

RARE BOOKS LIB.



The University of Sydney

Copyright and use of this thesis

This thesis must be used in accordance with the provisions of the Copyright Act 1968.

Reproduction of material protected by copyright may be an infringement of copyright and copyright owners may be entitled to take legal action against persons who infringe their copyright.

Section 51(2) of the Copyright Act permits an authorized officer of a university library or archives to provide a copy (by communication or otherwise) of an unpublished thesis kept in the library or archives, to a person who satisfies the authorized officer that he or she requires the reproduction for the purposes of research or study.

The Copyright Act grants the creator of a work a number of moral rights, specifically the right of attribution, the right against false attribution and the right of integrity.

You may infringe the author's moral rights if you:

- fail to acknowledge the author of this thesis if you quote sections from the work
- attribute this thesis to another author
- subject this thesis to derogatory treatment which may prejudice the author's reputation

For further information contact the University's **Director of Copyright Services**

Telephone: 02 9351 2991

e-mail: copyright@usyd.edu.au

University of Sydney

This thesis has been
accepted for the degree



**Elite rugby union coaches' interpretation and use of Game
Sense in Australia and New Zealand: An examination of
coaches' habitus, learning and development**

John Robert Evans

A thesis presented in fulfilment of the requirements for the Degree of
Doctor of Philosophy of Education, School of Policy and Practice,
Faculty of Education and Social Work

The University of Sydney
June 2010



Author's Declaration

This is to certify that:

- I. this thesis comprises only my original work towards the Doctorate of Philosophy Degree
- II. due acknowledgement has been made in the text to all other material used
- III. the thesis does not exceed the word length for this degree.
- IV. no part of this work has been used for the award of another degree.
- V. this thesis meets the *University of Sydney's Human Research Ethics Committee (HREC)* requirements for the conduct of research.

Signature(s):

Name(s):

John Robert Evans

Date:

2nd of March 2011

Acknowledgments

I had only fleetingly considered undertaking a PhD prior to meeting my supervisor at a job interview in 2004. It was through his vision, understanding and guidance that I was able to grasp hold of the journey that is a PhD. I would like to take this opportunity to thank Professor Light for his valuable insight and his continued support of my career and in my development in the area of learning. During this period he has been more than a supervisor but also a friend and collaborator on a number of additional research initiatives.

I would like to thank my colleagues from Yooroang Garang, Faculty of Health Sciences, the University of Sydney who have provided an environment that supported me in my endeavours. Thank you to Sally Farrington and Freidoon Khavarpour who allowed me to pursue my research without question and were available to discuss issues relating to my work and research when things became difficult. I also received numerous scholarships from the Australian Government and the University of Sydney without which I would not have been able to complete my studies.

Finally I would like to thank the participants who gave of their time in a period which was extremely busy and demanding during the rugby seasons of 2007 & 2008. I would like to thank my wife Peta and my family for their encouragement and support.

Table of Contents

Author's Declaration	ii
Acknowledgments	iii
Glossary	viii
Abstract	ix
Chapter One Introduction	1
Chapter Two Literature Review	7
2.1. Introduction	7
2.2. The Genealogy of Game Sense	7
2.2.1. Early Development of Games-Based Coaching/Teaching	7
2.2.2 Teaching Games for Understanding (TGfU)	9
2.2.3 Issues in implementing TGfU	13
2.2.4 Game Sense	16
2.2.5 Features of a Game Sense Approach	18
2.2.6 The Impact of Game Sense on Coaching	21
2.2.7 Game Sense in elite level sport	24
2.2.8 Differences between TGfU and Games Sense	25
2.2.9 Game Sense Pedagogy	27
2.3 Understanding Learning in and through Sport	29
2.3.1 Constructivist Theories of Learning	29
2.3.2 Complex learning theory	32
2.3.3 Situated Learning	33
2.3.4 Legitimate Peripheral Participation	34
2.3.5 Communities of Practice	35
2.4 Contemporary Developments in Coaching	36
2.4.1. Traditional approaches to coaching	36
2.4.2 Socio-cultural views of coaching	37
2.4.3 Coaching Effectiveness	39
2.4.4 Coach reflection	41
2.4.5 Quality coaching	42
2.4.6 The impact of professionalism on rugby coaching	42
2.5 Coach Development	45
2.5.1 Coaching as a profession	45
2.5.2 Coach Education	45
2.5.3 Coaching Experience	47
2.5.4 Playing Experience	48
2.5.5 Coaches' beliefs practices, change and habitus	49
Chapter Three Theoretical Framework	53
3.1 Introduction	53
3.2 Habitus	54
3.2.1 Field	57
3.2.2 Capital	58
3.2.3 Practice	59
3.3 Situated learning	60
3.3.1 Communities of practice	61
3.3.2 Legitimate Peripheral Participation	62
3.4 Integration of theories.	62
Chapter Four Methodology	65

