-service teacher education programmes and especially in PE, concepts such as ALT-PE²⁰ (Metzler 1979, 1986, 1989; Siedentop & Tannehill, 2000) were still some way off being mainstream in teacher training programmes.

Learning the game from a cognitive dimension

Another important awakening for me, even at this early stage of my teaching of PE and sport coaching, was that there was indeed both a cognitive and physical dimension to learning in games (French & Thomas, 1987). Again, I was yet to be exposed to the philosophies of Descartes (Light, 2008) and the concept of dualism; i.e., the concept of the separation of mind and body or the alternative position namely that there is no separation. At the time all I knew was that only teaching the sports techniques was not enough and that I felt I needed to teach or expose my team to the knowledge of the game, the tactics and strategies of how to play so they could appropriately apply their technical hockey skills. Also at that time, because I did not have access to any classroom or means of providing a 'blackboard' session, I had to find a means of teaching for this understanding within a practical context.

²⁰ ALT-PE refers to academic learning time-physical education. It is used as a measure of the time a student successfully engages with the learning outcome of the lesson.

My early nurturing period in learning games intuitively led me to teach for this understanding through a games centred approach.

‘Boiling the Billy’

As I recall, after a rather poor start to the hockey season by the Papukura High School Boys 1st XI Hockey team, the methodology I adopted resulted in considerable improvement tactically in the team and we were never again beaten by a substantial score and eventually secured third place in our division of the Auckland Secondary School hockey competition. In addition, I had subconsciously started to develop a method of teaching and coaching that not only included ideas associated with competence but also that the learning needed to be socially constructed. Although at the time I may not have been conscious of all of these developments, my habitus in terms of what constituted good teaching in games and PE was changing and I was actually on the journey towards ‘boiling the billy’ for those whom I would teach and coach.

5.3 EARLY BEGINNINGS IN TEACHING: 1970s

In my concluding comment in the previous section, I suggested that in my final year of teacher training I was subconsciously moving towards a method of teaching and coaching that not only included ideas associated with competence and tactical understanding in games, but teaching that was based upon social construction. This may have been an early development in my teaching career but once unleashed on the teaching profession with all of the daily routines and management aspects of trying to be an effective teacher, the development and indeed the opportunity to become truly reflective in my teaching was a little way off. The following quote perhaps better sums up my early experience in the classroom:

The difference between a beginning teacher and an experienced one is that the beginning teacher asks, "How am I doing?" and the experienced teacher asks, "How are the children doing?" (Esmé Raji Codell, 1999)

My first years of teaching were all about learning to manage, understanding young people and realising that not everyone was motivated in the same way. In management my obsession with structure stood me in good stead as I felt comfortable with being what is sometimes called 'plan dependent' (Stroot & Morton, 1989), and even though later in my teaching I could operate at the planning independent level I was always one who liked some written strategy for my lessons and units of work. I also learned that a sense of humour in teaching was very important, especially ensuring you could laugh at yourself. My first years were not especially remarkable but now, on reflection, I recognise aspects of my teaching that would in future years become part of a more deliberate way of instructing rather

than haphazardly discovering something. Interestingly they follow on from my discovery of a more holistic approach to teaching games and the child-centred learning strategy associated with implementing the TGfU model. While I am charting aspects of my development in TGfU, this development is significant in my teaching and is reflective of a major shift in both my habitus and what I felt was achievable in the field of PE.

5.3.1 Integration of subjects: letting go

In 1974 I developed a view on teaching that I had not previously been exposed to but thought provided the best opportunity for learning across a range of subjects. My idea was to integrate several subjects and then turn it into a festival of the student's achievements. Embracing or developing the idea that I could integrate learning across a subject through reference to other subjects and not lose anything from the specific subject is part of the development in my teaching that allowed me to 'let go' of a single way of doing things and to broaden my insights into what teaching could be.

TGfU is in many ways an integrated model of teaching games. It has, for example, principles and components based on modification, tactics, decision making, technique development and relationship learning. It requires an integration of many of the topics taught to a trainee teacher of PE but are usually taught to the student in the form of silo teaching. For example, it might be said: *'this is sport science and it is separate from the actual learning context of games. Use it for testing before and after you've undertaken your teaching.'* This approach is the skills and drills equivalent to learning games. However, TGfU is not like that as it incorporates,

especially in tandem with concepts such as Sport Education (Hastie & Curtner-Smith, 2006), a holistic and integrated framework of pedagogical knowledge.

5.3.2 The integrated scenario

Early in the first term of 1974, as a teacher in Rotorua, I organised to take my class from Rotorua to the beach at Mount Maunganui. The build up to the day included using English language and music in story-board writing for a film sequence. In small groups, students were asked to find some music or song they all liked and then write a story board of about ten scenes that they could photograph that would illustrate the meaning of the song (early music video but no video at this time!). The films would be processed as slides and then integrated manually with the slide projector while the music played! Another language activity was to do with writing poetry. This was to take place while circumnavigating by walk the mountain of Mount Maunganui.²¹ At one point on the walk everyone was to relax and write about the context or whatever came into their mind about the day.

In PE we developed four teams for some beach cricket and ensured that everyone could undertake the basic skills. Again, without the insights of a Siedentop I was developing ideas that could equate with a 'Sport Education' model (Siedentop, 1994; Siedentop, Mand, & Taggart, 1986). Students were asked to decide on some of the rules. For example, could you be out first ball or should you have to score at least one run? Did everyone have to bowl? My questioning and constraints were basically back-yard cricket as known by thousands of children in NZ at this time.

²¹ The extinct volcano is perhaps more of a 'mountain' (Elevation is 232m) because the surrounding area is so flat.

In science, the theme was on a sea-foreshore study. The 'Mount' was and is a wonderful source of different shells and so a study was to be about the different shells and bird life. We also looked briefly at wave patterns as a means to understanding water safety and what a rip in the ocean was. Artwork was to undertake a sketch of a scene at the beach or around the mountain that they could work on in their own time and present it as a final copy with a title. A bonus was that one of the school's technical teachers was skilled in and owned a super-eight movie camera and he was persuaded to come along and make a movie of the day.

After the day and several weeks later when everything was ready we had a parent's night where the poems, shell collections with descriptors and artwork were all displayed in the school library. Some poems were read out and slide shows to music were played. I still recall two. One was set to the music of Cat Stevens, 'Morning has Broken' and another, a very clever effort by three boys based on the music of Simon and Garfunkel's '59th Street Bridge Song' or 'Feeling Groovy!' Finally, the technical teacher played the movie he had made and edited. Something else transpired that I had not planned for was oral language and speech making. The students explained their collections and art to the parents and other staff who attended the evening; the poems had to be read aloud to an audience and the slide show music ensembles were also explained to parents before the presentations.

When I undertook this work I was still only in my third year of teaching. I did not know of other people undertaking this type of programme but my reflection of it at the time was that it was extremely successful. My students loved the trip but it led

to follow up work in quite a different way from my standard approach. Suddenly, because they wanted to have answers for questions around sea bird identification or shell collections and habitat and because I didn't have all of the answers at my fingertips I sent them to the library to find the answers and they did so in pairs or small groups. Suddenly the library period was not 'find a book and sit still, be quiet and read', it was 'find a resource and read for meaning'.

Retrospectively and by way of comparison with my hockey coaching experience with the Papakura High School Boys 1st XI Hockey team, something similar was happening. My teaching was no longer merely behaviourist but was holistic and what was being learned was what the students were discovering and I was providing the context for learning (Slade et al. 2013). I was acting more in a facilitator role than as a single font of knowledge. They were according to George Jones' philosophy, taking knowledge from the context based on what they both wanted and needed to know rather than what I dictated they should learn (see Ovens, 2016). It was, in TGfU terms, providing them with small-sided games that challenged them to learn the tactics and put them into a bigger picture of their learning in other related areas. Students were discovering for themselves things they found interesting and this was motivating because it was also authentic.

David Kirk (2005, 2016) notes that for PE to become meaningful to most students the teachers of PE have to move beyond an outdated notion that they are expert instructors of game techniques. He notes that this is the issue that confronted Bunker and Thorpe in the 1980s and motivated their TGfU model (1982). This particular unit of work was in a PE context, a first major step towards seeing and

implementing PE as something more holistic than just one curriculum area. I was developing an opinion that in teaching if I could teach the reason for things or how they worked or integrated with other activities then I enjoyed the experience more but in addition, I captured more students to the subject. This was definitely a step beyond a biomechanics approach to teaching and game education that Kirk insists is outmoded and acts as a hindrance to PE being a meaningful subject to a majority rather than minority of students. However, my first real opportunity to realise these concepts in a more in-depth way was not to occur until the 1980s when I was appointed to the position of HoD, PE at Awatapu College, Palmerston North.

CHAPTER FIVE SUMMARY

In this chapter I have highlighted aspects of my early years' experiences in sport and PE that I suggest accounts for my, in the manner of a constituency of other previously mentioned prominent colleagues in this period of change, being less bound by acculturation and more open to new pedagogical approaches in PE and sport (Moy et al., 2014). To be a person less inclined to adopt what Lortie (1975) described as a custodial approach to how I had been taught. I did this through reference to my unconscious awareness as a youth of the appeal of games, the habitus forming early experiences in learning from playing, retrospectively noting the socialising and community strengthening aspects of games and sports. Additionally, I highlighted that at teachers college I discovered that games could be used in training, that students enjoyed playing games and that my lecturers, perhaps a little reluctantly as it was most likely a point of tension relative to their own practise, endorsed my approach. I also learned, albeit implicitly from George Jones, about student-centred learning – a philosophy at the heart of TGfU. It is important to stress that through this period of awakening to new ideas I did not have a deep philosophical or theoretical understanding of student-centred or constructivist theories of learning. I was trying things instinctively but the understanding was implicit. In the next chapter I note an epiphany, the origins of which stemmed from my questioning as to whether the programmes I was implementing were making a difference to my students' learning. Traditional methods of assessment in PE were not providing those answers and my solution centred on adopting an individualised mastery learning programme. Also detailed in this next chapter is how I consider this notion of mastery in relation to competence and a democratic outcome associated with developing social capital through games and sports.

CHAPTER SIX

HOD, GAME PRACTICE INFLUENCED CURRICULUM DESIGN

CHAPTER OVERVIEW

This chapter provides further insights into my receptiveness, arguably reflective of a future influential constituency of other PE practitioners, to implementing game centred learning (GCL) strategies in PE and sport. Covering my ten-year tenure as HoD PE at Awatapu College, my receptiveness to the GCL model of TGfU transpired not merely because I wanted to be a better games teacher but rather from a desire to provide a holistic student-centred programme of PE. The maturing of these ideas was fuelled by a belief in the importance of play, my ‘discovery’ of individualised mastery learning (IML) and the importance of a child-centred learning philosophy, which is central to the model of TGfU. My employment of IML also influenced my beliefs relating to the role of PE in promoting democratic outcomes associated with social capital developed through basic competence in games and sports. While my later advocacy for the use of IML within the structure of the TGfU model was not accepted by some TGfU purists, I still advocated for its use because of its potential holistic impact on PE rather than an exclusive focus on game education. I argue that if we are to understand why TGfU found a willing constituency among students and teachers, we need to understand that it built on earlier ideas about movement and education. A culmination of these developments during this period led to my involvement in national curriculum design and the publication of my commissioned text, *Senior School Physical Education: A course book for New Zealand Schools* (Slade, 1993, 1999).

6.1 LEADING TEACHING DEVELOPMENT: 1980s

At the 6th International TGfU Conference in Cologne, David Kirk (2016) rhetorically asked his audience why TGfU had not been more widely adopted by teachers in schools? One answer he proposed was because it was thwarted by the nature of the institution of schooling. Secondary schools are largely governed by timetables that generally require changes in subject and classroom on the hour every hour. Routines within schools become established and the ‘way we do things here’ becomes embedded. Kirk observed that this routine makes change to new ideas slow and difficult as it is easier for teachers to do what has always been done. This was part of my experience as a teacher in the 1970s but this was to change following my appointment to the position of HoD of PE at Awatapu College, Palmerston North, in 1980.

I do not want to give the impression that my movement towards a way of instruction in games and PE in general that is now called game centred learning (GCL), of which TGfU is the major model, was a linear progression. Not everything I did would be categorised in that way. However, what can be noted in reading what follows is the focus on child-centred learning that is at the centre of the TGfU model and in my ten year tenure as HoD of Physical Education at Awatapu College most of what I did was consciously based on that concept of Child-centred Learning.²² If the factors of nature and nurture predisposed me in my pre-service teacher training to be someone receptive to child-centred learning, then the intent of this chapter is

²² Interestingly this is precisely the point that Alan Ovens makes, previously noted as a personal communication, (June 18, 2015). He said that many teachers of PE were adopting these philosophies in their teaching but at the time they did not have a model on which to base their methods of instruction.

to illustrate how that in turn was manifested in the programmes I developed at Awatapu College. This is achieved through illustration of how:

1. I integrated components of PE and other subjects across all levels of schooling at Awatapu College.
2. I applied mastery learning to assessing learning in PE and also how I felt it contributed to my developing philosophy of PE's contribution to the democratic function in society.
3. PE in Bourdieu's terms, the field, changed at this time by becoming part of the national examination system in NZ. The habitus and capital of those teaching PE changed. These changes also ultimately led to the publication of my first text that became a standard bearer for the subject for well over a decade and also impacted on my own capital within the wider PE community.

This period in my teaching is set against a backdrop of considerable political unrest and social change in New Zealand. The political unrest was precipitated by the 1981 tour of New Zealand by the South African rugby team, the Springboks. The tour not only divided the country on the issues surrounding apartheid, but it also carried over into the coaching of rugby in schools and teacher involvement in sport in general. Because, in many people's minds, PE and sport were one and the same, some of that negativity associated with sport at this time also landed on the plate of those teaching PE.

The election of the fourth Labour Government post the 1981 tour, resulted in the most radical implementation of economic policies in New Zealand's history. These policies came to be known by the name of the Minister of Finance in that government, Roger Douglas, as 'Rogernomics'. The right wing agenda of that government also resulted in policies that decentralised the governance of schools and introduced the self-governing schools structure, known as 'Tomorrow's Schools' (Codd, Harker, & Nash, 1990). This period also witnessed changes in 1987 with a PE syllabus, the first such change since the 1950s for primary schools and 1945 for Secondary School PE. While this period was one of considerable change and unrest in New Zealand, it also promoted attitudes in school teaching that encouraged risk taking in the sense of trying new methods of teaching and exploring a new perspective on traditional approaches to teaching.

6.1.1 HoD Physical Education: Awatapu College 1980-1990

The catalyst for a major change in the direction of my teaching came with my appointment in 1980 as the HoD of PE at Awatapu College. Prior to this appointment I had started to develop some rather definite positions on what teaching PE could and should be and definitely what I wanted to be part of as a teacher. I had learned some harsh truths as to the status of my subject and that PE was not always held in very high regard by some of my secondary school colleagues. I have to admit I could also see why that was sometimes the case. I had also learned that a well-run PE department could make a significant contribution to the culture of the school and contribute to its philosophy and practice. In this way, the PE Department was also in a position to influence to some extent the habitus of those who attended the school both as pupils and staff. To this date in my teaching I believe I had seen

both good and bad practice, but even within an efficient system or structure I could also perceive that the contribution to the culture of the school, while rewarded by positive feedback on a job well done, did not necessarily reflect my developing position on what constituted a good physical education. I realised that there was a tension between how I understood the field of PE and how my habitus was evolving. I appreciated receiving the respect of my colleagues but that was not necessarily enough for what I understood as being necessary for a student's physical education; one that I hoped would have an impact on them beyond their immediate experience of being in school.

Integrated child-centred learning

Having briefly experimented with an integrated approach to teaching in 1974 the next few years saw me immersed in schools with very standard PE programmes with an emphasis on motor skill development and a one-size fits all mentality. The appointment to HoD of PE at Awatapu College provided the opportunity to revisit my ideas for teaching PE especially, initially, at an integrated level both across and within the various sub disciplines of the subject and the integrated nature of the Year 12 Recreation programme providing an exemplary example. During the period of my tenure as HoD of PE at Awatapu, PE was a required subject through to Year 13, the final school year for students in secondary schools. However, what one delivered to a 13-year-old and a student turning 18 years, needed to reflect their different needs and expectations. In order to provide informed consumers of PE in the senior class, the preceding years of instruction needed to provide the opportunities for students to develop as competent and critical consumers of sport,

recreation and leisure. This needed to be more than an education of things physical, but also involving critical thinking.

The next examples highlight aspects of the programme that attempted to achieve that aim. In design they built on my earlier experiences and views related to achieving a holistic education, student-centred learning and game education. The point in highlighting these aspects of the programme I developed as an HoD of PE is to illustrate the flexibility and breadth of view I was presenting as a physical educator and my receptiveness to new ideas and innovations in pedagogy.

6.1.2 Experiments in PE and sociological perspectives

The experiments programme consisted of five lessons at the first three levels of the secondary programme, Years 9, 10 and 11. Based on enquiry learning, students explored concepts associated with movement, body systems and cardio-vascular fitness. The lessons were called ‘experiments’ because they were set out in the nature of an investigation. There was also a sport sociological programme of one class per week that took place in Year 10. Not all of the classes were sociological in content, as physiological health also figured prominently, but it was a great opportunity to explore topics such as morality and ethics in sport, women in sport and where possible these topics were explored through practical activities such as role play and debate.

Special needs

At Awatapu I was also able to provide a programme that gave a quite different perspective on PE as a subject for students and teachers alike, namely a special

needs and ability programme. The *Awatapu Special School*, a near neighbour, was a school for students with special needs who were not yet mainstreamed into standard school systems. A number of the students at that school who suffered from Down Syndrome were more than capable of partaking in aspects of our programme. After discussion with the principal of the school it was decided to integrate such students in pairs into our Year 10 programme. The students would come once a week. Awatapu students were buddied up with these students and on a rotation basis would work with a student about once every 15 weeks or about 3 times a year.

At one level these programmes benefitted the students coming to the school but also impacted positively on the Awatapu College students through having a normalising effect of having such students in their class and helping them become a normal societal activity. Adding to those feelings in an empathetic way I also developed a programme that involved ‘disabling’ all students in order that they might experience, albeit for a very short period, the issues that confronted people with disabilities. A highlight of that programme was a lunch time wheel chair basketball game between Awatapu first team male and female players against a Manawatu Wheel Chair basketball team.

There were also remedial and extension programmes for students fully enrolled at Awatapu College, especially associated with swimming and our own students whose disabilities confined them to wheelchairs.²³ I employed Renzulli’s (1976)²⁴

²³ Awatapu College’s inclusive philosophy of education eventually saw it become a wheel chair free access school and many students with disabilities that confined them to wheel chairs, gravitated to the school.

²⁴ Joseph Renzulli an American educational psychologist developed the three-ring model of giftedness, which promoted a broadened conception of giftedness.

triad model of giftedness to also encompass special needs employing the concept of his revolving door policy as the means of operating this programme. This model called for the identification of students for extension or remedial activities, negotiating short releases for that work before revolving back into their usual class structure and programme.

The senior school PE programme focused on recreation and leisure. Integrated into these offerings were lectures on health topics such as breast cancer. The Year 13 leisure programme was mostly individually mandated by the students. It had one compulsory module entitled food for flatting. The module over five weeks, provided basic nutritional advice and cooking skills for students about to leave school and perhaps go into hostels or flatting situations that may have required them to prepare meals.

Another feature of the programmes at Awatapu was the spiralling learning effect of topics that yearly built on previous learning. For example, in aquatics the goal for the Year 9 programme was to get all students to reach a basic proficiency in water safety and swimming. Those that struggled to achieve this within the normal period of instruction were offered the remedial programme. Part of the incentive to achieve these outcomes for the students was that the Year 10 programme focused on snorkelling and swimming with flippers culminating in learning to master these skills through playing underwater hockey. The students loved the underwater hockey and this structure helped implicitly to develop their snorkelling skills. The Year 11 programme focused on kayak skills using canoe batts with the culminating game being canoe polo. The underwater hockey and canoe polo activities also

employed a sport education structure, albeit at a very basic level, where students played in teams that brought fun and competition to their learning.

6.1.3 Teaching athletics

One of the components of all Secondary School PE programmes at this time was the teaching of athletics. The annual school athletics competition would also benefit enormously from my child-centred integrated learning approach. Previously, I had struggled with seeing the relevance of teaching athletics to students as it always seemed about being the fastest or jumping and throwing the furthest and most students lacked motivation to participate at this level or within that philosophy of instruction. The approach I developed is perhaps as close as I got to playing athletics at a secondary school. Reflecting on the threads of what I was doing at the time and with hindsight I have been able to impose a theoretical construct to this work. What I did represented a shift from a purely behaviourist perspective of instruction to embracing constructivist theories of learning. Further to the basis of my thesis that my eventual and indeed much of the PE community's embracing of TGfU took place both as a gradual process and as a model to reflect much of their practice, this story related to my evolution on how I taught athletics and clearly illustrates the development of that thesis. At its heart my evolving position on teaching athletics was an effort to try and find a structure that made athletics interesting and something that a majority and not a minority of students would enjoy doing. The philosophical start for achieving this was to change from teaching athletics for performance outcomes to an education in and through athletics. Initially I set about doing so through using a thematic approach to instruction that focused on understanding movement. Of course performing athletic events well was congratulated but I

sought to emphasise that it was just as important to understand how the movement worked as to being a star performer.

Jumping theme

The theme approach started with the Year 9s and was based on jumping. The initial lesson was a favourite of the students. On entering the gymnasium for this lesson the Year 9 class would see the space filled with equipment. There were gymnastic mats, high jump pads, hoops, basketballs, volleyballs, rugby balls, benches, mini trampolines and two standard trampolines. It was certainly enough equipment to raise the curiosity of the average student and motivate them to want to try something. It was explained to the students that the theme of the lesson was jumping and they would get an opportunity to try various sorts of jumps and in between having turns they were welcome to come back to the white board and ponder the various questions written there about the nature of some of the jumps. Near the end of the lesson there would be an opportunity for the class to collectively answer the questions. There were always between 10 and 12 activities so time enough for a pair of students or a group of three to explore the different types of jumps. Safety issues were explained, and off to a start position they went before rotating every 4 or 5 minutes or so to the next jump. Some of the non-athletics specific jumps included, jumping for a lineout from a rugby ball throw in, a jump shot in basketball, a lay-up in basketball, a tip-off in basketball, a rebound jump and throw basketball style but off the wall of the gym with a volleyball, and a standing long jump onto a gymnastic mat. The standing long jump was always measured as a plus or minus against the height of the individual student. I explained I was not interested in comparing their total distance with anyone else but I was interested in seeing if they

could jump beyond their own height. The standard jumps included a basic triple jump, using hoops to help coordinate the sequence before landing on a mat and a high jump with a very low-set bar.

The jumps most enjoyed were those that included the mini-trampoline and the standard trampolines; for example, imitating a springboard dive preparation jump. The mini-trampoline was placed at the end of a Swedish bench up against a high jump landing mat. The students would complete a three-step hurdle approach along the bench before taking off on the hurdle, landing on the mini-trampoline and then, depending on gymnastic ability, land standing up, complete a forward dive roll or somersault onto the landing mat. The students were told that this sequence was in preparation for diving that would form part of their aquatics programme.

The two standard trampolines were used to firstly require a safety-based 10-bounce basic sequence to stop. On the larger trampoline the sequence started with one foot on the frame and required the hurdle action of the three-step hurdle to launch into a bounce and either a standing landing, a front drop (also called a face drop) or even, if they said they could do the action, a somersault.

PE and the dualism of Descartes

It seems PE has been having this argument over dualism (Light, 2008) ever since Descartes promoted the concept of the separation of mind and body. If only he had known the angst this has caused those of a PE bent, I'm sure he would have adopted a more holistic position. Again, while I was yet to acquaint myself with this position at any level beyond the superficial it was still my intuitive intent to try and convince

students that there was a side to PE that required them to think as well as move and to do both at the same time! That there was not a separation between mind and body in the Descartes tradition but indeed one was very much part of the other. For me it was also important that the students could see that they could do well in this subject and receive positive feedback not only by virtue of being athletically gifted but also through understanding movement. The questions posed for the students on the white board and the invitation to discuss them ahead of the class discussion were attempts to teach understanding in movement as much as performance.

The classes enjoyed this activity and nearing the end of the lesson when we gathered to discuss the questions it gave a whole range of students a chance to shine and participate. Answering the questions did not require procedural knowledge or movement competence but instead critical thinking about how to jump, the different approaches required of a jump and whether it was just vertical projection that was required or something else. Typical of the questions were: ‘what shape run-up did you employ on the high jump?’ ‘In this jump, what projection is most important, vertical or horizontal?’ ‘Which way is the force directed in a high jump?’ ‘Does anyone know if there is a law in physics relating to this action?’ In a subsequent lesson students were encouraged to give three pieces of feedback to each other as they completed the jumps, which were prompted by having aspects of the specific jump or style written on laminated cards to help them in what to look for.

Although yet to encounter TGfU, I was enacting the questioning philosophy at its heart and encouraging students to become questioners. Although not yet aware of the TGfU strategies associated with questioning it is possible to suggest that this is

an example of my implicitly adopting elements of TGfU, and perhaps part of why when I did encounter the model I was so drawn to its practice.

Improved participation and positive atmosphere

This methodology of instruction completely changed the atmosphere in my classes for teaching athletics. I could legitimately set the high jump bar at a level barely above the height of the landing mat because I could explain to those who sought more of a challenge that we could adjust the height, but in the first instance I wanted them to understand the mechanics of the jump and how it worked (TGfU). On occasion I placed a vaulting box bench top in front of the landing pad. Now the jumpers were almost halfway up the height of the mat so clearing the bar was never an issue. I also used the vaulting box as a take-off for long jump in order to give the students time in the air and actually perform a hang technique that typically was well beyond the capabilities of the average student to experience without this aid. However, in both examples, it helped the students to play at, understand and to enjoy athletics as it was about processes and not about comparative performance. In explaining the lesson this way those who would normally shy away from athletics participated. I had fewer examples of the competent bystander effect (Tousignant & Siedentop, 1983) than I had with my previous approach that placed a premium on correct technique.

Spin-offs: Change for the better and foreshadowing my work in TGfU

My whole approach to athletics teaching changed. I was teaching with a focus on understanding the underlying processes of activities and thus foreshadowing my work in TGfU. For javelin, I bought bamboo garden stakes from a local garden

nursery that removed much of the danger but allowed for repeated throws without too much fatigue. So too with my shot-put teaching that now included shot-puts comprising of sand inside plastic bags in turn, inside old socks. No injuries, a focus on understanding the process of force over time without the fatigue or the issue of carrying heavy shot-puts to and from the gymnasium.²⁵

Understanding ideas associated with cadence, resulted in running through the long jump pit to observe one's foot plant and in 400m practising not to be the fastest runner but the one who could gauge their own speed to be the closest to complete a lap in a time they had set to do so. Indeed, one other simple innovation I managed was while the school had a 400m track for athletics, the PE Department used a 200m track, that changed the psychology of running laps and teaching relays.

A physical education in athletics rather than an education in athletics

There were other innovations in this teaching of athletics that encompassed for example, speed for sport and triathlon. By the time I was organising my Department to teach in this manner I had undergone a definite shift from teaching athletics from a coach perspective, a product outcome solely measured in performance, to trying to provide an education in movement through the process of athletics. My habitus had changed significantly.²⁶ Today I believe what I started doing back then would definitely be interpreted as an applied model of TGfU and a decade later was

²⁵As I recall the grounds man was also keen on this development as it reduced the holes in the grounds.

²⁶In my acknowledgements, I mention my principal at the time, John Wall. I was fortunate to have in John a principal who was supportive and encouraging. His openness to PE concepts that were new, meant I did not encounter the tensions I knew some of my colleagues faced when trying to implement similar ideas in their schools.

adopted in a new Ministry of Education document (1999, Health and PE Syllabus) of learning in, through and about movement.

The difference between sport coaching and teaching PE

A recurring argument, still being debated today between PE teachers and sport coaches is the distinction between teaching PE and coaching sport. If I were challenged on this topic all those years ago my standard argument was always to ask the protagonist how they thought athletics should be taught. Without exception I received a discourse on a standard skills-based performance description of athletics. I often made some small headway in these discussions with my description of how I thought about and did teach athletics. In this sense I felt I reflected more the philosophy of a PE teacher rather than as a coach of athletics. It also provided another opportunity to better inform people on the practice of PE and reinforce my habitus and as a teacher of PE.

This approach to teaching my PE practical classes morphed into several other sports all with the same effect of improved engagement from the students. Those students who loved sports and games were always going to be reasonably happy in the PE class, but the less enamoured of the subject were in my view, better captured by this enquiry method of instruction.

6.2 DEVELOPING MASTERY LEARNING: 1980s

The mastery process operates on the proposition that almost every student can learn the basic skills and knowledge that are the core of the school curriculum when the instruction is of good quality and appropriate, [and the student] spends adequate time in learning. (Torshen, 1977, p. 41)

6.2.1 *Mastery concept*

Still to be discovered in those early years of teaching and my tenure as HoD PE, was mastery learning (Bloom, 1976; Keller 1968; Metzler, 1984) as a vehicle for the development of a teaching philosophy. This philosophy aimed to provide, through competence and individual goal setting, an avenue for the development of social capital through facilitating access to society by participation in sports, recreation and leisure. That perspective was to come, but at this initial stage I was in search of something that would elevate my teaching through measuring its impact. While I was experiencing many positive feelings about the programme of instruction I was responsible for in PE, I also had doubts about aspects of the programme in the sense of assessment. One basic question I struggled with was:

What should a student have experienced, understood or know, having spent five years in my PE programme? What could I actually claim as an agent of change brought about by what I was providing versus general maturation?

The actual ‘road to Damascus’, flash of enlightenment, or epiphany re the answer to that question came in the form of mastery learning and individual goal setting

and as a revelation was not especially spectacular. It occurred a few years into my time at Awatapu College, about the mid-1980s. I recall quite clearly making my way back to teach a class and pondering what were my students learning and indeed, what aspect of measuring any change in understanding, performance or attitude was down to my input? Were changes in the students' performances, understanding and attitudes merely through maturation or was I and/or the programmes making a difference? I had undertaken some education papers at Massey University with Don McAlpine and he had introduced me to the concepts of mastery learning as espoused by Bloom (1976) and Keller (1968). I thought that there were many aspects of the personalised individualised mastery learning (PSI) concepts of Keller that could work with PE.

The simple measure of learning in any subject is the formative and summative assessment of the student versus the content. Apart from some recording in athletics and swimming, at this time there was little assessment in PE. Part of the negative comments passed about the teaching of PE by secondary school colleagues that I had encountered and have hinted at are reflected in the following type of comment.

In PE all you do is play games in the sunshine – you don't have any marking or assessment and your reports typically only comment on behaviour, participation and propensity to bring a change of gear.

The standard response to such comments at that time went something like:

Unlike you, where you have a class in front of you at least four or five times a week, I only see a class twice a week and one of these is outside and it isn't always sunny! If I assess my practical classes I do not have time to teach them. I must make a decision, teaching or assessment and I choose teaching.

I considered that position and thought what if I could do both at the same time; i.e., teach and assess? Is that possible? My concept on that walk to my class was to consider whether or not I could come up with some basic standards that students could be measured against prior to any instruction; that is, diagnostic and summative assessment post-instruction? If I could do that I could actually chart whether any learning or at the least change in performance was taking place in my classes.

6.2.2 *Mastery learning applied to the curriculum*

My initial response was to further develop the work I was doing in athletics. Assessment in athletics at this stage in many schools focused on the Bank of New Zealand sponsored 5 Star Athletics Awards²⁷. Distances, times and heights were allocated points adjusted for ages and a best three score across both track and field events. These resulted in a star award certificate of between 1 and 5, with 5 being the highest awarded to students. However, the measuring and timing of these activities was time consuming and tended to emphasise comparative performance, especially as the assessment tended to be quite public. My solution was to take those

²⁷ The Bank of NZ sponsored the 5 Star Athletics Award Certificates and summary charts. The actual programme, as explained above, was part of the work of the late Alan Launder.

scores and provide four standards that could be measured at any time and would encourage improving individual performance as against where do I stand in relation to the rest of the class.

I achieved this by taking the scores that according to the 5 Star programme 90% of all students should accomplish and making that Level One. I did the same at 80% for Level 2, 60% for Level 3 and 50% for Level 4. To speed the process of scoring up and deemphasise the public nature of the scoring, the levels were marked on the event areas for the school athletics programme; e.g., lines arched across the constraining lines for shot-put and discus and painted levels beside the long jump pit. In the first lesson students were told how the system worked and that they could opt for any three events and record a score. If safety was not an issue they did this with a buddy and they would later tell me the level recorded. This was an incredibly quick method of assessment and allowed for extended periods of process-focused athletic instruction with intervals in the lesson where students could try and improve their standard. Level 4 was still a challenge for many students but almost all students achieved a Level 1 and 2 score and a majority at Level 3.

A second development: Mastery learning in tennis

I developed a second initiative along these lines with the sport of tennis with a structure that would eventually form the basis of my data collection for my Master's thesis (Slade, 2006). Tennis taught in a conventional way is an extremely difficult game for one person to teach to a class of 30 mixed ability students at one time - so difficult I renamed the activity 'sorry' as that was the predominant word heard between players trying to hit a ball back and forth to each other in the form of a

rally. I maintained the four level standards structure I had developed for athletics, but this time I put those standards into three basic components of the game; namely, serving and forehand and backhand ground strokes. The aim was to get students to a stage where they could start a game with a serve, no matter how basic, and sustain a cooperative rally where unlike the point of the actual sport of tennis, the object in the PE classes was to make the return of the ball as easy as possible for the other player. The goal was to produce as many consecutive return hits as possible with your partner.

6.2.3 Individual goal setting

The effect of employing individual goal setting in conjunction with the mastery teaching strategy was not the result of any deep philosophical reflection but occurred as a natural consequence of the mastery standard procedure. In congratulating a student on achieving a level it just occurred that staff were naturally suggesting to students “*Over the course of our athletics or tennis programme see if you can get to the next level.*” Staff reported that these instructions were having a positive effect on student effort so we decided to formalise the practice. At the end of the first lesson, when standards were recorded, students were asked to come and tell the teacher what their goal for improvement was. It was explained that we wanted to see their progress against what they could currently do and this was much more important to us than whether they were better than their class mates; hence the development of individual goal setting.

Programme-wide mastery learning and individualised goal setting

The 1987 syllabus on Health and PE proved to be a further cementing of my ideas around the use of play and mastery in teaching games. The 1987 Syllabus replaced the 1953 Primary School Syllabus and the Syllabus of Instruction for PE for Post Primary Instruction Regulations of 1945 and was accompanied by a second document a *Guide for Success*. The aim of this second document was to help teachers at all levels interpret the new syllabus in an applied manner. It established standards based on developmental stages of learning; that is, what might be a reasonable expectation for children to achieve in PE classes. For example, in swimming, a middle school primary student should be able to “glide with efficient leg action and breath control on both their front and back” (Department of Education, 1987a, p. 16). At secondary level, Year 9 students should be able to “swim comfortably and competently for a minimum of 50m on their front and on their back” (Department of Education, 1987, p. 17).

After discussion with my department colleagues it was decided to extend the mastery programme across many of the sports and games that were included in the junior programme using the guidelines of this document for establishing the standards in our mastery programmes. The same four standards concept was applied with a view to ensuring that almost all students experienced success and achieved Levels 1 and 2.

6.2.4 Child-centred learning and TGfU

What was starting to transpire as a result of this approach to instruction was child-centred learning and through the assessment programme, identification of students

for extension and remedial programmes. There was occurring a subtle shift from teaching for expertise in sport where the philosophy that only those who were experts at the game could play to developing student's basic competence to a level that all could enjoy a form of the game. This was straight from the Bunker and Thorpe (1982) play book on what the teaching of games should and could be like. I still did not know about TGfU and nor did Bunker and Thorpe talk about mastery learning. Nonetheless, on reflection this approach developed understanding and competence in a manner that allowed all students to enjoy games, sports and recreation activities at their own level. This embraced the TGfU philosophy that such activities should be enjoyed by everyone and not just the elite.

Status within the school and Central Regional Education Department

My use of the concepts of mastery learning and subject integration resulted in several positive spin-offs both for me at a personal level and the school. Firstly, Ken Morley, the then Central Region Secondary School Inspector for PE was impressed with the nature and direction of the work I was developing at Awatapu College and as a consequence provided an at the time substantial financial grant to further enhance the experiments and sociological work I had instigated. He was also keen to disseminate some of these ideas and as a consequent of his direction I received visits from teachers from other schools to observe the programme. In addition, I was on occasions seconded to the Secondary School Inspectorate to undertake school inspections in PE.

Further to this, the curriculum work I was doing at this time also caught the attention of Margaret Campbell, who was the national curriculum advisor for PE with the

Ministry of Education and she seconded me to undertake teacher in-service workshops in New-Plymouth, Wanganui, Palmerston North, Hawke's Bay, Wellington and the Hutt Valley on the new 1987 PE Syllabus. Margaret referred to these workshops as the PE Roadshows. I produced numerous units of work and developed participants' ideas into resources that they could use in their programmes resulting in the publication of a two volume set (Slade, 1991a, 1999b) of the workshops. In this sense the capital within the staff in the field of PE relative to the sometimes relational struggles with competing curriculum areas (Smith, 2012) at Awatapu College was significantly enhanced in the opinion of my principal and other staff members. In a practical sense, obtaining resources and affecting change became easier.

6.3 SENIOR SCHOOL PE: A NATIONAL QUALIFICATION

6.3.1 National assessment scheme for Sixth Form Certificate PE

As noted in the introductory comments, this was a time of considerable social and political change in New Zealand. One of those changes occurred in the National Senior School assessment system. University Entrance was phased out and in its place a much more flexible system of an enhanced Sixth Form Certificate (SFC) (Today's Year 12) introduced. This certificate was awarded to students who completed a satisfactory course of instruction in their subjects over their Sixth Form year as long as the study was in advance of the work assigned to the Year 11 / Fifth Form syllabus that constituted School Certificate. Within the previous SFC programme were various Group 2 subjects that were solely examined within a school. In many schools one such subject was Sixth Form Certificate PE (SFC-PE). In order to bring some consistency to the introduction of the Group 2 subjects from local to nationally awarded SFC grades, assessment schemes were required for these Group 2 subjects. In 1986 I was seconded, along with Mr. George Salter, at the time, HoD of PE at Onslow College, Wellington, to write the new assessment scheme for 6FC-PE that was to be used in the new National Assessment Scheme.

6.3.2 National investigation into criteria referenced assessment

Once Sixth Form Certificate became the national assessment system for all students, the allocation of SFC grades became a contentious issue. Schools were only able to allocate SFC grades based on their school's School Certificate (SC) grades achieved the previous year. Allocation of these grades took no account of changes in individual student achievement or that many subjects, e.g., physical education, were not examined at SC level. In response to this concern the NZ

Ministry of Education commissioned an investigation into a system of assessment known as Criteria Referenced Assessment. It chose three curriculum subjects for the trial, Physical Education, French and Geography. I was part of a national group of about twelve secondary school teachers recruited to write the criteria referenced standards for use in the new SFC–PE programme and then trial them in our schools. The Criteria Referenced Assessment system of assessment was essentially mastery learning and foreshadowed many years later the introduction in 2002 of the National Certificate of Educational Achievement (NCEA) that also employs criterion referenced assessment in the national examination system. The SFC trial did not lead to any immediate change in the assessment system and the trial itself did have major flaws. One of these was that at the end of the year the students' grades were still allocated on the basis of the school's SC results. In doing so it applied a norm referenced system when students had been motivated by the opportunity to achieve grades based on set moderated criteria. However, this work did lead to a significant and almost final defining moment in my tenure as HoD of Physical Education, namely, the publication of a text for the new senior school PE programme that became the standard curriculum resource for the subject in New Zealand.

6.3.3 The Senior School PE text and its relationship to TGfU

David Heep, then CEO of New House Publishers, Auckland, specialised in New Zealand secondary school texts, approached me to write a text for the new SFC-PE programme. He suggested it was required as no such New Zealand work currently existed (At the time the text most favoured was an Australian one by Davis, Kimmet & Auty, 1986). In discussing the nature of the text I argued that it needed to shift from the traditional purely behaviourist presentation to a more Socratic,

constructivist format. I suggested that while presenting content it also needed to provide numerous questions and practical activities for students to undertake to better understand the content in an applied context. David agreed and encouraged this strategy and so a major emphasis on an experiential approach to learning was developed within the text reflective of my practical work in PE. In the Introduction to the text I made mention of the need to modify learning objectives to develop critical thinking about, for example, the need to improve students' understanding of the need for physical activity, as opposed to merely instructing them in the principles of exercise. I stated "If students are to understand why they should exercise, what bodily systems are involved and what happens to them when they do, then a programme beyond the design of the old 'PT' [Physical Training] type is required" (Slade, 1993, p. 4).

Book structure that would resonate with TGfU

The questioning and critical thinking principles that I was already employing in my practical teaching, with David Heep's approval, came to the fore in this text in various ways. This was the same questioning strategy that I would later learn was advocated by Bunker and Thorpe (1982) in TGfU and indeed all those years previously by Valarie Pemberton in teaching educational gymnastics through the enquiry method. The success of the text is perhaps reflected in the various reprints that eventually led to a second edition being commissioned and published in 1999. Indeed, even today, I still see the second edition on the shelves of PE teachers' workrooms when I visit schools.

CHAPTER SIX SUMMARY

This chapter further advanced the tenet that the ready adoption of game centred learning (GCL) by a constituency of prominent physeders was facilitated by their previous practitioner experience and their perspective that they had already adopted a philosophy of GCL consistent with what they would learn about TGfU. To illustrate this receptiveness to TGfU I have provided insights into my own experiences that were in many ways similar to that constituency of physeders. My experimentation with a student-centred curriculum incorporating the integration of children with special needs, remedial and extension programmes, innovative recreation and health and sport sociology programmes. These all contributed to my receptiveness to a child-centred learning philosophy that was at the heart of the TGfU model. My discovery of personalised system of instruction (PSI), that I later incorporated into a fifth step of a TGfU model, satisfied my contention of the need for basic competence in movement if PE might earn the right to claim it makes a contribution to a democratic society. The recognition and support my work received from Ken Morley, Central Region Inspectorate, was a catalyst for my inclusion in Department of Education writing parties and curriculum development initiatives that led to the exchanges of ideas with practitioners of similar persuasion. Finally, the publication of my first text (Slade, 1993), provided impetus to my capital within the field of PE, eventually contributing to opportunities to contribute to the dissemination of GCL, particularly the TGfU model in NZ and internationally. The next chapter covers my career in education at the PNCE. It highlights a closing of the circle between my intuitive implicit student-centred teaching to an explicit theoretical model of TGfU that, as in the manner of other practitioners previously noted, provided an endorsement for my current practice.

CHAPTER SEVEN

TEACHER EDUCATOR: IMPLEMENTING TGfU

“The true object of all human life is play”²⁸

CHAPTER OVERVIEW

This chapter covers the period after I accepted an appointment as a lecturer in PE at Palmerston North College of Education (PNCE). It provides an account of my epiphany type experience of meeting Rod Thorpe and insights into the impact that meeting had on my understanding; i.e., an implicit understanding of the principles of TGfU to an explicit demonstration and understanding. Conversations with other practitioners who also met with Rod Thorpe at this time, echoed my reactions. Like me, they and the students they instructed, were overwhelmingly receptive to the TGfU model of teaching that also aligned with a wider emphasis in education on student-centred learning. Also discussed in this chapter is how my requirement for my students to employ the TGfU model while on teaching placements contributed to TGfU’s dissemination within New Zealand. It concludes with details of two TGfU publications (Slade, 2003, 2005) from this period and my feeling of the need to fill a gap in the way TGfU could be applied both in coaching and teaching circles. The theme of this chapter is on how I, as a teacher educator, contributed to the dissemination of TGfU through my contact with pre-service teachers and sport coaches. It also continues the thread, illuminated through my story, of the constituency of other previously mentioned prominent colleagues whom I suggest contributed to the development and implementation of game centred learning (GCL) strategies in PE and sport in New Zealand.

²⁸G.K. Chesterton, “Oxford from Without,” *All things considered*, 1908, Early beginnings

7.1 TEACHER EDUCATOR: 1990s

The next stage of my journey in TGfU occurred at the Palmerston North College of Education (PNCE). At the time the door opener to such appointments was based on an applicant's reputation or capital in the field, whether, according to your peers, you were a legitimate figure in that discipline. The rise in status of the discipline of PE and the opportunities I had been presented with and indeed had seized, were the factors that played heavily in favour of my appointment. Once appointed I was required to deliver to pre-service teachers a 'how-to approach' in the art of teaching and I did this with much enthusiasm. However, it was the discovery in this period of the TGfU model, precipitated by the visit of Rod Thorpe to the PNCE that helped close the circle of much of what I had been doing intuitively in my teaching, and ushered in a period of awakening and further opportunity for me.

The revelation of the TGfU model did not result in my abandoning my ideas about mastery learning (Personalised System of Instruction, PSI) and individual goal setting as important components of what was required in teaching practical components of the PE curriculum. However, PSI and individual goal setting provided part of a framework through which I could reflect on what I had been doing in secondary school PE and to be further challenged, especially in the field of integrating TGfU and mastery learning. It also resulted in those pre-service teachers for whom I was responsible, receiving not only my instinctive ideas about teaching but as academic publications based on TGfU expanded exponentially (Butler & Ovens, 2015; Harvey & Jarrett, 2014; Oslin & Mitchell, 2006), they were exposed to further research on the theory and practice of GCL. In the longer term it also enabled me to be part of those teachers, academics and coaches who have

contributed to this model of child-centred learning in PE, games and sport coaching around the world.

Until my arrival at PNCE my practical teaching ideas in PE, that had also spilled over into my senior secondary school assessment examination classes by way of the textbook I wrote (Slade, 1993; 1999), were intuitive. I thought my methods worked, students enjoyed them but I did not have a model or a name for it. I just thought it was good teaching. However, when a colleague at the PNCE already aware of the TGfU development explained to me TGfU as a ‘new way of teaching’ my response was not all that dissimilar to some other practitioners on being informed of this new methodology namely, “this is not a new concept” (Liu Yuk-kwong, 2010, p. 17). I believed that this purportedly new concept was in fact what I had been doing for many years. However, my encounter with Rod Thorpe and this new way of teaching was to have a significant impact on my teaching and my life.

7.2 ROD THORPE'S VISITS TO NZ

Rod Thorpe had been visiting and presenting on TGfU in New Zealand and he had accepted an invitation to present at the Palmerston North College of Education (formerly PNTC). A legacy of being a secondary school teacher that I have observed is the effect of making teachers quite sceptical about prophets with new methodologies. If what you are doing is working it often takes considerable persuasion to make you change what you do. Being a little affected by this condition I attended Rod's evening presentation with some mixed feelings about whether this was really going to be a worthwhile occasion. My scepticism was ill founded. Rod Thorpe's presentations that evening had a profound effect on me. It reinforced what I understood in my own teaching and established a template from which I would henceforth teach games through my tenure both in and out of the PNCE/MUCE environment. It is probably fair to say that how I taught games post Rod's visit impacted on a whole generation of teacher trainees who would pass through the Bachelor of Education, Graduate Diploma of Teaching, Secondary PE degree at the MUCE.