4.1 Introduction	65
4.2 Research design	65
4.2.1 Comparative Study	65
4.2.2 Case Studies	68
4.3 Methodology	69
4.4 The cases and context	71
4.4.1 Site selection	71
4.4.2 The participants	71
4.4.3 Participant selection	72
4.4.4 Participants' profiles	72
4.5 Data Generation	74
4.5.1 Interviews	74
4.5.2 Observations and field notes	76
4.6 Analysis	78
4.7 Relations in the field	80
4.7.1 Chronology of site events	81
4.7.2 Foreshadowed problems	82
4.7.3 Research challenges	82
4.8 Researcher's Role	84
4.8.1 Reflexivity	84
4.8.2 Ethical issues	86
4.8.3 Issues of Trustworthiness	88
4.9 Pilot Study	89
4.10 Significance of the Research	90
4.11 Conclusion	90
Chapter Five: Identification of a coach's habitus	92
5.1 Introduction	92
5.2 Australian site	93
5.2.1 Belief-premises: Views on Good Coaching	93
5.2.1.1 Earn respect from players.	94
5.2.1.2 Possess extensive knowledge	94
5.2.1.3 Display a strong work ethic, commitment and enthusiasm	95
5.2.1.4 Manage people well	96
5.2.2 Perceptions-appreciation: Views on What Makes Good Players	98
5.2.2.1 Are born with natural ability	98
5.2.2.2 Are tough and resilient	99
5.2.2.3 Have a strong work ethic and passion	100
5.2.2.4 Have natural talent	100
5.2.3 Practical Sense of Possibilities and the Forthcoming: Attitudes to Innovations	101
5.2.3.1 Ambivalence toward coaching innovation	102
5.2.3.2 Limited views on possibilities for future areas for innovation in coaching	103
5.2.3.2.1 Decision making and flexible playing style	104
5.2.3.2.2 Physical preparation	105
Discussion of Australia site	106
5.3 New Zealand site	107
5.3.1 Beliefs-Premises: Views on Good Coaching	107
5.3.1.1 Fosters relationships with players	108
5.3.1.2 Has a passion for rugby	109
5.3.2 Perceptions-appreciation: Views on What Makes Good Players	110
5.3.2.1 Have game understanding and intelligence	111
5.3.2.2 Are motivated and resilient	112