In discussing the development of TGfU with Alan Ovens, (A. Ovens, personal communication, June 2015), co-author of a review of TGfU articles (Butler & Ovens, 2015), he suggested that part of the appeal and acceptance of the model of TGfU in New Zealand was because it provided a useful model of PE practice but also reflected what some practitioners were already doing, although without a formal model on which to frame their practice.

The wide acceptance of the model of TGfU came about because some practitioners, who were teaching in something close to the approximation

of the Bunker and Thorpe (1982) model, saw in it a model on which to 'hang their hat.' Ovens argued, *'The advent of TGfU, or more precisely its gradual dissemination in NZ, provided PE practitioners with a feeling that at last someone is articulating what I do.'* (A. Ovens, personal communication, June 2015).

Oven's comments, as a hypothesis, could be positively tested when applied to my practice and indeed within the PE staff at PNCE. All employed in PE at this institution would have recognized aspects of their own work in the model and practise delivered by Rod that evening, especially Anne Kingsley and Barrie Gordon. So too would have those involved in educational gymnastics. I think back to Valarie Pemberton at Ardmore Teacher's College and the questioning strategies Rod outlined would have resonated strongly and positively with her, especially as the strategies suggested playful discovery learning experiences rather than a prescribed command structure of instruction.

7.2.1 TGfU: Not necessarily a new concept

Relative to Alan Ovens' hypothesis, Rod Thorpe too was quick to disavow that the underlying concepts of TGfU, for example, child- and game-centred learning, game modification, highlighting decision making and a focus on tactics, were for some not necessarily new concepts. Indeed, Rod referenced his TGfU work to the Ming Dynasties in China (1368–1644). In more practical references, he later talked about the influence of those who taught educational gymnastics and especially at Loughborough University, the work of Elizabeth Mauldon and Betty Redfern (1981). In sum, he definitely was not saying these ideas were all new. What he was

saying was that he was concerned about how practical activities, especially games, were being taught in schools and he thought he had a better way. When his ideas were exposed to teachers of PE and sport coaches there were bound to be people of similar persuasion and ideas. However for the vast majority, this was a new concept and he, David Bunker and their close associate, Len Almond, are rightly given credit for bringing this concept to the world of those who teach PE.²⁹ Of course my argument around the dissemination of TGfU throughout New Zealand is to a degree speculative, but feedback I have received from numerous TGfU workshops I have since run in New Zealand have often been met with that same response. There have been those who were doing something similar to the TGfU model, while for others it was a whole new and typically exciting way to perceive their teaching of games.

7.2.2 Practical workshop: Badminton

Rod was a great teacher and part of the epiphany for me in understanding the model of TGfU was through the workshop he provided at the PNCE that followed his lecture. Listening to and seeing him demonstrate ideas associated with tactical concepts in games I was enthralled as so much of what I had started doing and continued to do, suddenly had a home within the model of TGfU. One of Rod's demonstrations that evening related to badminton. He explained various concepts that made the learning of this game so straightforward it took me right back to my Tennikoit days at primary school. After explaining how to explore the rules of the game – because these need to be understood in order to understand and apply legitimate tactics to the sport, we then moved to players now playing with racquets.

²⁹ See in Chapter notes on Barrie Truman. Truman appears to have published on this method almost a decade before Bunker & Thorpe (1982). However, it is Bunker, Thorpe and Len Almond who took the concept to the world.

At this stage of the workshop I answered a question posed by Rod for which I knew another answer existed. However, I also knew that in answering in the way I did I would advance the understanding of what he was saying far better than if I had supplied the alternative. That question and answer exchange I had with Rod is still so clear that when I write about it I can still clearly hear his tone of voice. The sequence went this way:

Rod: *The shuttle has been played to the back of the court. Your student is having trouble clearing the shuttle back from here deep into the opponent's court. They ask you for help. What do you say?*

By now I was so tuned in to what he was saying I knew what the answer should be but I gave him the answer that would allow him to make the point himself.

I said: *You instruct him to hit the shuttle employing a long back swing, recruiting force over time, with sufficient trajectory to carry the shuttle deep into the opponent's court!*

The answer was a godsend! It could have been plucked right out of the pages of traditional approaches to teaching games. All I needed to add to this technocratic response was something like: *I'd isolate the technique and have the player rehearse it until I, as the authority on technique, was satisfied with the execution and then the player could resume playing the game!* My response lit up Rod's face; he must have thought I'd been placed there to prompt his alternative TGfU response. He said something like:

Rod: *Ah, a biomechanist. Provide an exact model of the technique, that is, of course, exactly the same for all players and they'll be successful and can move on with playing the game... Unfortunately, we're not all the same and if we go and isolate the technique we take away all the motivation inherent within the game anyway and quickly those who cannot master the intricacies of the technique don't get to play. Surely playing the game is what we want them to do because it is certainly what they want?*

If I were to respond within a tactical context, one that would help with the player further recognizing the need for the shot from a tactical perspective I might just motivate him/her to practise the shot anyway. Here is how I would respond. Note, I respond to the question with a question... "Why do you want to hit the shuttle to the back of your opponent's court?"

Rod invited responses from the audience. *Student: Because if I only clear just over the net or not even to mid court my opponent is smashing the shuttle down and I'm losing the serve or a point."* Others in the audience added: *"Because back here I need to get time to be back in the middle of the court so I can respond to either another long shot or a drop shot from the opponent.*

Rod: *Good answers. So I might now ask my student: So, if you want to get back to the centre of the court and you don't want to provide an easy smash shot for your opponent where do you need to hit the shuttle?*

Again the answers came thick and fast:

Replies: *You have to hit high.*

Rod: *Just vertical?*

Replies: *No, it has to go as far back as possible as well.*

Rod: *Great, well back to the game and let me see you do that and see how you get along.*

Replies: *So what if after trying to do that, the player still cannot achieve that performance outcome. What then?*

7.2.3 A philosophical perspective of TGfU

Rod's answer has stayed with me ever since that day and has influenced me especially in my specific area of sport expertise, hockey, and considering unasked for advice when I've observed a player who, if their technique was adjusted through some serious time spent on rehearsal they would really improve. His answer was along these lines and also fitted into the model of TGfU that included the station, skill rehearsal.

Rod: *You're a good squash player. You're at your squash club and you see a couple of people playing a match. Their technique is poor; they don't appear to understand positioning in relation to the T. They're running, bumping into each other and puffing and blowing and because no-one seems to really grasp the game, the scores are in fact quite even. As a good player, and wanting to be helpful, you knock on the door of the court. They stop, you enter the court and with the best of intentions you offer some basic advice that you believe will lift their performance. Because they're polite they listen, even try and respond to your demonstration even though it*

doesn't go too well and as you leave they thank you. Their court time expired, they pack up and leave. Over the course of the next week or two you notice that you don't see those two players again and wonder why they are no longer playing. The thing is, they probably are playing, but they changed their court time in order to not encounter you and your advice again!

He added:

The point of my story is indeed several fold:

- 1. Giving advice in response to a question for help is fine. The players are in fact asking for more guidance and so suggesting something specifically technical in the technique or even a way to intensify the rehearsal of the technique is also fine. The learner and not you motivate the timing of the request and the desire to change.*
- 2. It is possible to play, enjoy and get considerable pleasure from playing games with a poor technique especially if you and the person you are playing against are of a similar standard.*
- 3. Changing a person's technique takes time and so unless you're going to make a commitment to teach / coach the person(s) on a regular basis it is, in my opinion, better to leave the players' alone.*

There it was. The philosophy of the TGfU model explained including a philosophy of teaching aimed at improving understanding, enjoyment and enhancing the possibility of long term involvement in games, sports and physical recreation all explained through a story at a workshop that involved time spent on how to teach badminton from the perspective of a TGfU approach.

7.2.4 *Individualised learning programme*

Rod provided a means of how to provide positive game learning experiences while catering for individual differences. This was achieved through adherence to the very first basic step of the TGfU model that he had explained in his lecture and now delivered in practice, of looking to see whether it was the game or the learner that was central to the learning? The model clearly places the learner in the centre of the learning experience and Rod's messages made that clear. *Modifying* the game and adding or removing those modifications or constraints resulted in *individualised learning programmes* available within a whole class structure. Of note here, is that it is the learner that is the focus of the model and the teacher or coach interprets what should happen but they are not actually a station in the model.

The questioning of why one would want to clear the shuttle from the back of the court required the player to consider the *tactical implications* of what they wanted to know and then in understanding the tactic, making the *appropriate decisions* about what and how to do aspects of the game. Then, in response to '*I still cannot do that*' a mandate was established for Step 5 of the TGfU model relating to the student's request for help, *skill execution*. Again it was a case of the learner driving the learning experience, requesting the feedback and being ready and motivated to act on the feedback (see Janelle, Barba, Frehlich, Tennant & Cauraugh, 1997 for advantages of student initiated feedback requests).

Within that workshop we never really discussed the *performance step* (Step 6) of the model, but that was later explained as perhaps the full version of the game.

However, as I reflected on the analogy of the squash player story I decided that my own interpretation of that stage would be performing at a level commensurate with your ability, your ambitions within the game or sport and most importantly the level that gave you the most enjoyment.

7.2.5 Defining my work as TGfU

The evening culminated in a meal with Rod, his wife and several members of our faculty. I recall having so many questions I wanted to ask Rod but also a sense of what Alan Ovens' noted that this is what I've been doing and now I have a model that will help define my work. Reflectively Rod's message reinforced and added to where I was in regard to my habitus in the teaching of games. The idea as noted in his second point, '*It is possible to play, enjoy and get considerable pleasure from playing games with a poor technique*' was so far removed from what accounted for capital in my formative teacher training days yet reflected my evolving understanding of how to teach games and it was enormously empowering.

At the time I also thought of my past experience in teaching and how I had developed my assessment procedures around mastery learning and integrated that programme with the student experience of being instructed in the various sports and other physical activities. What emerged from those initial exchanges with Rod Thorpe and some other almost watershed moments helped shape my experience in the development of TGfU in this country and my own emerging contribution to its wider acceptance within New Zealand both in teaching and coaching.

I was not to meet Rod Thorpe again until 2003 when I made two presentations at the second international TGfU conference in Melbourne and he attended my practical workshop. His description of that session, (Slade, 2003), as the best interpretation of TGfU he had seen in a major sport (R. Thorpe, personal communication, 2003), boosted my confidence to continue to employ the TGfU model in my teaching. In turn that influenced how I instructed my pre-service teaching students at MUCE in their curriculum and practical classes and their preparation for teaching placements in schools.

7.3 COMBINING PLAY, MASTERY LEARNING AND TGfU

7.3.1 Teaching curriculum and practical papers

Several major influences emerged in this next period of my time at the PNCE that combined to make an impact in my own development and the wider acceptance of TGfU in both teaching and coaching within New Zealand in which I played a small part. Rod Thorpe's visit was obviously one. A second, was in a developing influence I was having in coach education courses in regional sport hubs, but specifically for Hockey New Zealand. However, at this time the most significant impact I affected related to my teaching the second year students in the B.Ed. Graduate Diploma of Secondary Teaching PE in their curriculum studies paper (208.266, Curriculum II) and their practical paper on how to teach games in secondary school (208.114, PE Practical II).

The sports I was responsible for teaching included athletics, hockey, soccer, netball, touch rugby, indoor basketball, badminton, squash, softball and lacrosse (Other sports and activities were covered in another paper). To demonstrate to the students the wider impact this approach could have on learning in PE the instruction was through TGfU and mastery learning. Students would be introduced to the sports through play-like activities before transforming into more tactical approaches that required some movement competence. The assessment of the practical work was in large part their achieving the mastery standards that mirrored how this could be conducted in schools. The impact for the ability to disseminate the message of TGfU into schools occurred because I could model the approach I wished my students to adopt, and in the curriculum / teaching practice paper I was able to direct what they did on Teaching Practice. In their second year teaching placements the

students focused on the junior secondary school, classes Year 9 and 10, and in their practical teaching I required them to adopt a TGfU / mastery learning methodology.

7.3.2 Leveraging TGfU into schools

Having this control of what students were required to teach resulted in my leveraging into schools the TGfU approach. This was quite important because I wanted the students to adopt these teaching strategies while on teaching practice. Yet on my visits to schools in the Central / Wellington region to observe my students it was obvious that the direct command methodology was still the predominant instructional format in game lessons. Without this requirement from me, my students were unlikely to have TGfU or other student-centred learning methodologies modelled for them nor opportunities to try and use this teaching strategy in schools. Ironically, in our debriefing of the teaching practice one positive of the students' work was they reported their associates were really enjoying the TGfU / Mastery approach and in a role reversal were taking on the ideas that my students were bringing to the schools.

7.3.3 Combining play, TGfU and Mastery learning in Football

Another avenue for me in exposing my students to GCL models and TGfU and mastery learning in particular was through setting up quasi experimental teaching opportunities where various methods would be explored, data collected and outcomes discussed while also contributing to the PE of the students in the classes taught. One such episode combined traditional direct instruction, mastery learning and TGfU in association with novice football players (Slade, 1999). The students involved in the study aged 11-13 (N=58) were randomly assigned to six teams in

two pools and received instruction in soccer through one of the three methodologies. At the end of the instructional period one team of each model was placed in a pool and played in a round robin tournament. In turn a final was played between the teams that topped their pool. One of the teams that contested the final had received TGFU instruction and the other team, mastery learning practices. In the final, data were collected on the number of completed passes, the number of corner kicks awarded and goals scored.

The data from the final revealed that the mastery instructed team achieved more completed passes and was awarded more corners than the TGfU team, reflecting their territorial dominance in the game. However, in the short term none of this mattered because the TGfU group comfortably outscored them, winning the match 4-1. The TGfU team displayed better appreciation of both offensive and defensive depth with the mastery team frequently having almost all players on attack and only one defender, the goalkeeper, to deal with the counter attack (Slade, 1999).

This research (Slade, 1999) provided several important outcomes. It reinforced the value of understanding the tactics of games and that if even on the 'skill score' the mastery team won, the score line indicated in the vein of Rod Thorpe's message, namely, you can have a very good game without necessarily being especially skilful. The pre-service teachers were also asked to note comments made by students that related to enjoyment or impressions of the methodology employed. The summary comments were interesting especially when put against the final results. Both the traditional skills and mastery groups often made comments that they were receiving "proper" coaching and they quite "liked the idea of drilling so

they could master skills.” They thought the TGfU groups were “mucking around.” The TGfU groups didn’t really comment on whether they thought they were learning but they repeatedly noted that they “loved playing the games.”³⁰

Another message to my students based on these results was that dogma and ideology were dangerous bedfellows when it came to teaching or coaching games. In discussion with the students it was agreed that if the teaching unit had been spread over a longer period both teams that played the final would have benefitted from aspects of both methodologies. It was thought that if the TGfU team did not further develop their technique but the mastery group picked up on their tactical shortcomings then their superior passing and length of time in possession of the ball might turn the result around in their favour. For the students I was teaching, the experience both in using the methodologies as opposed to only being a recipient, generated considerable positive feedback. It helped reinforce to them the value of the teaching approach they were receiving and illustrated the value of critical examination of methodologies of instruction. I also hoped it would encourage adoption of both strategies in their teaching post their graduation and subsequent employment as teachers.³¹

³⁰One sometimes observes the teaching scenario referred to as ‘rolling out the ball’, having a game, as comparable to the game centred TGfU model. It is game based but it is certainly not TGfU.

³¹In terms of dissemination, several of these students are now HoDs of PE programmes and they assure me they employ TGfU models in their games teaching. Two students of this class received appointments at a central North Island Secondary School based on their background in TGfU and were in attendance at the 2nd TGfU conference in Melbourne in 2003.

7.4 MY EVOLVING POSITION ON TGfU

This period was extremely important in my understanding of what TGfU could and perhaps should be like. Shulz and Pill would write at a much later date (2014) that an issue with TGfU was that what constituted TGfU became subject to increasingly theoretical criteria that argued that people could only legitimately consider themselves practitioners if they followed its purportedly prescribed steps in a linear fashion. They suggested that this in part accounted for the disconnect between practitioners and academics and the uptake of TGfU. Practitioners had their own versions but rather than perhaps being praised for their interpretations they were somehow alienated and made to feel that what they were doing was not TGfU in the way academics defined the term.

In noting to my students the danger of being ideologically bound when it came to instruction I was practising my own message. My evolving position with regards to TGfU over this period somewhat mirrored the argument of Launder (2001, 2003) and his views on the complexity of the model for those without extensive game knowledge to employ TGfU in their teaching. I loved the games for teaching the understanding concepts but my experience at the MUCE suggested an easier way of employing or applying the model was required. I felt that the heart of teaching games still lay in play and somehow one had to find a way to achieve this in relation to teaching formal games or sports.

My way to achieve this was through the use of what I would later adopt as a name from the work of Memmert and Roth (2007), as non-specific games. These were games that I invented based on game categories, for example invasion games and

by taking this step into understanding an invasion game, for example, basketball, taught through my non-specific games that were essentially play, novice players learned the principles of invasion games and related tactics. This step was taken before moving to modified versions of the actual sport of basketball. These concepts would gradually form the basis of my philosophy of transforming play (Slade, 2010a).

Rod Thorpe (R. Thorpe, personal communication, 1996) was absolutely correct in saying you can play and enjoy a game without great technique, but also without doubt you require some technique. My position was to employ mastery learning in the model of TGfU at Step 5 where it called for skill execution. My approach differed slightly from some interpretations of that step. Griffin and Butler (2005, p. 3) note that “Skill execution is always viewed in the context of the game”. Obviously the game context is important but I also felt opportunities for individual and cooperative practice involving individual goal setting at initially easily achieved levels of competence were also important. This was in order to bring to the game context techniques that would allow for the enjoyment of playing the game (see also Smith, 2016). I thought this was especially important in racquet sports where unless you could hit the tennis ball you were never going to enjoy the fun of a rally. Indeed, as a teacher I often introduced tennis to my students not as tennis but as ‘Sorry’ because after each hit of the ball, you heard the player apologizing ‘sorry’ to their playing partner.

Teaching the why

All of these games that I developed fitted into the concepts of TGfU espoused by Thorpe, Bunker and Almond (1986), in that they started with teaching ‘*tactics* and the ‘*why*’ of the game. Teaching what you need to do tactically in a game ahead of any technique is the rationale and logical thing to do. The modification principle was required because a novice does not have the requisite technique to experience the tactics and so this approach overcomes that hurdle. In doing so it provided a learning context within an atmosphere of play and the accompanying motivation to continue with the activity and to develop the actual specific technique to take the tactic to the game. In turn the mastery standards supplied, provided opportunities for students to set individual performance goals that would enhance their enjoyment in playing the game. The structure of the game design in this instance is crucial. It was also an opportunity, depending on the nature of the group to introduce a Sport Education context (Grant et al., 1992). All of these components were integrated into units of work across the sports in which I instructed pre-service teacher trainees. These resulted in a series of booklets that I developed and encouraged my students to contribute too to help them develop the resources they would need when they eventually graduated to full time teaching.

7.4.1 Sport coaching using TGfU and Game sense

During this period at the PNCE/MUCE I was also heavily involved in coaching sport, most especially junior football and hockey. Many of the ideas I developed for use in my work at the PNCE/MUCE were either developed from coaching junior football teams or applied to them. Both mastery learning and TGfU were used extensively in my football and hockey coaching. My success with junior teams at a

national level using these concepts resulted in a 1999-2002 appointment with New Zealand Hockey, firstly as an assistant and then as Head Coach of the Hockey New Zealand U16 Boys team. The work I did with those teams helped promote the use of GCL in programmes that had, until that time in Hockey New Zealand age group camps, been intensely drill focused through command based instructional methodologies.

In this coaching role for Hockey New Zealand, I also introduced concepts based on my work in teaching appraisal. Previously player evaluation in games typically focused on what they did when they had the ball. I introduced coaches to look at the processes a player undertook before they either received or did not receive the ball. In doing so I introduced them to the requirement to look for decision making as well as outcome and making judgements on the players' intent both on and off the ball. This development created considerable interest amongst hockey coaches and has resulted in my contributing to approximately 60 Hockey New Zealand coaches courses as the person delivering the TGfU approach and the Game sense strategies. Recently (Slade, 2015²¹, & 2016²²) I have instigated with Hockey NZ advanced courses in coaching utilising these methodologies.

Over several years I developed teaching units for all of the sports that I was responsible for in the 208.114, PE Practical II paper that followed these principles. My students noted that many of these 'units' were photocopied by the PE Departments they were assigned to on Teaching Practice placements and indeed I felt like I was always copying these units for current and past students. Future publications would capture my evolved position on TGfU but the germ of those

ideas was already evident in these game concepts.

7.4.2 Publications and amalgamation with Massey University

The Palmerston North College of Education was amalgamated with Massey University in 1998. The institution changed its name from PNCE to the Massey University College of Education (MUCE). This too ushered in a further shift in the expectations required of me as I moved from teacher educator, to academic within the University College system and eventually within the School of Sport and Exercise, firstly within the College of Science and thence to the College of Health. This shift in employment focus provided challenges in terms of habitus and capital relative to new colleagues. The capital of new colleagues already in the School of Sport and Exercise was heavily invested in what they considered to be a science and objective approach to their work.³² It also provided opportunities of another kind associated with TGfU, specifically in journal publications and conference presentations. However, the very strong legacy of this initial period of employment as a teacher educator resulted in several publications that would also contribute to the dissemination of the GCL and TGfU in New Zealand.

³² See Smith (2012), for a study of challenges faced by those similarly amalgamated in another tertiary institution.

CHAPTER SEVEN SUMMARY

This chapter covered my career in education as a lecturer in PE at the PNCE. It provided an account of my meeting Rod Thorpe that resulted in my shifting my insights in game and child-centred learning from an implicit to explicit nature. How the provision of the TGfU template resulted in a more deliberate conscious instruction of my students than that I had previously delivered based on intuition. I revealed how a constituency of other practitioners who met Rod Thorpe at this time, had a similarly overwhelmingly positive response to TGfU that aligned with a developing wider emphasis in education, on student-centred learning. I explained how the amalgamation of the PNTC to the PNCE and MUCE within the structure of Massey University made me more conscious of the need for research and publication and how this was manifested with my students within the TGfU genre (Slade, 1999). I discussed the positive dissemination effects of TGfU through my requirement for my students to employ the TGfU model while on teaching placements that in turn contributed to the motivation I had to publish a text on TGfU (Slade, 2005) that eventually ran for six reprints. This period also marked the beginning of a relationship with HNZ that still continues, where I contribute applications of TGfU to their coach education courses. In this period HNZ also endorsed my CD-ROM (Slade, 2003) on teaching hockey to novices employing the TGfU model. The next chapter provides an account of my relocation to the School of Sport and Exercise at Massey University. In this period my text on TGfU (Slade, 2010a) was published and I explored further the question of why GCL and TGfU are important models for teaching games? The answer I suggest relates to an integrated notion of PE, one that emphasizes PE's potential for developing citizenship.

CHAPTER EIGHT

RESEARCHER EDUCATOR

CHAPTER OVERVIEW³³

In the period of the late 1990s government policy on teacher training shifted from having specialist Teachers Colleges to their amalgamation within University Colleges of Education. Fiscal efficiencies apart, educationally it was thought the amalgamations would provide a better mix of the University research led Colleges of Education with the practical and experiential insights of those employed in Teachers' Colleges. As a Teachers' College lecturer I was absorbed in this change from PNCE to the Massey University, College of Education (MUCE). Initially, my job description remained the same, however the merger with the University brought changes in emphasis from teacher educator, modeller and motivator of good teaching practice, to a lecturer / researcher role, and with that a much more overt expectation in regard to conducting and publishing research. This chapter charts that change. The chapter also provides an insight into my evolving philosophical perspective, a changing habitus, not always tension free but charted through references to my publications on the place of PE within schools. It demonstrates how this perspective enhanced my beliefs and practices associated with play, mastery learning and TGfU, along with the need for integrated programmes of PE that have the potential to contribute to citizenship.

³³ References to conference and workshop presentations are found in an appendix to the thesis. They are numbered in the order that they appear in this chapter.

INTRODUCTION

This chapter covers the merger of the PNCE with Massey University (MUCE) that saw my job title change to University Lecturer. This change might be best summarized in the observation that I went from providing research informed to research led lectures. This change also required me to consider new ways of disseminating my knowledge and influencing developments in the field of PE and especially games education. In this period modelling good practice for students now included the context of a research environment that involved students in the research process. Within the Bourdieuan concepts referenced in this work I can suggest that while my field does not necessarily change in this period, my habitus and practice and how I interpreted and presented my field, definitely evolved and with that a new interpretation of my capital within the field. This chapter also provides an insight into a changing philosophical perspective on the place of PE within schools and how this perspective enhanced my beliefs and practices associated with play, mastery learning and TGfU. It also reflects on challenges and opportunities associated with new avenues of influence, namely journal, text and media publications as well as conference presentations. This changing context also provided opportunities to influence thinking on the use of the TGfU model beyond a national to an international audience in teaching PE and sport coaching. It concludes with a model for transforming play, TGfU inspired, but focused on introducing novices to games and sports.

8.1 SHAPING A HOLISTIC PHILOSOPHY OF PE

The opportunity to think reflectively on the purpose of my subject was one of the major benefits of working in a tertiary institution. There were several developments in education that coincided with my shift into the university environment and influenced my thoughts around the subject of PE in schools. For instance, the absorption of Colleges of Education into the university system placed pressure on the flexibility associated with providing meaningful courses for undergraduates training to be teachers. Learning to teach from an experiential perspective, previously the single biggest factor in the preparation of teachers, became less important than the epistemological theory of a school structure. In some instances courses in pedagogy were cut so drastically that in specialist subjects such as PE a pre-service teacher could graduate with a qualification to teach across the ages of 5-13 years with a few lectures amounting in some instances to a maximum of six hours. In primary schools the changing demographic of staff³⁴ seemed to exacerbate a lack of PE teaching. Moreover, some elements of the PE teacher's job were being undertaken by staff at Regional Sport Trusts (RSTs). First developed in the 1980s to promote regional sports, the Trusts quickly expanded their role to include school sport advisors where they either undertook or demonstrated sport-coaching programmes in schools. Coinciding with this development and in many cases working alongside the Trusts as providers of the content knowledge, more full time sport coaches were delivering sport specific programmes in schools and these often took the place of or occupied the time previously set aside for PE in schools.

³⁴ For example, in 2015 approximately 40% of teachers were in the 50-64 age group (*Teacher Headcount by Designation (grouped), Gender and Age in State and State Integrated Schools, New Zealand Ministry of Education*).

In secondary schools the competition between schools for students elevated the importance of good sport results as part of the public profile of the school. Sport, rather than PE became the movement focus within schools and also contributed to the growth of school sport academies (Tristam & Baty 2000; Grant & Pope, 2007). Sport academies in New Zealand were originally introduced into secondary schools as an enticement to students who may have enjoyed sports but had dropped out of school early, to return (Grant & Pope, 2007; Erueti, 2005). This second chance education focus of the sport academies quickly changed to having a focus on elite sporting students whose talent would promote the school through positive media coverage based on their contribution to the school's success on the sports field (Tristam & Baty, 2000).

A third factor in my deliberations around my holistic philosophy of PE related to the introduction in relatively quick succession of two new PE syllabi in 1999 and 2007. The previous, 1987 document, was more technocratic in function than the 1999 and 2007 publications. The 1987 document tended to prescribe what was required and certainly provided supporting documents to facilitate a particular direction, for example the *Guide to Success* booklet (Department of Education, 1987a). The 1999 and 2007 curriculum documents also differed from the 1987 publication in the prescription of the time to be allocated for PE as a core subject in schools. The National Syllabus of 1987 had required PE as a core component of the curriculum from pre-school to the final secondary school year, Year 13, where-as from 1999, the compulsory component only required participation to Year 10. However, the most important differences between the two documents were the changes in the epistemology of the documents relative to the philosophical

approach to PE instruction in schools. The 1987 document was essentially behaviourist in philosophy, whereas the pedagogical focus of the 1999 and 2007 documents reflected socio-ecological concepts and the use of critical pedagogy in the examination of all matters relating to sport and PE. The socio-ecological focus was on the social and environmental factors that effect health and well-being. It not only promoted healthy lifestyles but also posed questions as to what barriers there might be in society to prevent citizens making healthy choices about their lifestyle and environment.

The 1999 Health and PE curriculum noted, “Through the socio-ecological perspective, students will learn to take into account the considerations that effect society as a whole as well as individual considerations and will discover the need to integrate these” (Ministry of Education, 1999, p. 33). It was no longer enough to know something about training principles, now students had to be taught to be critically aware of related issues around the fitness industry or sport. It was no longer “take this it is good for you” but “try this and what are the issues associated with it”. I welcomed these developments in the syllabus but wondered from an integrated holistic perspective whether we might lose the physical from PE (Slade, 2010b). My reflections led me to a position based on social capital and the democratisation effect of sport and physical activity (Christesen, 2012). The pathway to that perspective of course included critical thought but my perspective on PE’s specific contribution was through movement and in order to achieve that end I concluded that TGfU and mastery learning were still critical components to be understood and employed by the practitioner.

8.2 PUBLIC EDUCATION IN A DEMOCRATIC SOCIETY

The basis of my questioning in relation to providing a philosophical justification of PE in schools in the face of what I saw as threats either from inadequate preparation of pre-service teachers or the rise of specific sport coaching both at primary and secondary schools, was to look at one of the main planks for a universal education in a western democracy, namely an educated citizenry and one that engaged with its citizens across the whole spectrum of society. I reasoned that an educated citizen was one that could critically examine politics, discuss events and voice opinions that kept the elected officials' policies reflective of the views of the electorate. In order to be a good citizen in this way people needed to be assisted in engaging in society in its widest sense. It needed to encourage contexts where casual discourse over critical perspectives of current issues might be exchanged and in this way provide citizens a voice and to spread informed opinions and eventually make a contribution to the democratic function of their communities. Education of this type in schools had typically fallen to the humanities, through subjects such as social studies, history or literature. In this sense these subjects were much more than merely content knowledge and skill development. I reasoned that in order for PE to have a similar voice and to justify the subject of PE in the school curriculum in a holistic way, it too had to contribute to the role of producing good citizens and the democratisation of the population. The philosophy of the 1999 and 2007 PE curriculum certainly facilitated this perspective of the place of PE in the school programme.

8.2.1 PE and sport's contribution to social capital

My search for encouraging such meaning through PE led me to Putnam's (2000) notions of social capital. Putnam (2000) described social capital as those tangible substances of society that count most in the daily lives of people: namely goodwill, fellowship, trustworthiness, sympathy and social intercourse. Putnam (2000) added that social capital was founded on concepts such as reciprocity where people do something for someone without an expectation of receiving anything specifically back from that person but in the confident expectation that that is how society works and someone in the future will most likely do something for them. Such acts of generosity are typically generated from people being involved in their society. However, in order to be involved in society and not withdraw and become insular, citizens needed the confidence to partake and join into their wider society and make a contribution.

Several authors and reports presented the case for PE or sport contributing to social capital and as such advancing citizens' social capital. For example, Lopez and Moore (2006) reported that young people aged 18-25 who had previously participated in high school sports were more likely to participate in some aspects of civic engagements than those who did not participate. They reported that this was most noticeable in areas such as volunteering, registering to vote and making a statement in a public meeting. A New Zealand study of two communities by Stephens, Pearce and Gillies (2006), identified that one of the prime threads of identity and feel good about their community was through their association with sport in their community. Similar research based in Australia that analysed the concept of building social capital in disadvantaged communities through sport,

noted that sport can sometimes be seen as the “glue of communities” (Skinner, Zakus & Cowell, p. 262).

In 2001 The New Zealand Government received a Ministerial enquiry report on sport, fitness and leisure (McConnell, 2001).³⁵ The report listed one of the four public goods of sport and sport participation as being the development of social cohesion (McConnell, 2001 p. 4). The author noted that sport had the power to bridge social differences and provide national identity. It also suggested that sport and recreation clubs were at the core of New Zealand communities, drawing individuals together and providing facilities and access to community services. He argued that participation in sport helped to strengthen social ties and establish networks within communities.

8.2.2 A good citizen model through PE

These research findings reinforced my belief that participation in sports, recreation and leisure post school contributed to a person’s social capital and contributed positively to the democratisation of society. It also suggested that in order for this participation to transpire it required capturing the interest and developing the competence of young people at an earlier age, notably while at school and hence this goal should underscore the philosophy and structure of teaching PE. The overarching model for achieving such an outcome that includes various methodologies or models of instruction for the physical educator, was therefore a good-citizen model. Within this model, I argued that it was the responsibility of the physical educator to strive to have as many students as possible achieve competence in a

³⁵ This report is sometimes referred to as the Graham Report.

wide variety of movement skills that would enable them to elect to participate in sport, recreation or leisure activities of their choosing within their community. A good citizen model of PE also translates to a physically well-educated populace that has benefits for citizens at individual, community and national levels. For the individual there are health benefits of a physical, emotional and spiritual kind. At a community level, there are the benefits associated with the interaction and fellowship that transpires when people meet to play sports, recreate or take part in leisure. Such interaction encourages socialisation and a discussion of current issues and can even give communities a focus and direction. Nationally, a fit and active populace promotes greater participation in society, involvement with issues and less demand on health services. Through this interpretation of the role of a physical educator, I argued (Slade, 2006⁽¹⁾; 2009⁽²⁾) that PE contributes to democracy. If that argument is valid then perhaps the opposite also applies, namely that a person who is denied a chance to be physically well educated is being discriminated against in terms of their ability to choose to be a fully functioning member of society. In order therefore for PE to fulfil its role within a democracy, to promote equality of opportunities and other human values, it needs those who teach it to become accountable for all students' learning and not just that of an elite few. Previously, when asked to identify the difference between sport and PE I had resorted to discussions of methodologies, now I also included critical pedagogy and the development of movement competence through a good citizen inspired model of instruction.³⁶

³⁶ Reinforcing the perspective of the need to develop competence to encourage citizens post school to be physically active or volunteer in community sport comes a recent report from the Australian Sports Commission (May, 2017). It noted the degree to which children's participation in sport varied depending on the involvement of the parent. Children's involvement is nearly at 90% if at least one parent is physically active and volunteers in sport and only 50% if a parent is not involved as a player or volunteer.

8.2.3 The case for TGfU and mastery learning in games

Within a good citizen model of PE, I had suggested the learners' interest needed to be captured. Once achieved their movement competencies should be developed in order that they may choose to participate in physical activity within their wider society. To achieve this required transforming children's natural instincts of play to sports and games and this transformation was best achieved through a TGfU model of instruction. Competence or mastery in movement is important for achieving this end because few of us really enjoy things in which we cannot achieve some basic mastery. If you cannot swim, then you are unlikely to choose swimming as the physical activity to improve or maintain some basic level of fitness. Anecdotal evidence suggests that parents who did not enjoy sports pass on similar feelings to their children and so continue a cycle of deprived citizens. In order to break that cycle is a requirement to ensure that as many people as possible are taught to master basic movement skills.

We cannot make people join sports or take part in physical recreation activities post school – but within my concept of a good citizen model of teaching PE, our small contribution to democracy from a movement perspective in PE, was to equip them to participate if they chose to. My position in the university provided opportunities to explore further this philosophical position. As such, in 2001 I undertook to survey players and officials at the New Zealand National Masters' Hockey tournament (N=120)³⁷ that at the time catered for teams from ages, 35 to 60 years. A direction

³⁷ There were 50 men's and women's teams at this tournament, approximately 700 players hence I am not claiming my 120 respondents represented all the views of participants at this tournament.

of the survey was to discover each participant's hockey playing background. Did they come to be playing masters hockey with or without a previous playing history in the game? I found that 95% of respondents had played hockey at secondary school. Playing levels also suggested that they had been competent players, with 90% indicating they had, post school, played in senior adult competitions. In other words, the competency barrier did not hinder them when it came to playing sport (Taggart & Keegan, 1997). They had previously mastered many of the skills of the game and, importantly from my perspective, this capture and competence had occurred while they were still at school.

Further exploring the thrust of Putnam's (2000) definition of social capital and volunteering, I also explored through my survey whether the Masters players confined themselves to merely playing the game or did they also volunteer to contribute in a wider role within hockey. Eighty-eight percent (88%) of all respondents reported some other involvement in hockey apart from their playing. They were also coaches, managers, fundraisers, referees, and committee members and they undertook all of these duties as volunteers. It was quite clear that these people provided much of the social capital in their towns and cities that kept hockey going. They provided the structures in society that allowed young people to participate in sport.

8.3 THE TEACHER AS RESEARCHER

My views on the importance of TGfU and a Personalised System of Instruction (PSI) in both capturing and providing basic competence in movement skills as a means to give students the choice of participating in sports and recreation and consequently contributing to the social capital of society was further reinforced by PSI research undertaken as part of my Master's degree (Slade, 2006). For this research I developed a system of personalised mastery learning for novice tennis players. The programme directed them to becoming proficient at starting a game of tennis with an overhead serve and sustaining a cooperative rally using both backhand and forehand shots.

The results of this mastery programme of instruction suggested significant positive learning outcomes with more than 90% of the students progressing to the later stages of the mastery sequences involving serving and sustaining a cooperative rally. It might be argued that the point of playing tennis is not to be cooperative in returning the ball and that indeed the opposite is what one should strive for by making the return as difficult as possible for the person you are playing against. However, in stressing the player-centred nature of this programme, the fact that students of like ability were paired up for the classes, this was not playing against an opponent but playing with a partner, a notion that lent itself to cooperative learning. In addition, students were made aware that their improvement at this level required lots of hits of the ball and that was best achieved through playing the ball in a manner that made a return from their partner as likely as possible.

In my role as educator researcher I sought to involve my students in understanding

the philosophy of PE and the models of instruction I thought would best achieve those outcomes through exploiting the avenues that now presented themselves arising from my research.

In advancing the view of research led teaching I promoted the assignment work of my students by assisting in editing their work to make it suitable for publication and to date have achieved that outcome with three undergraduate students (Chattington & Slade, 2015; Renall, & Slade, 2014; Williams & Slade, 2016).

For the students I was teaching, the experience both in using the methodologies as opposed to only being a recipient, generated considerable positive feedback. It helped reinforce to them the value of the teaching approach they were receiving and illustrated the value of critical examination of methodologies of instruction. I also hoped it would encourage adoption of both strategies in their teaching post their graduation and subsequent employment as teachers.

8.3.1 Disseminating perspectives nationally and internationally

In my university role presenting at conferences and conducting workshops was encouraged and throughout this period I received many such opportunities to undertake this function, often from unexpected quarters. For example, the New Zealand Professional Tennis Coaches Association Conference (Slade,⁽³⁾1999) invited me to present to them on my mastery learning approach to teaching tennis; the New Zealand Rugby Development Officers Conference on capturing young people to the sport (Slade,⁽⁴⁾1999); the Equestrian Sports New Zealand Coach Educator Conference on a TGfU approach in young rider education (Slade,⁽⁵⁾2011),

and three or four TGfU presentations per year for Hockey New Zealand's Coach Development programmes. In addition, there were presentations for various Regional Sport Trusts (RSTs), (Slade, ⁽⁶⁾2003; ⁽⁷⁾2004; ⁽⁸⁾ 2005; ⁽⁹⁾2007; ⁽¹⁰⁾ 2008; ⁽¹¹⁾2011). Internationally, I was invited to be a keynote speaker on this topic in Singapore at the West Zone Physical Education Conference (Slade, ⁽¹⁾ 2006) and twice to present to schools in Hong Kong (2010; 2012^(12, 13)). In 2009 ^(14, 15,16) I also accepted invitations to make presentations on TGfU at Loughborough University, UK, Leeds Metropolitan University, UK and the German University of Sport, Cologne, Germany.

Perhaps my biggest audience on this topic was as a keynote speaker (Slade⁽¹⁷⁾, 2009) at one of a series of conferences in the United Kingdom (UK) developed in conjunction with the notion of creating a legacy around the then upcoming 2012 London Olympic Games. Entitled the 'School Sport Partnership Conference', held in Telford, UK and with 1500 delegates this was a major platform to suggest a legacy of a different kind other than improved motor performance to hundreds of delegates.

I also took opportunities to advance these views on citizenship, integrated PE and play as important components of a physical education and of course the need to have teaching methodologies that promoted these concepts in journals and other media outlets. These developments represent my earlier reference to a Bourdieuan perspective of my evolving habitus and practice within the field during this period. This is reflected in publications on these topics that appeared in *The Education Weekly* (Slade, 2009) based on the concept of building skills through play,

Integrated PE in the New Zealand Physical Educator (Slade, 2011; 2013), a keynote address at a Sport Northland Conference, entitled, '*Just let the Children Play*' and in the Australian Professional sport coaching journal, *Sports Coach*, Capturing Students for game instruction through integrating a TGfU approach into PE Lessons (Slade, 2007). My opportunities to spread the message re TGfU were also enhanced through recognition of my developing capital vested in my expertise in this area that resulted in receiving invitations to present on this topic at the 27th ACHPER International Conference, Adelaide, SA, Australia (Slade, 2011), and also an invited publication in a special edition of the professional journal of the Australian Physical Educators Journal (Slade 2015).

Bourdieu's (1984) notion on the nature of changing habitus and capital within a field of enquiry took a considerable positive turn for me in 2009. The previous year Rod Thorpe had used his influence to secure for me an invitation for a sabbatical at the birthplace of TGfU, Loughborough University, which I was able to accept late in 2009. Sadly, Rod had retired from his university position at that stage but David Bunker was still at the university and I was able to spend time with him and discuss various issues associated with TGfU. Also to prove influential to me in this visit were Louisa Webb and Nick Bromell, both extremely able practitioners in the application of the TGfU model of teaching games and sports.

Also reflective of my change in social capital within the field of PE, and specifically TGfU, was the invitation I received as one of only three invited workshop presenters for the 6th International TGfU Conference in Loughborough (Slade⁽¹⁸⁾, 2012) that celebrated the 30th anniversary of the publication of the seminal work on TGfU by

Bunker and Thorpe (1982) who had lectured at Loughborough. At this conference I was also elected to the TGfU International Task Force as New Zealand's representative. Further endorsement of this status was reflected in an invitation in 2013 to specifically travel to Holland to present Master Classes on TGfU at Windesheim University, Zwolle and Fontys University, Eindhoven, Netherlands. These presentations formed part of the opening of a collaboration between their universities and Ghent University, Belgium, towards the establishment of a centre of excellence for the teaching of games (Slade, 2013^(19 & 20)). These outcomes were the fulfilment of many years of work in lecturing, providing workshops, writing journal articles and making conference presentations on these topics.

At the 2013 ACPHER International Conference in Melbourne, Professor David Kirk in delivering the 2013 Fritz Duras Memorial Lecture, spoke of the need to interpret curriculum in the sense of valuing physical activity. In terms not too dissimilar to those I had been advocating since the 1980s period of my HoD experience at Awatapu College, Professor Kirk's challenge to the assembled audience was the need to ensure that teachers of PE explored methodologies that both captured and motivated young people to participate and become competent in physical movement, especially in games and outdoor pursuits. He noted that this was important both for the individual's personal health gains but also for the social benefits that accrue for society when a large body of citizens is motivated to do so. That such an esteemed person as Professor Kirk should be advocating these ideals provided me with considerable reflective satisfaction that I was/am not alone in my broader perspectives on the values associated with PE.

CHAPTER EIGHT SUMMARY

In the late 1990s changes in government policy on teacher training heralded a change in emphasis for me from teacher educator, to a more philosophical researcher role, coupled with overt expectations in regard to conducting and publishing research. The result was the publication of three texts (Slade, 2003, 2005, 2010), and numerous published articles related to the TGfU model. The academic role also facilitated attendance at international conferences where I discovered that my particular evolving model of TGfU was well received. During this period I was elected as the New Zealand representative on the TGfU International Advisory Board. Within that role, I coordinated a one day International TGfU symposium as part of the international conference of the International Association for Physical Education in Higher Education (AIESEP) in Auckland in 2014. My evolving status within TGfU circles also contributed to a sabbatical at Loughborough University, the birth place of TGfU. I made presentations to staff and pre-service teacher trainees in PE while also delivering an invited key-note presentation to an international conference (Slade, 2009) on an integrated model of PE, where TGfU was presented as an integral part of developing a good citizen model of teaching in PE. Nationally, the changing face of PE in schools with more input from regional sport trusts (RST) saw me invited to provide courses for teachers, coaches and regional trust coordinators on the TGfU model. In the next section of this thesis, Part C, the focus is on publications that provide the author's perspective on long standing issues associated with the implementation and dissemination of TGfU, a brief comment on TGfU and elite sport and to present a theoretical case for the adoption of philosophies and values that avoid ideological responses in coaching and teaching.

PART C: CHAPTERS NINE TO ELEVEN

Part A established the development of TGfU through analysis of the literature, the methodology of investigation and the impact of significant agents.

Part B, through the ontology of self and the epistemology of an emergent, evolving model of autoethnography, reflected on my contribution to the development of GCL in NZ.

Part C as the third part of this thesis notes that these changes have not always been smooth or linear and there have been legitimate tensions and disagreements between agents over how games and sports should be taught, especially to young people. While these issues are more of a global concern than specifically a solely New Zealand one, that does not diminish the fact that the impact has been felt here and has affected the evolution, dissemination and adoption of GCL models.

Chapter Nine provides a perspective of my teaching of games when I embarked on this research and a personal solution that has contributed to the further evolution and dissemination of GCL and TGfU in New Zealand.

Chapter Ten provides an opportunity to reveal aspects of this journey in the form of a further understanding of GCL, especially through the presentation of a revised model of GCL that is reflective of the process of this work that has allowed for critical reflection of my own practice. The collective effect of this section reinforces Kirk's position (2016) that when TGfU is viewed as a model for interpreting games teaching and not as a method, it provides a flexible philosophical position from which to instruct games at all levels.

Chapter Eleven then provides conclusions from the thesis in relation to the research questions.

CHAPTER NINE

TRANSFORMING PLAY: TEACHING TACTICS AND GAME SENSE

CHAPTER OVERVIEW

This chapter presents the philosophy of and practical examples from the author's published text, *Transforming Play: Teaching tactics and game sense* (2010a), that addressed many of the issues surrounding the teaching of games and the dissemination of the GCL model of TGfU in PE and sport. The initial focus is on the position of Ericsson et al. (1993), who suggested a need for 10,000 hours of deliberate practice in games from as early an age as possible in order to become an elite sportsperson and in particular, their position that such an experience should be devoid of fun. Acceptance of this position appeared to be an endorsement of traditional behaviourist methods of game instruction working against the adoption of GCL models of instruction. At the same time, the counter arguments of Côté (1999) and Côté et al. (2007) to the Ericsson et al. position are presented, as is Pope's view (2006), of the need for affect in children's games. Another issue explored is Launder's claim that TGfU is just too complex for teachers to use (Launder, 2001). This is examined through reference to Kirk's (2005, 2016) views re TGfU and transcending current practice and the position of Stolz and Pill (2014) on the divide between the habitus of the academic researcher and that of the practitioner, the applier of that research. The second part of this chapter provides responses to these positions in the form of an evolving GCL model.