5.3.2.3 Have athletic ability	112
5.3.2.4 Have humanistic qualities	114
5.3.3 Practical sense of possibilities and the forthcoming: Attitudes to Innovations	115
5.3.3.1 Innovation was central to improvement because of changes in the game	115
5.3.3.2 Innovation needs to be accepted by and have meaning and excitement for players	117
Discussion of New Zealand site	118
5.4 Conclusion	119
Chapter Six: Construction of a coaching habitus	124
6.1 Introduction	124
6.2 The Australian site	125
6.2.1 Sporting background from childhood before commencing as a professional coach	125
6.2.1.1 Positive experiences of sport	125
6.2.1.2 Long engagement, early specialisation and elite participation in rugby union	126
6.2.1.3 Early coaching experience	126
6.2.2 Influence of significant people (coaches, teachers and parents) from childhood	127
6.2.3 Pathways into elite coaching	129
6.2.3.1 Playing experience	129
6.2.3.2 The role of rugby union clubs	130
Discussion of Australia site	132
6.3 New Zealand site	134
6.3.1 Sporting background from childhood before commencing as a professional coach	134
6.3.1.1 Early introduction and importance of rugby union	134
6.3.1.2 The importance of competition for learning	135
6.3.1.3 Early coaching and leadership experience	136
6.3.2 Influence of significant people (coaches, teachers and parents) from childhood	138
6.3.3 Pathways into Coaching	140
6.3.3.1 Playing and coaching experience	140
6.3.3.2 The role of clubs and associates.	141
Discussion of New Zealand site	143
6.4 Conclusion	144
Chapter Seven: Views on learning and relationships	148
7.1 Introduction	148
7.2 Australian site	148
7.2.1 Coaches' beliefs and assumptions about learning	148
7.2.1.1 Learning is a process of internalising knowledge as an object.	148
7.2.1.2 Players have a learning style or preference.	149
7.2.1.3 Players learn best when motivated and through hard work	150
7.2.1.4 Players learning from their peers.	151
7.2.2 The role of games in the learning process.	153
7.2.2.1 Pressure and tests for players	153
7.2.2.2 Spatial awareness and decision making.	154
7.2.2.3 Skills before games	156
7.2.3 Relationships with players	157
7.2.3.1 Coaches sought to establish and maintain a business relationship with players	157
7.2.3.2 The coaches sought to foster respect and honesty from players.	158
Discussion of Australia site.	159
7.3 New Zealand site	162
7.3.1 Coaches' beliefs and assumptions about learning	162
7.3.1.1 Players learn when empowered, they have ownership and a sense of belonging	162
7.3.1.2 Players have a learning style or preference.	164
7.3.1.3 Players learn from their peers.	166

7.3.2 The role of games in the learning process	168
7.3.2.1 The use of games provides opportunities for understanding and decision making	168
7.3.2.2 Games replicate and simulate the actual game	170
7.3.2.3 Games are fun, provide excitement and competition	172
7.3.3 Relationships with Players	172
7.3.3.1 Relationships are humanistic and player-centred	173
7.3.3.2 Respect and trust	174
7.3.3.3 Coaches learn from players.	175
Discussion of New Zealand site.	177
7.4 Conclusion	179
Chapter Eight: Interpretation and use of Game Sense	183
8.1 Introduction	183
8.2 Australian Site	183
8.2.1 Exposure to Game Sense	183
8.2.2 Understanding of Game Sense	184
8.2.2.1 Game Sense as a practical sense of the game	184
8.2.2.2 Game Sense as the use of minor or small-sided training games	186
8.2.3 Application of Game Sense to training	187
8.2.3.1 The place of games in training	187
8.2.3.2 Specificity and replication of game conditions	188
8.2.3.3 Practising the unstructured aspects of matches	190
8.2.3.4 Pre-season	191
8.2.3.5 Testing skills	192
8.2.3.6 Views on limitations of games-based training	193
Discussion of Australia site	195
8.3 New Zealand site	197
8.3.1 Exposure to Game Sense	197
8.3.2 Understanding of Game Sense	198
8.3.3 Application of Game Sense to training	199
8.3.3.1 The place of games in training	199
8.3.3.2 Creating specificity and replicating match conditions	201
8.3.3.3 Exciting, motivating and inspiring players	202
8.3.3.4 Views on limitations and challenges of game-based training	204
Discussion of New Zealand site	205
8.4 Conclusion	206
Chapter Nine Conclusion	210
9.1 Introduction	210
9.2 Impact of Game Sense on coaching practice at each site	210
9.3 How has the coaches' habitus shaped their interpretation and use of Game Sense?	214
9.4 Closing thoughts	219
References	221
Appendix 1 Participant Profiles	232
Appendix 2 Coaching Behaviour Observation Instrument	240
Appendix 3 Ethics	241
Appendix 4 Interview Schedule	245