9.1 PLEASURABLE PRACTICE

9.1.1 *Ericsson, Krampe, and Tesch-Romer's deliberate practice*

While in my role as a lecturer at the PNTC I promoted to pre-service teachers the concept of play and associated fun as a foundation for capturing young people in terms of longer-term involvement in sport and physical recreation, I was aware that my view was not the only position on teaching games, especially if the sole outcome of that teaching was to produce elite performers. A view contrary to mine had developed post the Ericsson, Krampe, and Tesch-Romer research publication of 1993, that called for 10,000 hours of deliberate practice, and subsequently popularised by Gladwell (2008), whose observations were perhaps, disparagingly referred to by Chow, Davids, Button and Renshaw (2016, p. 28), as 'pop science'.

A simple summary of Ericsson's et al. (1993) position stated that in game teaching it was deliberate practice with a focus on improvement that was essential for developing elite sport performers. Ericsson et al. added that such practice typically required 10,000 hours of deliberate practice over ten years of endeavour to produce elite athletes and that the sooner a person started this journey the better; in other words, it should start with young children. In summary form their terms of engagement around deliberate practice were that it required full concentration, practice designed to improve performance, and practice not done for social or monetary gain, and not inherently enjoyable (Ericsson et al., 1993).

Of all the conditions noted by Ericsson et al. (1993), the performance recipe around deliberate practice that had as a condition of practice that it not be undertaken for pleasure appeared to me, to be so devoid of any observation of children and youth

games and sports that I wondered if in fact the authors had ever observed children playing games and sports? The idea of 10,000 hours of deliberate practice without that condition was contrary to my own experience over many years of playing sport that included my participation in sport at an elite level. Seeking insights other than my own on this condition, practice without fun or enjoyment, I contacted members of the New Zealand Men's Hockey team that won the Gold medal at the 1976 Montreal Olympic games as to their experiences. I received 12 replies from the 16 players contacted and in relation to the Ericsson et al. position of practice not being enjoyable, all clearly stated how much pleasure and satisfaction they received from practising their sport. Their view was that unless they enjoyed the practice, and I understand that enjoyment takes on many hues, they would not have continued to make the commitment to that activity. I conducted a similar survey with the New Zealand Men's Hockey team of 2010 that resulted in almost identical replies. For the players in the 2010 New Zealand Men's Hockey team, they noted that when starting out as young players, fun and pleasure were priorities. They added that while it is a different type of pleasure to that which they currently enjoyed from playing their sport, they reiterated the view that if they did not enjoy the practice and the games they could not continue to make the sacrifices required to play at the elite level in what is still largely an amateur sport.

9.1.2 Deliberate play

In general, it is accepted that focused rehearsal of technique is a precondition of elite success when complex skills are involved in a sport. However, at the younger age bracket that Ericsson et al. had identified and recommended as requiring deliberate practice, others, Côté (1999) and Côté et al. (2003; 2007) were suggesting

another approach. They suggested a stage of deliberate play. Their summary of deliberate play conditions included: “done for its own sake; enjoyable; pretend quality; interest in the behaviour flexibility; adult involvement not required; occurs in various settings” (Côté et al., 2007, p.186). This interpretation of stages of learning resonated much more strongly with my experiences and philosophy of learning in PE and sport and appeared to complement my published concepts of transforming play.

9.1.3 Affect in games

Adding to this critique and novice experience in sports, Clive Pope (2006) writing on affect and youth disengagement from sport, provided a perspective on sport that suggested a complete antithesis from the notion of deliberate practice for young people. He suggested that part of the reason for youth leaving sport was their early exposure to “adult-imposed versions of it” (p. 17). Pope argued that sport had received much attention from “scientific and cognitive approaches to instruction” but in the process “the emotional tenets of playful activity is lost” and that sport is presented to young people “as a serious matter” (p. 17). The observations I made in 2010 (Slade, 2010a), supported by the research of luminaries such as Côté, Baker, Abernethy and Pope, validated my position of the need for fun and enjoyment in playing games as a keystone to the motivation of young people to engage in games and in later years, sport. It reinforced my concept of transforming children’s play, while maintaining many of the elements of enjoyment, in order that they would be motivated to participate in more structured sporting activities when they were ready.

9.2 A JET PILOT'S LICENCE TO FLY

9.2.1 *TGfU is too complex for teachers*

TGfU as a model was first published in 1982. The first international conference on TGfU took place in 2001 with a second one in Melbourne in 2003. Despite much enthusiasm for the model from the several hundred delegates at the 2003 conference, there was some bewilderment, especially among academics, as to why the model was not being adopted more readily by practitioners in schools. Alan Launder (2001) and again in his keynote address at that second International TGfU Conference in Melbourne (2003), strongly suggested that the issue confronting the non-adoption of the TGfU model in schools and especially by non-specialist teachers of PE, was the model's complexity in terms of content knowledge required to implement it. Launder noted that traditional methods of game instruction were extremely straightforward requiring little specific game content knowledge to implement. Referring to a pilot licence analogy, Launder suggested the depth of knowledge required to teach games in a traditional manner required the equivalent of a basic flying licence. However, to make TGfU fly, he stated it required the equivalent content knowledge needed for obtaining a 'jet pilot's licence' (Launder, 2001). Launder's observation obviously struck a chord because while the TGfU model has been welcomed by academics, is taught in many teacher pre-service programmes and has spawned hundreds of articles and six international conferences (Butler & Ovens, 2015), it is still considered by some as too difficult to use/fly by the generalist teacher of PE. Indeed, in 2016 at the sixth International TGfU Conference, David Kirk who had written in 2005 that TGfU had the potential through its adoption as a holistic method of instruction by teachers of PE to provide a future for PE that transcended current practice, felt moved to discuss Launder's

comment in the final keynote address of the conference under the heading, ‘Do you need a jet pilot’s licence to make TGfU fly?’ (Kirk, 2016).

9.2.2 *Lauder’s Play Practice*

It is without doubt that Alan Lauder was an original thinker in and an extremely well qualified coach of sport and games teaching. Among his many accomplishments he published two major works on game teaching, *Play Practice* (Lauder, 2001) and a second edition with Wendy Piltz (Lauder & Piltz, 2013). In contrasting the Lauder and Piltz approach to teaching games and TGfU, they stated that the fundamental difference between the *Play Practice* approach and TGfU was that TGfU was about redressing the balance between tactics and technique and providing a game, modified for learning (Lauder & Piltz, 2013). By contrast, *Play Practice* started with a thorough analysis of the activity to be taught, and then “determining which aspects of skilled play are most important for the group or class to be taught.” (Lauder & Piltz, 2013, p. 13). Lauder and Piltz also suggested that this approach was more child-centred and more capable of meeting individual student needs than the original TGfU model that they said, “presented a linear sequence to guide professional practice.” (Lauder & Piltz, p. 14). They also noted “whilst this model (TGfU) suggests both the activity and the learner need consideration when framing learning, there is limited guidance for this process” (Lauder & Piltz, p. 14). Lauder and Piltz (2013) were correct at one level in this observation that there was limited guidance on how to achieve the ends of the TGfU model. Bunker and Thorpe did not write a ‘how to book’ or a ‘do it this way’ set of instructions. They provided a model and then developed principles for practitioners to use when developing their own lessons and programmes (Thorpe & Bunker,

1989). So perhaps this was part of Launder's argument. To apply the Bunker and Thorpe principles of teaching games through a TGfU approach you had to know a lot about games because the authors did not provide a manual. *Play Practice* (Launder, 2001; Launder & Piltz, 2013) is certainly a 'how to teach games' text and it contains much insightful advice, but whether it provides the non-specialist teacher, who may only have limited understanding of games and sports, with an easy starting point or licence to fly game-centred learning methodologies, is held in some dispute. Stolz and Pill (2014) note that the only study on *Play Practice* (Launder, 2001) as a model was undertaken by Holt, Ward and Wallhead (2006). This investigation concluded that unless learners possessed an underlying skill level proficiency then the *Play Practice* approach was not sufficient to improve game performance. My perception of the issue with the *Play Practice* approach, as with many such 'how to play' games and sports texts of this genre, with one or two exceptions (Mitchell, Oslin & Griffin, 2006, 2013; Butler, 2013, 2016), is that the step to teaching games is nearly always immediately to the sport as the medium. It is this step that in my experience causes the generalist teacher to hesitate, to be cautious in adopting a game-centred approach to teaching. When the first step is an immediate one into specific sports it precipitates teacher concerns of pedagogical content knowledge (Kirk, 2005, 2016) and it all seems so complex and difficult so they avoid it least they get lost in what should be happening. By contrast, a traditional game teaching approach, organising basketball dribbling relays, seems like fun, requires little to no specific knowledge and a game at the end keeps all busy, happy and good (Placek, 1983)!

9.3 PRACTITIONER PERSPECTIVES

9.3.1 *Stolz and Pill*

Stolz and Pill (2014) in an article designed to reconsider the relevance of teaching for understanding in a PE context reached conclusions that would resonate with many PE practitioners. Focusing on the type of research that has been used to examine TGfU and similar games models, their research, among several conclusions, brought attention to the “disparity between researcher as theory generator and teacher practitioner as theory applier” (Stolz & Pill, 2014, p. 36; Locke, 1977). They noted that in order for the researcher to quantify findings, the game-centred learning researcher, initially focusing on TGfU, has largely employed an empirical-scientific research design based on a perception that “because PE activities are overt they are also measurable” (Stolz & Pill, 2014, p. 63).

The need for measurability, noted by Stolz and Pill and also by Kirk (2005; 2016) has, in my view, led the academic researcher down the path of sport-specific investigations, because it is controllable in a scientific, quantifiable manner. Perhaps, and I speculate, these publications have in turn been interpreted by those charged with preparing generalist teachers to take PE in schools to focus their work on such studies and this has reinforced the sport focus in game teaching within such models as TGfU and Game Sense. In addition, the adoption of abbreviated teacher education programmes (Kirk, 2014) cannot achieve the pedagogical knowledge and confidence to allow teachers to employ game-centred models of instruction. My early experience in offering TGfU-based sessions for such pre-service teachers mirrors that of other researchers. Initially there was considerable enthusiasm for the employment of the TGfU model but just as quickly they often appeared intimidated

when required to develop their own ideas (Lauder & Piltz, 2013; Siedentop 2002). Stolz and Pill suggest that what is required to overcome this divide between researcher and practitioner is for the researcher to focus on practitioner referenced research, reflective of classroom practicalities. Such a shift might also change the steps suggested in how games could or should be taught in schools. It may, especially with novices and elementary school contexts, lead to less of an emphasis placed on particular sports as the medium for a holistic understanding in games and more of a focus on non-specific, small-sided games that potentially transform student understanding of play to sport.

9.3.2 Kirk's holistic approach

As suggested in the overview of this chapter and supported by Kirk (2005; 2016), TGfU has been viewed as having the potential through its adoption as a holistic method of instruction to be part of a future for PE that transcends current practice. In 2016 Kirk again, this time in the final plenary session of the 6th International TGfU Conference in Cologne, readdressed Lauder's question of 2001 and statement in 2003, "Do you need a jet pilot's licence to make TGfU fly?" In reflective mood, Kirk asked whether the lack of uptake of TGfU by PE practitioners was because it was just "too complex for ordinary teachers" (Kirk, 2016, p. 29); i.e., the Lauder position, or that generalist teachers shrunk at the prospect of GCL models because it challenged their pedagogical content knowledge? While not entirely dismissing the too complex argument, Kirk also asked whether there were other root causes? He thought there were, suggesting that other root causes lay in the molecularisation of teaching units and the dominance of biomechanics that encouraged PE teachers to cling to a belief that their purpose was to be "expert

teachers of techniques in sports as a means for developing proficiency in games” (Kirk, 2016, p. 29). Kirk also noted that an issue with the TGfU model and game-centred learning approaches in general was that it challenged teachers to step outside their comfort zone and think of games teaching in ways other than by direct instruction. Additionally, Kirk argued, as did Stolz and Pill (2014), that research that set about trying to compare traditional methods of instruction with game-centred models such as TGfU, provided a false agenda for those perhaps reluctant to explore other methods. Such results are typically inconclusive and as many have noted, especially Rink et al. (1996), the methods of research and contexts are so different they are meaningless as the approaches measure quite different outcomes.

Kirk (2016) also observed that arguments against the use of game-centred learning by those who claimed the models excluded repetition of techniques through drilling were in fact unfounded. Game-centred methods of instruction did not exclude the use of drills and the development of technique but what they do is suggest that these are learned within a nonlinear representative learning design (RLD) (Chow et al., 2016; Pinder et al., 2011; Smith, 2016), and, in so doing, provide for meaningful and authentic learning conditions that produce understanding of game play as opposed to performance in specific game techniques. Kirk added that traditional methods of instruction take place in out of context environments, while the game-centred approaches embrace notions of situated learning (Kirk & McPhail, 2002), affective outcomes (Chow et al., 2016; Pope, 2006) and opportunities to develop skill, that could be defined as the application of techniques within a game rather than mastery in isolation from the performance context (Chow, et al., 2016; Kirk, 2005; 2016; Launder, 2003).

Kirk's position and his arguments although not explored in detail here, relate to pre-service teacher education for generalist teachers of PE and resonate with my own philosophy around teaching of PE in general and specifically in the teaching of games. In this sense the word defining the process is 'education' and the physical is more than merely scientific knowledge; it is putting a physical education outside the mere realm of biomechanics and into an understanding of socio-cultural and political concepts associated with games and sports and physical activity within society.

However, despite providing clear philosophical and conceptual structures for the use of the TGfU by generalist teachers, Kirk did not and has not given examples that illustrated these concepts. As such he stands outside what Stolz and Pill (2104) appear to be seeking for such teachers; namely, simple, 'how to' examples that have the effect of empowering the generalist teacher to adopt the constructivist epistemologies associated with GCL. It is my position that the key to the uptake of TGfU by those without a 'jet pilots' licence' in sport content knowledge requires a first step that is not immediately into a sport context, and this is what is at the core of the *Transforming Play* (Slade, 2010a) text. This is explored in the final part of this chapter and addresses many of the issues surrounding games teaching in PE and sport coaching. As a reference to that exploration, an evolving model for interpreting Transforming Play is presented next.

9.4 A MODEL FOR TRANSFORMING PLAY

To overcome the criticism of the difficulty of applying the original TGfU model (Bunker & Thorpe, 1982) first stated by Alan Launder (2001) and still topical as noted by Kirk (2016), requires a model that overcomes the first stumbling block, namely the depth of content knowledge required to modify games and sports. I argue that in order to achieve that goal it is necessary to adopt some of the principles espoused by Côté (1999) and Côté et al. (2003; 2007) noted in their model of deliberate play, that is done for its own sake, inherently enjoyable and with little input from adults. To achieve these ends in teaching games and sports such a model needs to capture and transform the learner's natural interest in playing games. Achieving this transformation requires a model of instruction that emphasises play, basic mastery of fundamental movement skills (FMS) and game understanding. Figure 3, 'a model for transforming play', is presented as my, at the time, evolving practice and understanding of how this might be achieved.

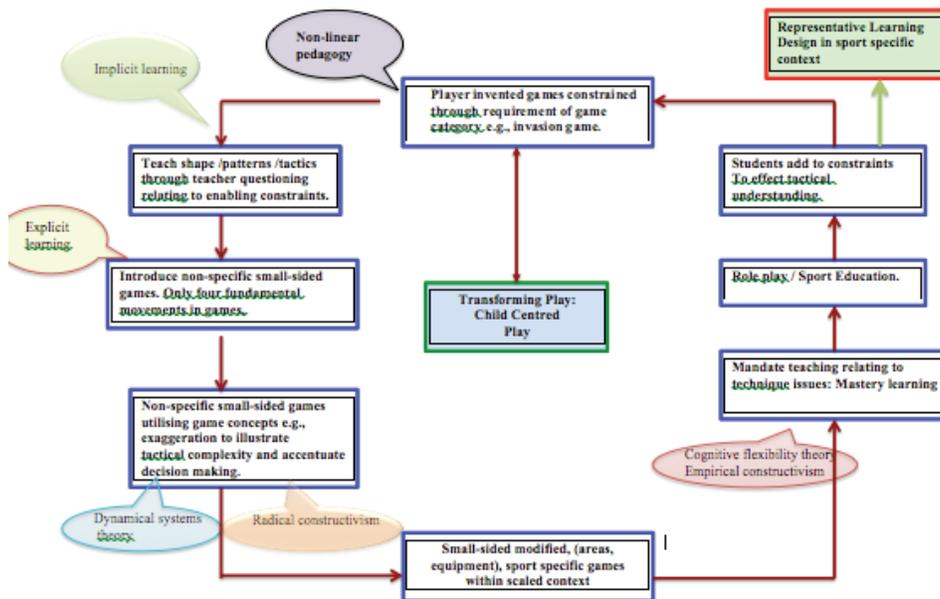


Figure 3 A Model for Transforming Play

9.4.1 Overcoming the Jet Pilot conundrum

How this model differs from the original TGfU model (Bunker & Thorpe, 1982), and in so doing overcomes the *Jet Pilot* conundrum (Lauder, 2001 & 2003; Kirk, 2016), is achieved in several ways. Firstly, it does so with its philosophical intent. The original model was designed to overcome, through an understanding approach to instruction, inadequacies in game understanding and performance and to encourage greater participation in games, sports and recreation. This approach is also a function of the model in Figure 3 but in the original TGfU model (Bunker & Thorpe, 1982), the first step of a linear progression (Stolz & Pill, 2014) for learning games started with a modification of the adult version of the game. It is this first stage, the ability to modify established games and sports that causes the conundrum in the adoption of the TGfU method, especially by the generalist teacher or beginning coach. The first step caused the stumble and prompted the Lauder reference to needing a Jet Pilot's licence to make TGfU fly.³⁸

The Transforming Play model starts with a more holistic intent for learning games and sports that allows for a more exploratory, non-linear first step that requires minimal coach and sport content knowledge. Coaches only need to understand the four different TGfU game categories (Werner & Almond, 1990) and to describe the basic principles associated with those categories to their players to make Step 1 work (Figure 3).

³⁸ See Kirk, who in his address to the 2016 6th International TGfU Conference, supported my conclusion re the difficulty of modifying sports as a reason for the lack of widespread use of TGfU by non-specialist teachers of PE.

1. Target games: participants propel an object at a target.
2. Net/wall games: participants propel an object into space making it difficult for opponents to return.
3. Striking/fielding games: participants strike an object away from defenders in the field.
4. Territory games: participants invade an opponent's territory to score.

Without the need to know how to modify an established sport or game, a Jet Pilot's licence is no longer needed to get the model underway. The second major difference between these models, one that is inextricably associated with this first step in the model, is that the first games are essentially about play, and although guided by some minor constraints from the coach, what is played is invented by the players who will play the game. Techniques are not imposed on those playing and as children never invent games they do not understand or cannot play, then all those participating can be involved. In this way all children can be engaged with the play and through providing modified equipment and scaled playing areas, the first step towards transforming players' play is underway in a fun and enjoyable environment of the players' making.

The third major difference between the original TGfU model and what I am advocating is through my explicit use of mastery learning. Although the original Bunker and Thorpe model (1982) also had a skill execution stage, my employment of mastery learning and associated individualised goal setting makes an emphatic statement about the importance of the development of technique.

9.5 ILLUSTRATING TRANSFORMING PLAY

In the second part of this chapter I wish to illustrate with reference to the aforementioned academic discussion how the author's published text, the focus of this chapter and a practitioner's perspective, addressed and continues to provide answers to the diverse positions promoted by various academics for the reasons why they believe there is a relatively low uptake in the use of the games teaching model TGfU, especially by generalist teachers. I will use references in the text to refute the too complex perspectives and demonstrate how the four pedagogical principles developed by Thorpe and Bunker (1989) and the need to meet the affective fun outcomes suggested by Pope (2006), can be achieved. I will also suggest that the philosophy manifested within the content of the publication (Slade, 2010a) reflects the concept of deliberate play (Côté, 1999; Côté, Baker & Abernethy, 2007) while also providing a grounding in game play that could be the basis for future elite play. In addition, reference will be made to the concept of non-linear pedagogy and how the structure of the non-specific, small sided games in this publication facilitate a more ecological dynamic context for learning movement skills at the level of performer-environment interactions (Chow, et al., 2016)³⁹.

9.5.1 *Game teaching starts with play*

For many years before and subsequent to the publication of the 'Transforming Play' (Slade, 2010a) text, I was convinced, as illustrated in other major publications (Slade, 2003, 2005) and numerous journal articles, for example Slade (2007, 2009), and subsequent to the text (Slade, 2012, 2013a, 2013b, 2014b), that the source of

³⁹ The subject of nonlinear pedagogy and ecological dynamic systems in the learning of motor skills is too broad a subject to delve deeply into in this forum though it is briefly covered in chapter 10. For an introduction to the topic and the application of research to the practice of skill learning, Chow, Davids, Button & Renshaw's 2016 text provides excellent material.

all novice learning in games teaching started with play. It was not just that the message is so often ignored in PE classes where eventually a student bored with the tedious repetition of drills asks, “please Sir, can we have a game?” that prompted this position, but rather I was convinced by my observations of the underlying fun, creativity, joy, and competition in children’s play. Indeed, if you look at game play by young children it nearly always has an element of competition. Children keep the score, you can be out, someone can win, and though to be fair, games can last so long that who won typically isn’t the topic when the play finishes. Hence, having those elements of competition in the games I was devising to transform their play, was not an issue. However, the structure was important. In addition, my sense that none of this play, which could last for hours, was hard work for the children was a compelling motivation to replicate those contexts in teaching games to novices.

9.5.2 A philosophy for playing games

In order to engage pre-service teachers or novice sport coaches in the practice of TGfU, the structure and content of my ‘how to’ text needed to overcome the ‘jet pilot licence’ concerns of Launder (2001). When I first encountered Alan Launder’s work and the first publication of *Play Practice* (Launder, 2001), my mistake was to think we were both using the word play with the same definition and outcome in mind. Certainly in conversations with him I thought we shared our interpretation of play. Indeed, in the introduction to his text he talks of play in the sense that I do. However, within the content of his publications play actually equates to play the game or a modification of it, but it is definitely play the game or sport. If you are starting at this point in your instruction with novices, then you certainly need a jet pilot’s licence to fly.

My own understanding and interpretation of play was in the non-specific sport game context. It was play within a fun, easily performed version of physical activity and my point was to try and transform what I observed in children playing their own made up games through similar contexts that would gradually lead them to a deeper understanding of their play and eventually formal sports. I expressed aspects of my philosophy in an anecdotal manner in the preface to the publication (Slade, 2010a). In the introduction in relation to my own playful game experiences I observed:

You learned tactics through constant play and imitating older siblings or neighbours...Team leaders or captains changed tactics based on who turned up to play. Occasionally those tactics required rule changes if the rest of those playing thought the tactic unfair.

In our playing of games, we never did drills. We never went for training runs. ...The games were competitive. We kept the score and it was only darkness or being called home that ended the games. Importantly, we always came back the next day for more games. (Slade, 2010, ix)

Turning that philosophy into game play looked quite different to a sport first approach. For example, any observation of school playground play, reveals the most common made up games by children are chasing games, where the chaser tries to ‘tag’ those trying to escape. However, if you look through game sense or TGfU ‘how to texts’ you will seldom if ever find chasing games. I included several such games to introduce quite sophisticated game concepts to relatively young players

who initially just enjoy a slightly modified chasing game but with some gentle questioning could start to understand some basic attacking and defensive principles in games and, when ready, apply them to more formal games and sports.⁴⁰ For example, one chasing and dodging game ‘*The Great Escape*’ (Slade, 2010a, p. 2), with the use of some subtle questioning reveals tactics associated with advanced invasion game tactics advocated by Wilson (2002) for adolescents; namely, width and depth in attack and congestion in defence. The questions bring to the attention of the youngsters other aspects of the game, planting the seeds of understanding and transformation of their play.

9.5.3 Splitz Attack

A second such tag game ‘Splitz Attack’ (Figure 4; Slade, 2010a, p. 64) requires players to run and dodge defenders and move through four stages of difficulty in order to reach the highest level of the game; rather in the sense of a computer game. Playing in a rectangular area divided in thirds, pairs of cones are placed to represent ‘gates’ that runners must pass through in order to get to the next level. There is always one more ‘gate’ than there are defenders. This puts an emphasis on timing a run to an undefended gate – the concept of space perhaps in a full sport - and attaining the next level by entering through the undefended gate. For the attackers the key learning outcome is the decision making process associated with timing an attack and looking for space or undefended areas. For the defenders it is learning how to zone defend and coordinate their defensive play. That this game reflects so well the principle of play is seen in how many young players approach this game

⁴⁰ Smith (2016) raises this point re basic tag games, in suggesting that such games can represent non-linear pedagogy across three levels of motor school development being intrinsic, individual and relational.

when they are placed in the role of defenders. They frequently give up easy tagging options in order to ensure they tag their friend. It is not until they are confronted with transforming questions do they change the focus of their play.

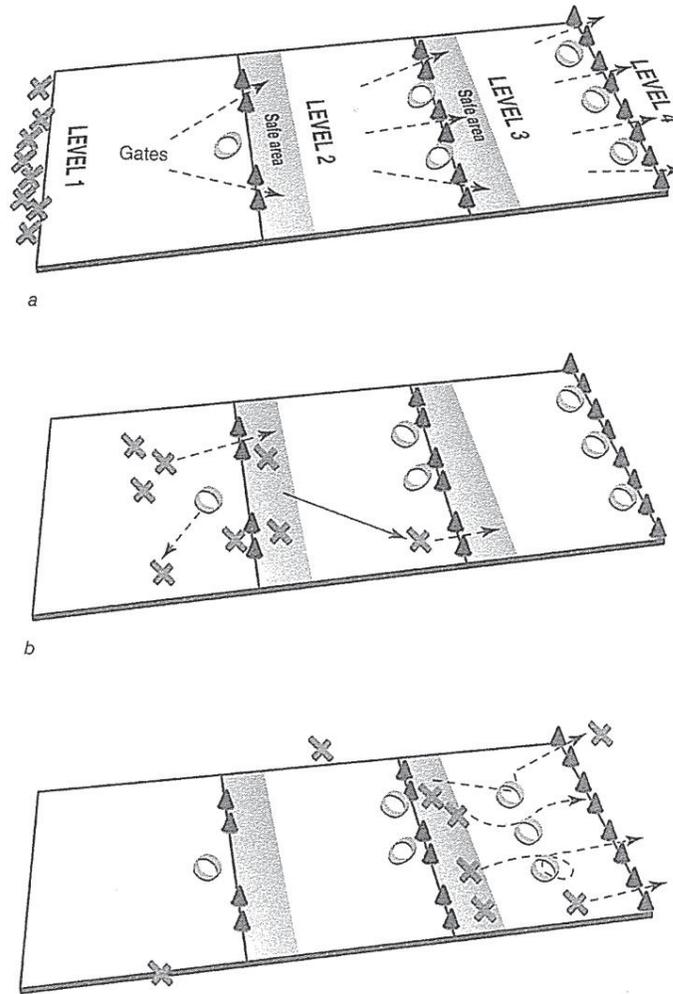


Figure 4 SPLITZ ATTACK (Slade, 2010a, p. 64)

9.5.4 Affect in TGfU inspired games

Various minor constraints can be made to these games in order to develop an even deeper understanding of game tactics but also to cater for Pope's (2006) concerns around a lack of affect in children's games. For example, in the SPLITZ ATTACK game, attacking teams can be asked to *secretly* nominate a player or players they want to

ensure get through to the final level. This requires them to think about tactics and strategies and disguise. One response almost all players come up with in this variation is the concept of sacrifice. Players will present themselves to be tagged in order to advance another player. It can also involve some elementary blocking to ensure the *secret player* gets through. I've found that the idea of a *secret player* adds to the excitement and fun of this game for children. In addition, the concepts of sacrifice to advance another player can be related to softball and baseball and the blocking to basketball and American football. For the defenders it changes their role from merely tagging but to looking at the attacker's body language to see who is the real threat in the game. These may be sophisticated concepts but presented in this context they can be understood at an elementary level.

Although very simple in structure and content these games also reflect aspects of one of the TGfU pedagogical principles (Thorpe & Bunker, 1989); namely tactical complexity. I have observed that the players' responses and insights to oral questions and those posed by the structures of the games equate well to Wilson's (2002) concepts of attacking and defensive principles in invasion games. These were principles designed for teachers to understand and teach to secondary school age children yet easily grasped through the structure of these games designed for much younger students. So do you need a jet pilot's licence to make these games fly? Obviously not with this approach. Such games definitely overcome any thoughts of being too complex for the generalist teachers to teach. In my view this is achieved through embracing the concept of play and within that context, and through the subtle use of questioning children's play can be transformed.

9.6 NON-SPECIFIC GAMES

9.6.1 *Non-specific, small-sided games*

Another key component employed within the TGfU model in the *Transforming Play* text is the use of small-sided, non-specific games (Memmert & Roth, 2007). An advantage when using this approach to introduce a sport is that it can be done without specific reference to the name of the sport. For example, to introduce students to lacrosse, I start with a game called Piltz Pass (Slade, 2010a, p. 35). An introductory game of this nature avoids the teacher being confronted with the issue from some of the players that this is not the real game of lacrosse. If you don't think the game is lacrosse, then you play the game without reference to any preconceived ideas of how lacrosse should be played.

Another advantage of the use of non-specific games is that the games can be designed with constraints that require the repetition of specific techniques. Such a structure enhances the fundamental game movements (Smith, 2017) and provides a form of deliberate practice (Ericsson et al., 1993). However, the sport-specific games in this publication apart, to play the majority of the games in this text, all that is required of the participant is the execution of the fundamental movements of walking, running, dodging, catching and throwing. Because the players find these types of games enjoyable (Slade, 2007, 2013) they can be played for considerable lengths of time and so the repetition of the techniques, noted by Launder (2001, 2013) and (Kirk, 2005, 2016) as a necessary component in learning games, are constantly rehearsed but in an implicit and fun game context (Smith, 2016) rather than in explicit drill practice. In this sense these games provide a nonlinear pedagogical approach to motor skill acquisition suggested by Chow et al. (2016).

One other positive aspect of the use of non-specific games occurs through the unlikely source of naming the game. Most of the games in this text are named after the tactic they were based on. For example, a game based on the tactic of a fast break in sport is called *Fast Break* (Slade, 2010a, p. 58). One of the points of doing this was to create a word association between the tactic and the strategies required to be successful in the game. Children asking the teacher ‘*Can we play Fast Break?*’ would begin to associate the name of the game with its structure and how to score points when playing it. This creates an implicit learning context where the players learn these strategies and develop the techniques without deliberately invoking working memory.

9.6.2 Deliberate play

Côté et al. (2007) advocated the concept of deliberate play as an alternative to deliberate practice championed by Ericsson et al. (1993). Côté et al. suggested that deliberate play games should have structure and purpose but could be played without coaching or adult supervision. Beyond the type of chasing games developed for younger players I also developed games that reflected those criteria suggested by Côté et al. (2007). Two such games in particular have been widely used to teach basic tactical concepts associated with invasion games; for example, *Zone Defence* and *Outlet*.

Zone Defence and Outlet

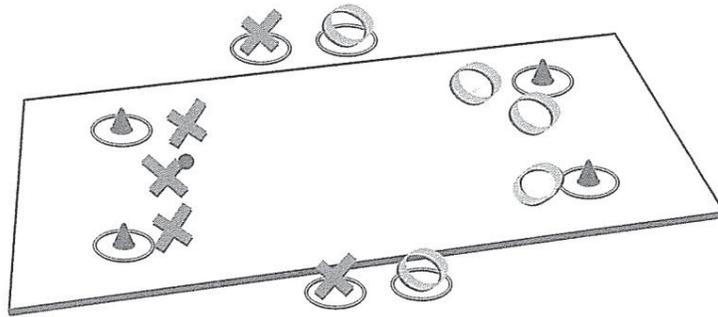
Zone Defence (Slade, 2010a, pp. 52-54) is a tactical strategy familiar to anyone who has played invasion games or sports that in shape have a goal at one end to defend,

for example, indoor basketball. The structure of this throwing, catching but no running with the ball game, are two teams of three who defend and attack two goals. The structure of defending two goals usually sees two players take up this guarding role while the third player standing in front, completes the defence in the form of a triangular shape. The shape is classically a zone-defence formation and the player at the front is 'pointing the defence.' Even more impressive than this basic structure is that as players develop their understanding of how to play the game, attackers move the ball from side to side in the manner reminiscent of back play in football, field hockey or basketball teams or what those sports might call, back and around. However, defenders quickly adjust to this attacking ploy and counter it by the defenders sliding from side to side reflecting the path and direction of the attacker's passes, in the fashion of what sophisticated sport teams would label a sliding zone defence.

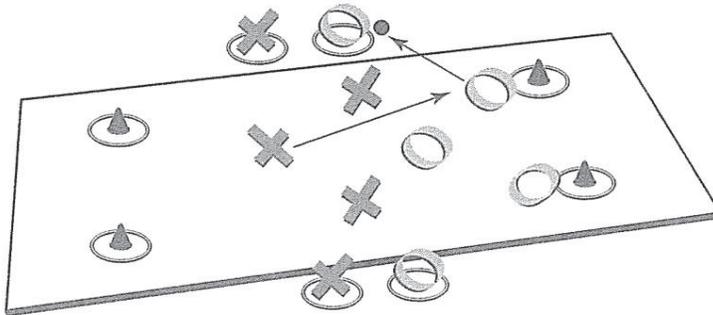
Outlet: Tactical complexity

Another feature of the *Transforming Play* publication was to take the concept and pedagogical principle of tactical complexity and build it through successive games. For example, the game *Outlet* (Figure 5; Slade, 2010a, p. 55) builds on the Zone Defence game with a slightly altered playing formation. The basic formation and shape of the game is the same as *Zone Defence* but with two additional players per team positioned on the side (Outlets) of the playing area. The rule change is that now when the defenders capture the ball or receive it after a goal has been scored against them they get an uncontested pass to one of their outlet players. The outlet player then passes the ball back into and joins the game. The person who passed

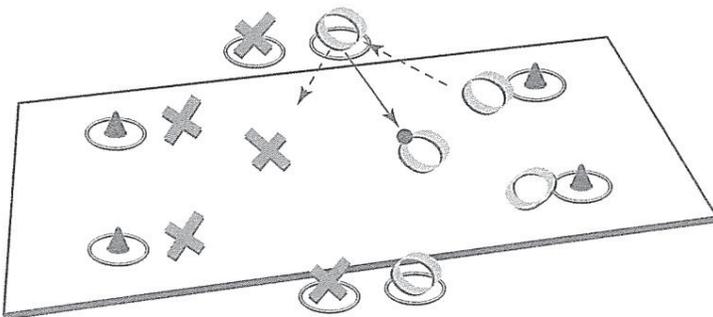
them the ball leaves the game and occupies the just vacated side position of the person they passed to. So they now become an outlet player.



a Basic formation. Note the outlet players standing in hoops.



b A defender intercepts a shot and then makes the outlet pass.



c The outlet player passes the ball back into play and joins the game.
The player is replaced in the outlet hoop by the player who intercepted.

Figure 5 Outlet (Slade, 2010a, p. 56)

From a children's game perspective, the free pass to the outlet player ensures this changing of position occurs and means that everyone is getting game time. As noted, children do not invent games that require techniques they do not possess nor do they develop games where they 'sit and watch on a bench!' The tactical concept of an outlet pass - i.e., where a defender on capturing the ball passes it out and wide of the front of their defensive goal - is common to all invasion games that include a goal in the centre of a playing area to be defended, for example, football. But in this game it also provides a means for player rotation. In addition, requiring the pass to be made as a rule also prevents players only passing to one player on their team. It also has the effect of teaching pass and move – a concept many a coach has struggled to convey to young players.

These are complex tactical plays employed by elite teams and players yet they are accessible through the structure of these games to young players and easily taught by generalist teachers because the game structure invokes the tactics. My point of difference with other 'how to' texts, as evident in these examples, is that the non-specific games allow the concepts to be developed and understood by players because the techniques of the game (run, throw, catch) are not sport-specific (e.g., football techniques,) but are in a play sense, typically accessible to all players. In addition, the structure of the game leads the players to adopt the tactic of the name of the game to play it well and all achieved without a jet pilot's licence.

9.7 PLAY, MASTERY LEARNING AND TGFU

Various authors (Kirk 2005; Launder 2001; Launder & Piltz 2013; Stolz & Pill, 2014) have suggested that perhaps one reason for the disconnect between researcher and practitioner and the uptake of the TGFU model has been that it is too complex for practitioners to apply to their teaching. I have argued that a reason for the complexity is that researchers and writers of interpretative texts have typically come straight to the TGFU model through applying it to sports. I have taken another approach in using non-specific games and structuring my activities around the concept of children's play. In this next example from the text I illustrate how this can be applied to a major sport.

Applying the pedagogical principles of sampling and game modification (Thorpe & Bunker, 1989) to field hockey allows novices to develop a feel for the adult version of the game through play. This is achieved through modification by exaggeration (Thorpe & Bunker, 1989), where the rules and equipment and how they are used are radically changed to achieve the purpose of motivation for playing the game as if the novices were seasoned players. In addition, short interventions to develop mastery of techniques to enhance and spiral the principle of complexity through the games is also employed.

9.7.1 *Stick2hockey*

The opening game of *Stick2hockey* (Slade, 2003) is *Rollaball* (Figure 6; Slade, 2010a, p. 84) and is the introductory game for novices to hockey. As a play activity it conforms to the criteria of being inclusive of all players, requiring only the most basic fundamental movements to play and achieves Pope's (2006) perspective, of

being fun and enjoyable for the players and hence does not seem serious or work like.

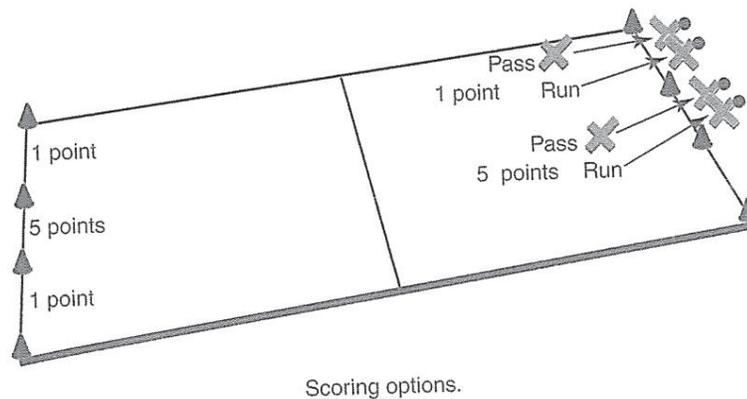


Figure 6 Stick2hockey Rollaball (Slade, 2010a, p. 84)

Reflecting principles of sampling, this introduction to hockey does not use hockey sticks. The rectangular shape of the game is retained and the ability to score goals in the centre of the baseline is also retained. But in this game the only equipment apart from cones to denote the scoring area, is a ball.

The ball is moved by players picking it up and running with it or passing it by rolling it along the ground. Fundamental skills of running, dodging, rolling a ball and stopping a ball are all that are required of the players. A tackle is achieved by that most basic of children's activities, playing chase and tag, as a tag is a tackle. Scoring options reflect the pedagogical principle of exaggeration as scoring a goal in the centre of the base line is worth 5 points whereas over the baseline anywhere else is worth 1 point. The implicit message to attackers and defenders alike is that you need to firstly defend or attack the centre goal but if that option is not available then accumulating points by scoring wide is a good option. For the defenders, the main

priority is to protect the centre goal but give up the wide scoring option because that is only worth one point.

Introducing the principle of game complexity, the second game, *Stick2it*, requires the players to carry a hockey stick in their left hand but it is not used in a conventional hockey sense. This modification forces the players to bend to pick up the ball in one hand and in doing so they implicitly replicate the trap position of the adult version of the game, notably, left hand at the top of the stick and right hand lower down. Next, the concept of mandate teaching (Slade, 2014), is employed because the mature version of the game requires the players to trap the ball with the hockey stick. So a short skill execution session occurs, Step 5 in the original Bunker and Thorpe TGfU model (1982), with a view to developing mastery or basic competence before returning to the next game, *Trap-it*. In this progression of the games the players are now required by a new game constraint, to repeat the technique within a game context. In this sense the practice of the technique moves from a drill context to one of a representative learning design of the sort advocated by Chow, Davids, Button, and Renshaw (2016) (see also, Kirk 2016; Pinder, Davids, Button, Renshaw, & Araujo, 2011).

The games gradually progress towards a full version of the sport of hockey but at all stages players are given options of how they want to play. For example, at an advanced stage a player may choose after trapping the ball, to push pass it using the hockey stick or roll it as in the very first game. The choice is down to the player and whatever makes them feel comfortable. In addition to the gradual shift in the techniques employed, players also play games such as *Zone Defence* and *Outlet*,

previously discussed, and are asked how they think these games might be employed in this introduction to hockey?

A research publication (Slade, 2007) using the *Stick2Hockey* programme (Slade, 2003), suggested extremely positive outcomes for the adoption of this approach to teaching novices hockey in this manner. In response to questions relating to self-esteem and the principle of exaggeration within the structure of the game, 58 novice hockey players responded (mean age 12.3) to a pre and post survey questionnaire, as noted in Table 1.

Table 1 Stick2Hockey & Novice Player Self-esteem (Slade, 2007, p. 30)

Self-esteem questions	Pre TGfU Instruction in hockey	Post TGfU Instruction in hockey
Do you think you will enjoy playing hockey?	21% think they will.	98% stated they did.
Do you think you will make a positive contribution to your team's performance?	12% think they will.	91% thought they did.
Exaggeration principle		
What should hockey feel like to play?	Of the 60% of students who had seen hockey played, all anticipated that hockey should be a fast running, dodging, passing and goal scoring game.	
What did hockey feel like to play?		100% of students indicated that hockey felt like a fast running, dodging, passing and goal scoring game.

9.8 HOLISTIC EDUCATIONAL OUTCOMES

Kirk argued (2005) that TGfU had the potential through its adoption as a holistic method of instruction to be part of a future for PE that transcended current practice. Within this observation he also called for more authentic assessment as he felt currently that teachers were failing to provide assessment that related to within game processes. In the text by Slade (2010a), this was achieved through modification of the Game Performance Assessment Indicator (GPAI) of Griffin, Mitchell, and Oslin (1997). Similarly, within the text, art, music, mathematics, design and technology were given scope to achieve a transformation of learning. There are also examples and direction on how to explore ethical as well as cultural and social issues associated with sports with the intent of appealing to both the generalist and specialist teacher of PE. Stolz and Pill (2014) suggested a need for a closer alignment between researcher and practitioner as a means for developing research with outcomes more closely aligned to the daily pragmatic undertaking of teaching PE. In presenting some of the issues that have confronted the teaching of games in PE and sport and the associated concerns of academics I have suggested that my *Transforming Play* text (Slade, 2010a), provides an answer to many of those issues and concerns. An endorsement of this position is that the text has been adopted in some pre-teacher education programmes, in for example, University of South Australia (S. Pill and W. Piltz, personal communications, 2010), Loughborough University (N. Bromwell, personal communication, 2010), HAN University of Applied Sciences, Nethererlands (J. Cobussen, personal communication, 2015) and even in international schools as far afield as Discovery College, Hong Kong (P. Watson, personal communication, 2011).

CHAPTER NINE SUMMARY

This chapter discussed issues associated with the teaching of games such as the requirement of 10,000 hours of deliberate practice (Ericsson, Krampe, & Tesch-Romer, 1993), from as early an age as possible in order to become an elite sportsperson, and the counter arguments of Côté (1999), and Côté, Baker and Abernethy (2007). Also mentioned was the need for affect in children's learning of games as championed by Pope (2006). Non-adoption of TGfU based on Launder's claim that TGfU is just too complex for teachers, especially generalist teachers of PE, was examined through reference to Kirk's (2005, 2016) views and the position of Stolz and Pill (2014) on the divide between academic research and the needs of the practitioner, the applier of that research.

Also presented was the philosophy of and practical examples from the text, *Transforming Play: Teaching tactics and game sense* (Slade, 2010a) that addressed many of the issues raised surrounding teaching of games and the GCL model of TGfU in PE and sport post the 1990s. The culmination of this work was a model for transforming children's play, designed within a holistic philosophy incorporating, play, mastery learning and TGfU. I concluded that my text (Slade, 2010a), incorporating, play, mastery learning and TGfU provided a practitioner's perspective that both overcomes the 'Jet-Pilot' analogy of Launder (2001, 2003) and provides the introductory tactical and technical requirements for game play.

In the next chapter, I reveal aspects of the journey that have contributed to the writing of this thesis in the form of my continually evolving understanding of GCL, and further Transforming Play model.

CHAPTER TEN

TOWARDS A FURTHER UNDERSTANDING OF TEACHING GAMES FOR UNDERSTANDING AND GAME CENTRED LEARNING

CHAPTER OVERVIEW

This chapter reflects my evolving understanding of Teaching Games for Understanding (TGfU) and Game Centred Learning (GCL) that has emerged within the process of writing this thesis. The medium for articulating this is through the presentation of a revised model of GCL. The process of arriving at this revised model of GCL has involved an objective evaluation of various models of GCL, reflecting critically on my own work and exploring associated questions related to teaching games, for example, are GCL models used in elite level sport? This revised model also reflects a discussion of arguments along ideological continuums of instruction in games; for example, should fundamental movement skills (FMS) be taught before game instruction or should game pedagogy be solely based on Game Centred Learning? In this chapter these positions are brought together through reference to Smith (2016), the application of complexity theory (Ovens, Hopper & Butler, 2013), and complementary learning in skill acquisition (Kelso & Engstrom, 2006). Smith's middle ground practitioner position provides a further justification for my revised GCL model from a skill acquisition perspective. In this chapter I briefly summarise some of the processes just mentioned, before presenting a revised model of GCL that reflects my practitioner perspective which I contend in its simplicity, flexibility and pragmatism, makes GCL accessible to anyone undertaking the role of teaching games to novices and also sport at the elite level.

10.1 A MODEL

“When play is allowed to be child driven, children practise decision-making skills, move at their own pace, discover their own areas of interest, and ultimately engage fully in the passions they wish to pursue”

(Ginsburg, 2007, p. 183)

James Joyce’s, *A portrait of an artist as a young man* (Joyce, 1977) clearly defines the title as ‘A’ portrait and not ‘The’ portrait. Bunker and Thorpe’s (1982) article that gave formal birth to TGfU was similarly entitled. It was ‘*A model for the teaching of games in secondary schools*’ (Bunker & Thorpe, 1982), and not ‘The’ model. The reason for raising this point is because I sometimes detect an almost ideological fervour in some who discuss and advocate on how best to teach games. While in this chapter I too present ‘a’ model for the teaching of games I do so coming from the position advocated by Jess, Atencio and Thorburn (2011); namely that there is no one way to teach games. Hence the model presented in this chapter for teaching games to novices or as an introduction to a sport, is a game and learner-centred flexible model. The intent is to present a model based on the concept of play and its transformation and to provide an illustrated statement that generalist teachers might look at and immediately feel comfortable at employing in their teaching of games. If indeed it does achieve this end then my goal of providing a model of games learning that makes GCL available to anyone without the need for a ‘Jet Pilot’s licence’ (Kirk, 2016; Launder, 2001; 2003) will have been achieved. However, before explaining the model some observations are presented about games teaching that have, through the course of the research for this thesis, led me to a further understanding of GCL and TGfU and contributed to this revised model.