Glossary

Term	Explanation
AIS	Australian Institute of Sport, centralised high performance centre of sport in Australia administered by the Australian Sports Commission
All Blacks	National rugby union team of New Zealand
ARU	Australian Rugby Union, governing body of rugby union in Australia
ASC	Australian Sports Commission, the Australian Government's national body for the administration of sport
Brumbies	Provincial rugby union team in the Super 14 rugby competition from Canberra in Australia
Colts	Age specific rugby union competition in Australia and New Zealand for players between 18 and 20 years of age.
Crusaders	Provincial rugby union team in the Super 14 rugby competition from Christchurch in New Zealand
Deliberate Play	Games with standardised rules where participation is geared towards fun
Deliberate Practice	Structured and organised practice with an emphasis on improving performance.
GPS	Global positioning system technology which tracks the movements of players during a game or at training
Hurricanes	Provincial rugby union team in the Super 14 rugby competition from Wellington in New Zealand
IRB	The International Rugby Board is the international governing body for rugby union
NPC	The National Provincial Championships is the professional rugby union competition within New Zealand.
NZRFU	New Zealand Rugby Football Union governing body of rugby union in New Zealand
RWC	Rugby World Cup is played every four years and is only surpassed by the Olympics and the Soccer World Cup as an international sporting event.
Sampling	The process of experiencing different sports in childhood years
SANZAR	Southern hemisphere tripartite governing body of professional rugby union for South Africa, New Zealand and Australia set up in 1995.
SPARC	Established in 2003 Sport and Recreation New Zealand is the government's national body for the administration of sport.
Specialisation	The process of concentrating on one sport for elite development.
Springboks	National rugby union team of South Africa
Super 14	Professional rugby union competition between provinces in Australia, South Africa and New Zealand established in 1996
Tri Nations	Tri Nations is an annual competition between Australia, South Africa and New Zealand established in 1996 and administered by SANZAR
Wallabies	National rugby union team of Australia
Waratahs	Provincial rugby union team in the Super 14 rugby competition from Sydney Australia.

Abstract

As an innovative game based coaching approach developed in Australia Game Sense holds significant potential for developing thinking players. However the ways in which it challenges traditional beliefs about coaching and practices has limited its uptake in elite level sport. This study contributes toward the development of knowledge regarding the implementation of Game Sense in elite level sport by inquiring into the influence that it has had on the practice of elite level rugby coaching in Australia and New Zealand. Using a case study approach it focuses on eight elite level rugby coaches in Australia and New Zealand to allow for the identification of themes that transgress different cultural settings while highlighting the situated nature of coach development.

Data were generated through a series of interviews, observations and field notes conducted in 2007 and 2008 in Australia and New Zealand. The analysis of the data was conducted by using Bourdieu's key analytic concepts and those of Lave and Wengers' situated learning in an integration of learning theory and the social theory of Bourdieu. Habitus in particular emerged as a central means of understanding and explaining how the experiences of the eight participants shaped their interpretations and use of Game Sense. The integration of Bourdieu's (1977) and Lave and Wenger's work allowed for a focus on a community of practice within the notion of a sub field of a larger field to examine how the habitus is developed and embodied over time.

The participants viewed games based training as one of a range of approaches to effective coaching. However, there was a significant difference between the two sites in their understanding and application of Game Sense pedagogy that was shaped by the different cultural and institutional contexts within which the coaches' habitus was constructed and in which they practised. While there was some variation on an individual level at the Australian and New Zealand sites the New Zealand coaches pedagogy was significantly more aligned with Game Sense pedagogy than the coaches at the Australian site. Habitus provided a means of understanding the learning and development of expertise of the coaches at both sites.