10.1.1 GCL structures in an elite sport – the Côté model?

While noting the weight of research on TGfU and GCL practice has been focused on novice and youth sport, Oslin and Mitchell (2006) pondered whether it was also employed in elite sport. Investigating this question in 2011 through the sport of field hockey at the Federation of International Hockey's (FIH) elite top eight tournament for men, The Champion's Trophy, I concluded (Slade 2015) that there was an almost universal employment of GCL approaches by the coaches in this sport at this tournament. However, it was a flexible position made evident in the rehearsal of some set plays. In set plays the methodology was typically blocked learning and it did not reflect a representative learning design (RLD). Additionally, almost all coaches noted, as a qualification of their use of GCL structures, that because the individual player's techniques were so highly developed they did not require traditional drilling practice structures. While GCL practices were the overwhelming choice of the coaches it was chosen on the pragmatic basis of this being the practice appropriate for this level of player and team. Interestingly, their perspective regarding younger players was almost an exact template of the Côté (1999) and Côté, Baker and Abernethy (2007) model of games teaching. The consensus of those interviewed, from the perspective of encouraging future generations of elite hockey players, was the need for novice players to have lots of opportunities to play and have fun but as they advanced in the game and in order for the players to employ advanced tactics they needed to develop their techniques to an autonomous level. This outcome, they suggested, could only be achieved through employing high levels of repetition and ultimately tested within game scenarios.

10.1.2 Towards an ideological position on teaching games

The rhetoric surrounding those who present an ideological position on teaching games is often a presumption that they are at the end of the continuum of instruction that is deemed command based (Mosston, 1966 & 1992) and defined as traditional (see for example, definitions by Kirk, 1996 & 2006). However, this is not always the case and I would now suggest that the divide is more between those at one end of the continuum who advocate for the need for mastery of FMS or physical literacy (Gardner, 2017), while at the other end, those who solely advocate for radical constructivist methodologies typically manifested through GCL and guided discovery type models and methods of instruction.

My observation of those who focus on FMS as a prerequisite for playing games is that they have typically based their position on research that measures or places an emphasis on the measurement in isolated contexts through batteries of FMS tests e.g., Victorian Department of Education (1996), *Fundamental Motor Skills: manual for teachers*. Typically, these tests, because of the necessarily strict criteria applied to the performance of these skills in order to achieve test validity, result in quite small percentages of participants being adjudged as having mastery of FMS (for example, Sanders, & Kidman, 1998; Bryant, Duncan & Birch, 2014). Consequently, either through suggestion or inference, a need is then advocated for such skills to be taught and mastered typically in a non-applied learning environment. Presumably this ensures the criteria associated with the correct execution of the skill is reached and only when that is achieved can learners progress to the game. For example, Bryant et al. (2014) in the wake of fundamental skills testing suggested an early mastery was necessary for an increased likelihood

of engagement in physical activity. While I have considerable empathy for the need for mastery of skills I am not convinced that mastery of specifically defined FMS is necessary for promoting engagement in physical activity. I am even less enamoured with the position that there exists a finite number of skills and a correct version of said skills that individuals all need to master in order to play and enjoy games. As Bunker and Thorpe (1982), have noted, you can play and enjoy games with very limited technique.

10.1.3 No one way to teach games?

In their work on complexity thinking in teaching PE, Ovens, Hopper and Butler (2013) take a position advocated by Jess, Atencio and Thorburn (2011) that states there is no-one way to teach. While advocates of non-linear pedagogy do not always advocate for drilling in learning games, within complexity theory, behaviourist-type practices, for example the use of repetition, is not entirely abandoned but rather adapted to be more representative of concepts associated with a constraints led approach (Newell, 1986) to skill acquisition. Additionally, Chow et al. (2013) also demonstrate that within a non-linear approach to instruction, strategies of instruction that previously may have been associated with behaviourist blocked learning scenarios may still be employed. Chow et al. suggest that through a manipulation of the environment, especially in relation to action perception coupling, it is possible to employ drill like learning contexts that promote the high levels of repetition necessary to achieve automatic responses to match the requirements for executing skills in RLDs of the sport or game.

If there is no one interpretation of playing technique in games (Kirk, 2016), then

there is certainly no one consensus on how games should be taught. I have previously debated flexible versus ideological stances on the teaching interpretation of the TGfU model Slade, Webb and Martin (2013). In this thesis I have noted that the concern of too much teaching in TGfU was firstly promoted by Richard and Wallian (2005) and resurfaced through the work of Gréhaigne, Caty, and Godbout (2010). I deemed their calls for a type of back to basics in TGfU and an exclusive use of discovery learning through radical constructivism, as ideological. In discussing their stance with the late Louisa Webb, we developed an opinion that we agreed with the position of, for example, of Kirk (1996) that TGfU needed a theoretical underpinning that was absent in the first paper of Bunker and Thorpe (1982) but cognisance also had to be made of the very pragmatic nature of teaching and coaching in games and sports. We argued for a need to consider the learner, context and content and based on those perceptions employed models of instruction that were deemed most appropriate. As a guideline we, Slade, Webb and Martin (2013), suggested Spiro and DeSchryver's (2009) notion of ill- and well-structured domains of learning, referenced to the concept of cognitive flexibility theory (CFT), as providing both the theoretical basis for TGfU while also allowing for the flexibility evident in coaching and teaching games and sports. My practitioner's perspective still sees me hold this position reinforced by my observations of teaching and coaching games and sports at the professional sport level (Slade, 2015) and also in games teaching with novices or more experienced learners.

10.1.4 Complementary learning

Most recently my position on the need for flexibility in game instruction has been reinforced by the work of Smith (2016). Smith argues for a complex understanding

of skill in games (Ovens, Hopper & Butler, 2013) that is not merely the expression of a movement by an individual “contained within the human body” (Smith, 2016, p. 435), but rather that we see skill as “an expression of the relational dynamics that emerge from non-linear, self-organising, interacting parts.” (p. 435). Smith views Fundamental Movement Skills (FMS) and Fundamental Game Skills (FGS) through reference to Kelso and Engstrom’s (2006) concepts of complementary pairs. By their definition he suggests that we should view FMS and FGS as essentially the same, but that in developing the various qualities inherent within each definition of skill, we need to employ flexible modes of pedagogy that include both game centred or slightly more decontextualised, behaviourist type, learning environments.

Smith (2016) comes to this position through a complexity theory perception of skill learning that he explains, using an arbitrary division of the complex nature of skill to make his point. He achieves this through dividing skill into three levels labelling them as:

‘intrinsic’ (referring to internal coordination patterns or techniques),
‘individual’ (focusing on the individual and immediate goal-directed task such as we find in kicking, hitting or throwing, etc.) and
‘interactive’ (which takes account of the broader goal directed dynamics at the environmental level. (p. 436)

At level one, intrinsic dynamic coordination is focused on acquiring successful movement patterns that are stable enough for the individual to remember and repeat

them successfully to achieve the desired outcome. This state of motor skill acquisition has traditionally been acquired through repeated drilling often in isolated closed skill contexts which is something of an anathema to many proponents of GCL. However, Smith (2016) explains it is not necessarily the isolated nature of the drilling but the view that there is only one preferred biomechanical outcome that defines mastery or skill competence that is the issue in skill learning in this way. Smith advocates that repetition and stability can still be achieved at this level by imposing variables of a functional game nature to the drills that consequently require constant minor adjustments by the learners in order to promote stable but also flexible patterns of performance. At the second individual level, where the application of these acquired skills need to be developed for repetition in game skills, he suggests this can be acquired in drill-like goal directed contexts that are in more open skill environments but can still be managed to ensure learners achieve acceptable levels of success that are motivating and fun.

At the third level of interactive elements in games, he suggests that GCL is definitely required because this provides the test of individual development, stability and adaptability in skill production, through the interaction between all of the elements of skill production; that is, the intrinsic, individual, and the environment. In essence this is an endorsement for flexible and non-ideological means of pedagogy in the teaching of games. It endorses the position I have argued relative to Spiro and DeSchryver's (2009) notion of ill and well-structured domains of learning. It is this flexible position that most specifically relates to my model of GCL and provides an appropriate juncture to introduce it.

10.2. A TRANSFORMING PLAY MODEL OF GAME CENTRED LEARNING

10.2.1 Discussion of the model

The foundation for the model (Figure 7), regardless of pathway chosen, is the notion that play is the first building block of games and sports. Play, both invented and in context, is fundamental to achieving both the theoretical underpinnings and the practical outcomes of this model where the aim is to achieve game competence through an enjoyable learning context. Also fundamental to that position is the view that creative and constrained play can in tandem develop both Fundamental Game Skills and tactical understanding of games.

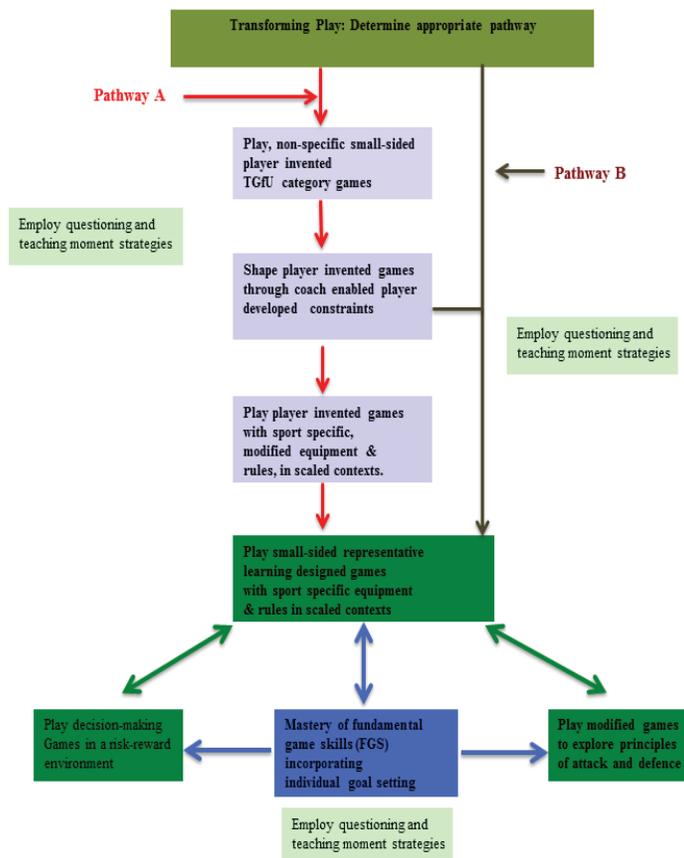


Figure 7 A Transforming Play Model of Game Centred Learning

The need for flexibility in game teaching is never more evident than in the adoption of this model of game teaching. In pathway A, there is a suggestion that providing constraints to the invented games results in a well-structured learning domain suited for direct instruction. Yet it is the opposite. The boundaries are provided but the creative invention of the game and evolution is ill-structured. Additionally, the techniques are not prescribed and they too are adapted as the game evolves. It reinforces the need to think of game models of instruction and teaching methodologies as not being fixed but rather on continuums to be employed flexibly.

Pathway A or Pathway B?

As noted above the first step in this model is to determine the needs of the learner and this determination decides whether to proceed along Pathway A or Pathway B. For novices with little or no experience or if developing a new game category then I suggest Pathway A. Pathway B can be immediately employed with more experienced players or if you have worked through Pathway A and it is appropriate to engage in more game specific activities.

10.2.2 Pathway A

Stage 1: The lack of a need for a Jet Pilot's licence to apply this model to teaching games is, as in the earlier model, achieved because the sole requirement in terms of content knowledge is for the teacher to understand the type of game they want the players to develop. For example, if it is an invasion game the teacher has to be aware of basic constraints associated with:

- Having different teams
- Having to defend and attack different playing areas

- The need for game boundaries
- Having ways of deciding winners

The rest is up to the players. The players decide on all other aspects of the game. One other crucial component is to ensure there is an accepted way of deciding on the structure of the game; i.e., how the teams decide on rules. So concepts of discussion and majority agreement are necessary components of this approach. The dynamic nature of games when invented by children for children is that they do not contain techniques they cannot accomplish. This ensures everyone can play but within the game playing performance boundaries they are always being pushed or exceeded. In doing so the games reflect non-linear pedagogical learning contexts that contribute to developing stable, but also flexible, movement patterns.

Stage 2: The first game is only the initial act of transformation. The next transformation occurs through encouraging time outs to discuss what is working well in their game, what they could do to increase engagement by everyone and to ensure they are all enjoying the game? Butler and Robson refer to these adjustments to the rules or shape of the game as enabling constraints (Butler & Robson, 2013). Enabling constraints can be associated with rules of play, safety or ways to make the game more dynamic, faster, more inclusive or more tactically challenging. There is no time frame or restriction on how these games develop and this second step can be repeated as often as it is deemed appropriate. Crucially though, this is a step towards transforming play. This transformation is being achieved through acquiring more dynamic and flexible movement patterns necessitated through open skill game contexts and through raising players' declarative knowledge of how

games work; that is, their tactical knowledge. At the end of this stage it is possible to go to Stage 1 of pathway B or continue to stage 3 of Pathway A.

Stage 3: Stage 3 incorporates an intermediate transformative step that requires further enabling constraints from the teacher or coach. This step requires the introduction of modified and scaled specific sport equipment learners. This is done to transform the games from purely non-specific contexts to a more specific game or sport environment. For example, a player invented invasion game involving catching and passing a ball could easily, with the addition of a goal to score in, become more netball or handball like. To achieve those developments teachers and coaches should provide questions for the players and ensure there are opportunities for the players to discuss their game to ensure it remains inclusive and enjoyable.

10.2.3. Pathway B

This stage is the transformation from purely non-specific games play to more representative learning designed (RLDs) games, that have may have a specific game or sport focus. It would be wrong to suggest that content knowledge is not required for this pathway, because it is but through the medium of small-sided games and the concept of scaled equipment and playing areas, modifications as manageable as making the games 3 vs. 3 provide a non-complex entry point to this pathway. The coach/teacher may also start to use aspects of modifications supplied by major sports, for example aspects of New Zealand Rugby's beginner programme, *Rippa Rugby*, or in net games, smaller playing areas, softer tennis balls, lower nets and appropriate racquets – scaled equipment (Farrow & Reid, 2010). It could also be non-specific games that have more of a sport or full game feel to them

for example *Touch Down* (Slade, 2010a, pp. 81-83).

The transformation of play from this stage to fuller versions of the adult game is dictated by the stage of learning of the players and their needs. There are no hard and fast rules of how to approach at this stage of transformation. In more formal coaching environments, National Sport Organizations (NSOs) often provide guidelines for these developments. What must not be lost though, through these stages, is an understanding of associated game tactics and decision-making.

Modified games to explore principles of attack and defence

These modified games for teaching principles of attack and defence, can be as simple as adjusting the force ratios between attackers and defenders to make either undertaking easier or more difficult. The key is to recognise teaching moments - i.e., when you see appropriate play - stopping the game and asking questions as to why the players undertook that action? Other principles of attacking and defending can be explored by placing constraints as to where players can attack from, or simple tactical games based on attacking or defensive principles e.g., Zone Defence (Slade, 2010a, pp. 52-54).

Other avenues include simple tag games in areas where the playing space is gradually reduced. This structure is a good medium for teaching both the movement skills in games but why width and depth are important concepts for attacking play and why congestion in defence is an important defensive tactic. The key is to suggest small adjustments or constraints that do not change the games too much and maintain engagement and enjoyment.

Play decision-making games in a risk and reward environment.

Coaches can facilitate players' decision-making capabilities by assisting them to invent decision-making games. Easy start points for such games can be based on point scoring values. Simple adjustments such as in an invasion game through having a centre goal worth 5 points but goals placed nearer the side boundaries of the playing area worth 1 point. This encourages defenders to give up the wide defence in preference for a contracted defence to ensure a high point goal is not scored. Conversely attackers learn to accumulate points through lower scoring options but still contributing to their scores. Further modification to the games being played can also assist players to develop concepts such as wide external vision (Wulf, 2007). Games that reward a well-made and taken long pass (see for example, Slade 2010a, pp. 77-79) encourage players to scan for creative playing solutions that can be reflected upon by the risk and reward involved in the decision to make a play. The risk and reward can be as simple as doubling a point value for a particular play if it is successful or losing the points if not (Slade, 2017). My experience suggests this is a fun way to teach these game concepts.

Initially tactical and decision making games are best played within a non-specific context, which helps to overcome a lack of technique mastery in the players that would otherwise hinder the development of declarative knowledge of the principles required in the type of game. The non-specific nature also helps with procedural knowledge as the movements into space or exploiting attacking options can be learned before later being applied within a more sport specific context.

10.2.4 Mastery learning of techniques and goal setting

Smith (2016) noted that repeated drilling was not so much the issue within traditional game designs but rather it was the lack of appropriate learning context. He also provided the common sense position that said, if direct instruction would greatly accelerate the learning and hence enjoyment of a skill then it should be employed. I would add the practitioner perspective; namely declarative knowledge of tactics associated with a game can be learned relatively quickly, for example, play the shuttle long or short, but if you cannot hit the shuttle then knowing what to do is of little use for you in enjoying a game. In order to develop technique players need to repeat the technique, and the context for repetition differs depending on the stage of the player. Just how these contexts are organised should also reflect Spiro and De Schryner's (2009) concept of well- and ill-structured learning contexts.

Within this model these mastery interventions need only occur from Stage three on because the game and associated techniques and tactics to this point have been made by the players. Post this stage, interventions within the model can occur at any time, however my cue for employing the mastery intervention is based on two criteria - it is either player requested or it is based on coach observation of players playing the game. The coach observation should not be based on minor biomechanical errors (Kirk, 2016), but where the fun, application of tactics or making good decisions is clearly hampered by poor technique, the intervention then is mandated (Slade, 2014a). It should be a brief episode out from the game with high repetitions of the technique and depending on the player's stage of learning, more towards closed or open context; i.e., well- or ill-structured domains of learning. If at all

possible the drill should be based on Fundamental Game Skills. After the brief mastery intervention, players return to playing the game in order to see if this has helped with their play.

Individualised Mastery Learning

With novice players I have found the most effective longer-term means of developing techniques is to employ an individualised mastery-learning model, because with youth sports there is never enough time to develop techniques in the practice time allocated. An individualised but cooperative mastery programme including goal setting can encourage players to try and master skills through individualised simple progressions in their own time - for example, cooperative rallies in tennis or badminton to achieve 5, 10, 15 or 20 hits in succession with a partner. In football it might be mastery levels associated with juggling the ball, passing it accurately, successive headers or a lob kick. These levels of mastery do require some content knowledge of the coach, but interestingly, where these are encouraged for the players to develop in their own time the learning is non-linear as in attempting to achieve mastery they discover what works, which is almost the opposite of the behaviourist learning definitions typically used to define mastery learning - for example, making setting the ball to a partner over a volleyball net is always a non-linear process for novices. Having goals such as Level 1, 3 sets, Level 2, 6 sets Level 3, 10 sets etc. starts by providing a first level that can be 'lucked' with poor technique but the succeeding levels require the gradual stabilising of movement patterns until by level 3 additions to the constraints can be made, for example, mixing up techniques, distances, number of players involved or sets on one side of the net before the ball is returned. As long as the goals initially are

achievable by almost all students and contribute to competency and enjoyment in the game, this approach can be successful.

10.2.5 Questioning and the teaching moment

At all stages of learning it is important to ask questions of the players. Questions can also be generated from the structure of the game. The non-specific game, for example, one designed to teach principles of attack and defence, should, when the game is understood and played well, through its structure answer the tactical question. At these stages, observing a teaching moment can often motivate the timing of the questions. It does not require extensive game expertise to see that players have adopted a defensive formation or an attacking strategy. When observed, the game can be stopped and the structure explored by asking the players their motivation for their structure. Their answers help with their declarative knowledge of games and supplement their procedural knowledge.⁴¹

Summary

As the players slowly have their play transformed towards more sport or game-specific contexts, the scaled games need to be representative of the game or sport in the TGfU category being developed. Here the emphasis needs to be on ensuring individuals can participate and contribute to the games in enjoyable and fulfilling ways. The more holistic nature of the model should not be forgotten. Players need to be involved in developing the games, be they tactical or decision-making and in setting mastery learning goals for their individual development. Concepts from

⁴¹ I have not included an assessment of play in this model, as there appear to be several excellent models available. My own preference is for use of the GPAI model of Oslin, Mitchell & Griffin (1998) adapted in Slade (2010a).

other game models should also be incorporated; for example, Sport Education (Grant, Sharp, & Siedentop, 1992; Siedentop, 1994), is especially useful in terms of teaching rules, fair play, and other associated activities such as, team photographer, that have the potential to encourage a wider and more diverse number of young people into seeing that they can play, contribute, understand and enjoy games, sports and recreations. Through all stages of the model, questions from the players should be encouraged and provided by the coach to develop players' understanding around what to do, when and how to do it. Such questions and observations of the learners' play provide the teaching and coaching moments crucial for constructing understanding games and motivating the players. Ultimately the model is about transforming play to the extent that as citizens they believe they are equipped should they choose, to be involved in their society's sport and recreation communities.

CHAPTER TEN SUMMARY

This chapter has presented the legitimate tensions that can exist between the habitus and understanding of practice related to games teaching of practitioners. It has also presented the perspectives I have further developed in relation to GCL and TGfU models over the course of writing this thesis. It represents both a reflection on some of the issues associated with GCL, for example, the ‘Jet Pilot conundrum (Kirk, 2016; Launder, 2001), traditional methods of instruction and more recent holistic interpretations of game instruction. The model reflects my current habitus and view of GCL practice that I contend is able to transform children’s play into more formal games and sports. I argue that the model is structured to capture the development of games procedural and declarative knowledge in dynamic, inclusive and enjoyable contexts. This conceptual basis of the model is based on my belief that to understand how to teach games and sports, you first have to observe and understand children’s play. My conclusion is that the model presented provides an entry into teaching games through a GCL structure that is accessible to all teachers and coaches, regardless of their previous background or experience in teaching games. It has the potential within such a structure to avoid the teacher or coach hearing the frustrated lament so often heard in the school gymnasium: “Please Sir, can we have a game?”

CHAPTER ELEVEN

CONCLUSIONS

This thesis has examined from a practitioner's perspective the development of Games Centred Learning (GCL), and specifically Teaching Games for Understanding (TGfU) and its dissemination in New Zealand, 1945-2015. In the process of doing so it has addressed questions and issues associated with games teaching that have suggested non-traditional methods of instruction are too complex for generalist teachers to implement and whether there is room for pragmatism in teaching games or should game instruction be characterised by ideological constraints?

The exploration of these questions has been through a multi-method phenomenological study that has achieved heightened authenticity through scrutiny from the perspective of a practitioner who has been centrally involved in the field. The practitioner perspective has been achieved through an emergent evolving continuum from life-history biographical writing (Angier, 2010), to evocative autoethnography, (Ellis, 2012) and analytical ethnography (Anderson, 2006). It has included analysis of historical documents, especially the New Zealand national PE curriculum, academic publications, predominantly those published in New Zealand, and conversations with significant agents as means to examine data within social and cultural contexts. Collectively, an evaluation of data from these sources has resulted in achieving what Richardson (2000) refers to as the 'crystal of understanding' that forms from the process of triangulation. This process lends credibility to the observations and answers to the research questions posed in this work.

The practitioner perspective of this thesis has also provided a rich and rigorous commentary of my career work. The methodology has transformed that commentary from autobiographical to a legitimate critical reflection within theoretical constructs. The reflection and the theoretical framework based on interpretations of Bourdieu's (1984) concepts of habitus and field and especially the author's explanation of the struggle between these two competing sources of practice has opened up and integrated a body of research hitherto seldom applied to this particular field.

Some scholars, such as Conrad (1990), argue that an "N of 1" raises obvious problems of generalisability (p. 1258) however this thesis has contextualised my individual experiences within the wider field of intellectual, historical and cultural developments within education and game centred learning. Naturally, the autoethnographical element means there has been no attempt to disguise the subjective views of the author. Its purpose has been to provide a reflective commentary and insight into the processes that have guided me in the development of my knowing (Ellingson & Ellis, 2008) about games and sports and the development of my views on the pedagogy that I believe work best in their instruction. Complementing my personal perspectives with contextual scaffolding has enabled me to use my own experiences as a window on evolving and emerging practices of Game Centred Learning in New Zealand 1945-2015. The main conclusions from this thesis are presented below under the following headings related to the contribution to knowledge in the field; namely, practice, theory and methodology.

11.1 CONTRIBUTION TO KNOWLEDGE IN THE FIELD

How, from a physical educator and sport coach practitioner's perspective, has game practice involving TGfU approaches evolved and been disseminated in New Zealand 1945 -2015?

Although elements of game centred practice have been employed in New Zealand for at least forty years, there has not been any detailed research on how, when and why they developed and changed over time. This thesis partially addresses this through an historical analysis of evolving practices. A summary of the key findings of the thesis in this regard follows.

11.1.1 Game practice evolvement

Post-1945, the teaching and coaching of games and sports in New Zealand has evolved from a:

- Traditional behaviourist, essentially command-based, teacher-led learning environment to a more holistic, non-linear game and player-centred philosophy based on constructivist pedagogy.
- Decontextualised sport-coaching learning environment to Representative Learning Designs (Pinder et-al., 2011) that encourage the use of authentic learning contexts.
- Outcome structure focused solely on eventually playing the adult version of the game, to a situated learning, sport in society context, achieved through the use of models based curriculums that include, for example, concepts associated with Sport Education (Grant, 1992; Grant & Pope, 2007).

11.1.2 Game practice dissemination

This thesis also provides the first research-led findings on the various ways in which GCL practice has been disseminated in New Zealand. The dissemination occurred through:

- The historically early practice and example of prominent national sport coaches who provided both practical and written direction, for example, Stewart, Maunsell and especially Truman, from influences emanating in England, Wade (1967) and Mauldon and Redfern (1969, 1981).
- The nationally and internationally pioneering publication (Department of Education, 1975) of pedagogical concepts written by Barrie Truman for game teaching that are now reflected in publications on GCL structures known as RLD, dynamical systems theory, constraining games and play practice (Chow et al., 2007; Launder & Piltz, 2015; Pinder et al., 2011; Renshaw et al., 2010; Slade, 2014a).
- The motivation to adopt GCL practices created by the visits to New Zealand and subsequent practical workshops by Rod Thorpe, one of the authors of the original TGfU publication (Bunker & Thorpe, 1982).
- The adoption in the late 1990s and early 2000s of GCL methodologies and in particular TGfU into the curriculum courses in PE pedagogy at New Zealand Colleges of Education where pre-service PE teacher education was conducted.
- My own contribution as the coordinator of the B.Ed. Secondary PE programme at the PNCE where I taught students how to teach games using the TGfU model, employing Socratic questioning techniques and discovery learning methods. Additionally, I required my students to employ this model

of game teaching on their teaching placements in secondary schools.

- Publication of New Zealand Health and Physical Education syllabi (1999 & 2007) within the New Zealand Education Curriculum that embraced the learning theory of constructivism and socio-ecological strategies that in turn promoted models of PE instruction in games and sports that not only emphasised movement but integrated critical perspectives for which GCL models proved to be an ideal promotional vehicle.
- The power of international and local conferences that spawned articles and other publications on GCL models that were circulated throughout New Zealand schools and educational institutions.
- A drive by Regional Sport Trusts to provide in-service training for their staff and local sport coaches on the TGfU model.
- My extensive involvement with Regional Sport Trusts and National Sporting Associations in the role of providing in-service teacher and coach education programmes employing TGfU and GCL models.
- A later provision within the professional journal of New Zealand Physical Educators, *The New Zealand Physical Educator*, of regular articles on TGfU game based learning. In this role I have contributed sixteen articles.
- My publications (Slade, 2003, 2005, 2010a) and their wide distribution within New Zealand and internationally
- The promotion by Sport New Zealand of GCL models as the instructional strategies for coaching in youth sports. The success and subsequent positive publicity of national elite teams, e.g., New Zealand Men's Hockey Team, who adopted GCL strategies and RLDs that were seen as part of the recipe for their success.

11.2 CONTRIBUTION TO PRACTICE

How has play been used to transform game practice involving TGfU?

11.2.1 *Transforming play*

Play has been used to transform game practice involving TGfU through promoting the notion that play is the first building block of all games and sports. This is achieved by drawing attention to the fact that children will invent and play their games with sophisticated constraints, rules and etiquette, fully engaged for hours on end. The notion of the importance of play to transform game practice evolved through:

- An evolving philosophy inspired by luminaries such as Piaget (1962) that noted the importance of play in child development that subsequently became part of the programmes of instruction in New Zealand Teachers' Colleges, e.g., Ardmore Teacher's College.
- Department of PE Handbooks (1970) that placed considerable emphasis on the play like qualities of minor games.
- The New Zealand PE syllabus of 1987 that included aspects of game invention based on play.
- Ministry of Education Physical Education curriculum (1987, 1999 & 2007) noted that play is an essential building block in the initial motor development of children.
- In New Zealand from the 1980s forward, the position of play as a core component of Human Development courses in tertiary education pre-service teacher education courses.
- Sport New Zealand acknowledging that play is the first building block of physically active play and games.

Dissemination: Transforming game instruction through the use of play was disseminated through:

- Publication of texts and visual resources within New Zealand that were adopted by pre-service teacher organisations and schools for teaching games e.g., Slade (2003, 2005 & 2010) and Ovens and Smith (2004).
- The adoption of my TGfU CD-ROM by Hockey New Zealand and Oceania Hockey Associations for teaching hockey to beginners, *Stick2Hockey* (Slade, 2003).
- Adoption of the philosophy of play in sports in New Zealand in the sports of rugby, football and netball.
- Endorsement by Sport New Zealand of play as the initial building block for individual and community sport in their Coaching Strategy document and their widely published document *Kiwi Sport* (Hillary Commission, 1988) that provided modified and scaled versions of sports at an introductory level.
- The promotion and adoption of concepts such as Represented Learning Design (Pinder et al., 2011) and non-linear pedagogical practice in sport coaching (Slade, 2011) that saw play as an important component of practice that developed player relationship and connectivity while encouraging creativity and flexibility in elite sports.
- The publication of texts that have recognized both the importance of play in an unstructured sense (Butler, 2016) and as a building and transforming agent before more formal involvement in games and sports (Slade, 2010a).

Mastery Learning:

This thesis has traced my journey in regard to Mastery Learning, in particular my belief that people need to develop both technical competence and game sense in order to attain maximum benefit from participating in games. Moreover, by focusing on self-improvement rather than comparisons between peers, Mastery Learning promotes personal development. Mastery learning evolved through educators concerns for measuring the effectiveness of instruction in schools (Bloom, 1976, 1984a, 1984b). In New Zealand mastery learning standards in sports were disseminated through:

- My adoption of the Keller (1968) Personalised System of Instruction concept across various sports and activities during my ten-year tenure as HoD PE, Awatapu College. This included but was not restricted to athletics, swimming, football, tennis, badminton and softball.
- My use of mastery learning within the practical curriculum courses I taught to pre-service teachers during my tenure as a lecturer at the PNCE.
- The mastery award schemes associated with swimming, lifesaving and gymnastics.

11.3 CONTRIBUTION TO THEORY

How can the practise of TGfU be applied in a more philosophical and flexible way than a strict ideological interpretation of the model?

11.3.1 Transforming play: A Game Centred Learning model for teaching games

The major contribution to the theory of game instruction in this thesis is the presentation of a model of GCL learning based on the notion that play is the first building block of games and sports (see Figure 7). Implicit within the model is the perspective of cognitive flexibility theory (Spiro & DeSchryver, 2009). This theory rejects singular ideological interpretations of theoretical learning structures and pragmatically promotes discovery learning and both radical and empirical constructivism through categorising game learning contexts as either ill- or well-structured. Movement competency, so important for achieving social and cultural integration in society, is also addressed through utilising individualised mastery learning (Keller, 1968). Justification for this approach is achieved through a practitioner's lens, also referenced to Smith (2016), that recognises the need for learners to construct their own understanding of how games work and the obvious, though often not acknowledged within GCL models, need and provision for a model of learning that provides opportunities to develop movement competence in GCS.

11.4 CONTRIBUTION TO METHOD

11.4.1 Multi-method approaches

The scale and scope within the challenge embedded in the topic of seeking to understand how the development and dissemination of GCL practice occurred in New Zealand quickly revealed that a single method of investigation would not provide the insights required to answer the questions. What evolved was a multi-method approach that enabled me as a practitioner to openly incorporate and utilise my own experience as a window to the development of a pedagogical approach, game-centred learning, that has over the past forty or so years become an established method of game instruction. It allowed me to situate my own experiences, social, cultural and technical, within the wider context of cultural, historical and theoretical changes in education and sports practice. In the process, this approach enhanced the credibility of my reflections through triangulating my findings and placing my own experiences within a wider story. Bourdieu's notions of habitus, practice and field have proven a useful analytical and conceptual tool in explaining both my own experiences and what has occurred more generally in the development of game centred learning.

The contribution of the methodology employed in this dissertation for future research is the provision of a framework for research, which will enable persons who have made long and significant contributions to their field to provide their back story in such developments. It will help elucidate and explore their motivation, epiphanies and various nuances that typically accompany change over extended periods of time enabling what more traditional single-method methodologies would

not reveal. The model is illustrated in Figure 2, which depicts my data collection process through an emergent autoethnography.

11.4.2 Bourdieu

Bourdieu's (1984) concepts of habitus, practice and field have proven a useful analytical and conceptual tool in explaining both my own experiences as an active social being and what has occurred more generally in the development of GCL. This research revealed personalities and tensions between competing pedagogical philosophies that required a method to draw those disparate parts together. Bourdieu's notions provided the stability and flexibility in its structure to both chart historical change and interpret associated experiences that revealed the changing nuances through the period that were influential in establishing those embodied practices. Light and Hassanin's (2012, 2015) perspective that Bourdieu has increasingly been used as a methodological key for unlocking sociological insights into sport is confirmed by a recent but narrow literature search utilising the key words of sport, physical education, games and play.⁴² However, the key finding from that search, and previous literature searches, is that Bourdieu's work has not been used to explain the development of GCL and definitely not in a New Zealand context. The contribution to method through the use of Bourdieu's work in this thesis is that:

- Because Bourdieu's concepts of habitus, practice and field are acquired through personal experience they provided depth to context and enhanced

⁴² Although outside the time frame of this work, a further recent literature search utilising the search engine *Discover*, using the key words of Bourdieu, sport, physical education, play and games, and the period 2016-2017, produced a total of 94 peer reviewed published articles. Of those 33 had a major focus on physical education and or games. Of the 94 articles only one was within a New Zealand context (Fitzpatrick & Burrows, 2017), and its focus was on health education in New Zealand.

the understanding of change through promoting an awareness of different agents' relationships between habitus, practice and field in order to help understand the development and dissemination of GCL practices in New Zealand.

- Providing the Bourdieu lens of field, habitus and practice to discussions on the evolving nature of GCL practice in New Zealand facilitated the ability to see within the triangulation of the components of social change and provided a collective rather than an isolated understanding of the phenomena.
- Where the lived experience of an investigation occurs over a substantial period of time, Bourdieu's concepts of habitus, practice and field provide signposts of change and provide structure to the narrative that can otherwise sometimes be obscured, especially when the experiences may have been formed non-consciously or as the result of epiphany.

11.4.3 Autoethnography

Within this mixed-method investigation of the evolution and dissemination of Game Centred Learning concepts within games teaching in New Zealand, autoethnography provided a context for reflection through narration that challenged my preconceived ideas as to my role in that phenomenon. In qualitative research of the nature of this thesis, autoethnography forms an important ingredient that can breathe life into data. While revealing a backstory to the phenomenon, my use of an emergent evolving ethnography (Figure 2) contributes to the triangulation of data necessary to understand and place subjective experiences in relation to objective structures - for example, historical documents, publications and policy - and in so

doing provides distance between the author and the narrative leading to a more meaningful and in-depth analysis of the phenomenon.

A major strength of the emergent autoethnography method developed in this study has been the liberating metacognitive style of writing. This style contributed to a fuller and more complete revelation and understanding of the transformation of games teaching in PE and sport coaching in New Zealand and my place within that change.

11.5 IMPLICATIONS OF THE STUDY

11.5.1 Implications for knowledge in the field

- Make play a legitimate pathway for instructing games in school PE programmes. This thesis provides insights as to how this has and still can be achieved in pre teacher education courses that will allow the transformative qualities of play to provide positive and authentic learning outcomes for all students.
- Further practitioner accounts of GCL practice need to be published (Stolz & Pill, 2014) or work-shopped, at regional and national Physical Education New Zealand conferences.
- Embrace suggestions from, for example, Kirk (2006), to provide authentic and relevant PE teaching by applying concepts such as Sport Education (Grant, 1992) and integrating other curriculum subjects within the structure of PE lessons.
- Utilise GCL practice in elite sport by integrating similar philosophies in junior sport through employing scaled and non-specific play structures to ensure tactics and techniques are jointly learned in playful fun environments.

11.5.2 Implications for practice - Application/adaptation

- A flexible model of game instruction, for example the Transforming Play games model proposed in this thesis (Figure7), that can be employed by all teachers and coaches regardless of their previous sporting experience and does not require a 'Jet Pilot's licence to fly'.

- Further develop and utilise current resources, e.g., Slade (2010a), for illustrating to teachers the simplicity of using non-specific, small-sided games in teaching games and sports.
- Aspects of Sport Education e.g., good citizenship (Grant, Sharp & Siedentop, 1992), should be taught in tandem within the suggested structure (Figure 7), along with the integration of other curriculum subject areas in order to make PE more authentic and relevant to learners (Kirk, 2006).
- Justification for games teaching should include reference to a citizenship model that seeks as an outcome the opportunity for all citizens to participate in sports and recreations should they choose to.

11.5.3 Implications for theory

- The model provides a non-linear utilitarian GCL learning model that promotes game awareness, opportunities for integrating concepts associated with, for example, citizenship and other curriculum subjects. It implies the need to recognise the notion that play is the first building block of games and sports and in so doing overcomes the ‘Jet Pilot’ issue (Kirk, 2016; Launder, 2001; Launder & Piltz, 2013) that has militated against the widespread adoption of GCL practice by non-specialist teachers.
- The adoption of this simple Game Centred Learning (GCL) model of instruction ensures GCL is accessible to all teachers and coaches for instructing novices in games and sports. The model requires:
 - An awareness of developmental stages in children to assess their readiness for following the alternative paths of the model.

- The ability to observe invented play and then to facilitate learners' procedural and declarative knowledge of games through suggesting enabling constraints to their play that encourage game solutions that mirror various game categories.
- The awareness of players' development to transform their invented play to more formal sport or game structures through employing modified, scaled representations of specific sports appropriate to their stages of development.
- The employment of non-specific, small sided games that in their structure implicitly ask tactical questions that require decision-making by the players enhancing their declarative tactical knowledge and procedural competence.

11.5.4 Implications for methodology

- Applying a multi-method model of research allows triangulation of data and methods and enhances the credibility of the qualitative findings.
- Methodology involving a practitioner's perspective includes an emergent autoethnography and aspects of Bourdieu's notions of habitus, practice and field.

11.6 RECOMMENDATIONS FOR FUTURE RESEARCH

In a preview to the 2016, 6th TGfU International Conference in Cologne, Memmert et al. (2016) published a paper based on a review of the six themes of the forthcoming conference that had been suggested by 42 scientific committee members, of which I was one, from 16 different countries. The authors suggested what they considered to be the ‘Top ten research questions relating to teaching games for understanding’. The following recommendations are based on some of those themes:

1. *How can children’s invented games be helpful in promoting their emergent learning?*

The research would seek to measure emergent declarative knowledge relative to the children’s choice of tactical structures in their games as suggestive of a readiness for more formal game learning models. The work of Wilson (2002) and Butler (2016) would provide a cornerstone for this work.

2. *Can facilitating the exploration of Bourdieu’s concepts of habitus, capital, field and practice by volunteer coaches lead to their adopting and maintaining non-traditional models of coaching practice?*

Volunteer coaching education programmes are notoriously short one-off episodes and according to Townsend and Cushion (2017), are largely ineffective in bringing about change in coach practice. They have suggested that providing more introspective components to such courses through a Bourdieusian lens may result in more effective outcomes in terms of changing practice. Townsend and Cushion’s (2017) work focused on cricket coaches undertaking an elite coaching qualification,

but this proposed research would focus on novice coaches and measuring sustainability of the use of non-traditional models of instruction in their coaching practice.

3. *Do integrated models of PE result in improved learning in the subjects integrated or does it dilute the learning effect?*

While the integrated method of teaching may achieve Kirk's (2006) goal of presenting PE in a wider holistic and perhaps a more authentic light in a crowded school curriculum, does it result in better student learning and motivation within the integrated and PE areas or does it dilute the experiences relative to instruction in non-integrated formats?

11.7 CONCLUDING COMMENT

“New Zealanders have a natural interest in, and fascination with, mastery over the ball that has developed to a stage where ball games occupy a large proportion of our leisure activities either as active participants or as individual spectators” (Department of Education, 1980, p. 2).

Over the course of this current work, and in my career in physical education and sport coaching I have not seen anything that would dissuade me from this perception as it relates to young people. In order to best prepare young people for sport, recreation and leisure pursuits reflective of this interest in games, it is my contention at a practical and theoretical level, Game Centred Learning should be seen in a holistic experiential sense and integrated into PE programmes in a manner that acknowledges its potential to contribute to, and enhance citizenship. Perhaps a final word on the evolution of games teaching in New Zealand and especially PE contexts that best illustrates how development has been driven mainly by practitioners. Recently I was given access to a secondary school end of year, Year 10, (Students of ages 14-16) one-hour written examination of PE. Amongst the questions related to health, nutrition, anatomy and basic training principles there were also questions on games. The questions did not focus on rules but rather on tactics and strategies and the advantages of small-sided games. If schools examine from their interpretation of the PE curriculum what they think is important enough for students to know and apply, then these questions in relation to games suggest that TGfU, game sense and child-centred learning have become, at least in some schools, the norm rather than exceptional differences from standard practice in teaching games and sports.

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APPENDIX

CONFERENCE AND WORKSHOP PRESENTATIONS

The following presentations are listed in the chronological order they appear in Chapter Eight.

Slade, D.G. (2006⁽¹⁾). *Physical Education and its contribution to the development of good citizens*. Invited keynote presentation at the West Zone Physical Education Conference, Singapore.

Slade, D.G. (2009, October⁽²⁾). *How can Physical Education in schools contribute to the development of good citizens?* Invited keynote presentation at the School Sport Partnership Conference, Youth Sport Trust, Telford, UK.

Slade, D.G. (1999⁽³⁾). *Competency based learning in tennis instruction*. Invited keynote address to New Zealand Professional Tennis Coaching Association Conference. New Zealand Professional Tennis Coaches Association (Inc.), Hamilton.

Slade, D.G. (1999, ⁽⁴⁾ December). *Coaching adolescents*. Invited presentation to New Zealand Rugby Development Officers and Super 12 Coaches Conference. *New Zealand Rugby Union, New Zealand Rugby Academy, Massey University, Palmerston North*.

Slade, D.G. (2011⁽⁵⁾). *Teaching Games for Understanding: A brief overview and learning equestrian skills through understanding*. Invited presentation at the Equestrian Sports New Zealand Coach Educators Conference, Massey University, Palmerston North.

Slade, D. G. (2003⁽⁶⁾, September). Workshop Staff, Sport Manawatu Stick2hockey. *Sport Manawatu Inc., Palmerston North*.

- Slade, D.G. (2004⁽⁷⁾, March). Motor Skill Learning. *Sport Manawatu Inc., Palmerston North.*
- Slade, D.G. (2005⁽⁸⁾, February). Teaching Games for Understanding. *Physical Education In-Service programme. One-day in-service. John Paul College, Rotorua, New Zealand.*
- Slade, D.G. (2007⁽⁹⁾, November,). A non-specific games approach to learning generic game tactics for transfer to specific sports: Badminton. *Sport Hawke's Bay. Hastings, 01-02 November.*
- Slade, D.G. (2008⁽¹⁰⁾, May 12). A non-specific games approach to learning generic game tactics and applying this approach to the specific sport of lacrosse. *Sport Waikato, Hamilton.*
- Slade, D.G., (2011⁽¹¹⁾, July). Transforming play: Integrating the teaching of fundamental movements, game tactics and sport language. *Sport Hawke's Bay, Waipukurau.*
- Slade, D.G. (2010⁽¹²⁾ September). Transforming play: Integrating the teaching of fundamental movements, game tactics and sports. *Renaissance Schools, English School's Trust, Hong Kong.*
- Slade, D.G. (2012⁽¹³⁾, February, 11-13). Teaching sport and games in physical education through a teaching games for understanding approach. *Hong Kong International School, Hong Kong.*
- Slade, D.G. (2009⁽¹⁴⁾, October C&W). *Teaching field hockey through a game based approach: Stick2hockey.* Loughborough University, Loughborough, UK
- Slade, D.G. (2009⁽¹⁵⁾, November) Transforming play through the application of game-sense and exploring sport education concepts. *Carnegie Research Centre for Sport, Leeds Metropolitan University, Leeds.*

- Slade, D. G. (2009⁽¹⁶⁾, October). *Teaching field hockey through a game based approach*. The Germany University of Sport, Cologne, Germany.
- Slade, D.G. (2009⁽¹⁷⁾, October). *How can Physical Education in schools contribute to the development of good citizens?* Invited keynote presentation at the School Sport Partnership Conference, Telford, UK.
- Slade, D.G. (2012⁽¹⁸⁾). *TGfU invasion games: A generic perspective through the lens of non-linear pedagogy and constraining games*. Invited keynote presentation at the 5th International, Teaching Games for Understanding Conference, Loughborough University, Loughborough, UK.
- Slade, D.G. (2013⁽¹⁹⁾, December). *Implicit learning in games utilising constraining game concepts in net and invasion games*. Windesheim University of Applied Science, Zwolle, Holland
- Slade, D.G. (2013⁽²⁰⁾, December). *The role of a centre for excellence in game teaching: Achieving integration in education, youth and elite sports and civic engagement*. Fontys University of Applied Science, Eindhoven, Holland.
- Slade, D.G. (2015²¹, April). *Field goal shooting in hockey utilising a representative learning design*. *Hockey New Zealand Advanced Coaching programme, Hawke's Bay, New Zealand*.
- Slade, D.G. (2016²², 19 November 2016). *Reflecting on your coaching process through considering implicit learning structures to facilitate autonomous performance in hockey players*. *Hockey NZ Coaching Course Auckland, New Zealand*.