Chapter One Introduction

My earliest memories of involvement in sport as a young boy are those of countless hours spent playing a range of informal games with friends. Typically we played games such as touch football (rugby), forcings back (a kicking game), British bulldog, soccer and fly with intensity and great joy until the sun went down or I was required to go home for dinner. It was these games, organised and run by ourselves without the intrusion of adults that I enjoyed the most and where I learnt the most about how to play games. We modified games to suit the spaces and conditions we played in, the number of players we had at hand and our own ideas of what a good game was.

As I grew up I moved into organised and increasingly competitive sport, particularly rugby union. This transition involved different experiences of learning how to play. It involved being coached in sport and adopting the role of the player being taught how to play by the expert, a coach. It involved being told what to do, having adult ideas of training imposed upon me and far more structured learning experiences. This is not to say I did not enjoy it because I did. I have many fond memories of learning to play rugby union and of some great coaches whom I respected immensely. Of course there was less motivation for the often-demanding drills that we had to do and far less ownership but I never questioned the need for these changes as I moved into a career as a senior level rugby player and left my childhood memories of games play further behind. Drilling and perfecting techniques to become a better player was unquestionable for me. It was common sense, that is, until my first exposure to Game Sense.

My next conscious consideration about the use of games in rugby union coaching was in 1998 while I was coaching Sanyo Rugby Club in Japan. Several of my players were Polynesian and struggled to keep their weight down. They had difficulty with the language and the cultural demands of training in Japan. In order to get them to reduce their weight and develop appropriate game related fitness I organised training so that the team played a selection of games closely mirroring rugby union. This resulted in a number of effects. Firstly the players lost a considerable amount of weight, secondly they improved their fitness and thirdly they were compliant at training. At that time I had not heard of the term Game Sense. I was just trying to engage the players so they could reach their potential.

Reflecting on 15 years of coaching experience (1993-2009) with the Indigenous Rugby program, I remember using games to motivate players in ways that resulted in greatly improved performance. Early in our existence we ran extensive training camps over a number of days but we found that our players lost interest when faced with long training sessions where the emphasis was on progressive technical development. They enjoyed free flowing games of touch rugby before training but did not carry that enthusiasm through into drills and skill sessions. When it came to playing full practice games or using touch football or any other game as part of the warm up our players came alive and were far more motivated. We responded by using games as much as we could in training. We did not necessarily use a Game Sense approach with questioning but employed games training as much as we could. Not only did the boys enjoy training more, they also improved rapidly. In 2000 our team won the World School Boys Tens (10 players in a team instead of 15) tournament using a combination of games and drills to prepare for the tournament. Given that a number of our players did not have a rugby union background this was an impressive achievement and we felt that the use of games played a big part in it, yet, at the time, we did not really understand how.

Every research project has its own unique catalyst or genesis, in my case this occurred in 2003 during a trip to Shepparton, Victoria, for a job interview. My present supervisor was also a passenger and during the trip we discussed the nature of Teaching Games for Understanding (TGfU) and Game Sense and its implications for coaching. This discussion prompted me to reflect again on my own experiences as a child, of being coached as a senior rugby union player and more recently my endeavours as a professional rugby union coach. The result was that my training as a sports scientist with its emphasis on motor learning and skill acquisition had created a view of coaching as a simple and predictable activity. However the opposite had been my experience as a player and coach. My history as a player suggested that learning to play was at times in contrast to these fundamental views of learning in contemporary coaching. My history and experience with coaches was also laden with authoritarian and directive people who did not engage with me as a player. The coaches I admired the most were those who spoke to me on an individual and humanistic level (Jones, 2009). Many years after that experience I had become frustrated with the application of motor learning and skill acquisition approaches embedded in coach education programs and their prevalence in the practice of coaching. In 2006 this was brought into closer focus during a practical coaching session where players were required to perform skill development drills

running between cones in an orderly fashion which required little decision making or purpose and lacked any connection to the real game of rugby union. From my perspective the players appeared to be bored and disengaged from the goals of the activity. However the opposite occurred when the players were left to their own devices; they quickly organised a game and were instantly excited and galvanised. In the modern era of professional rugby union, coaching has been reduced to a mechanistic practice where players are treated as unthinking or divorced from their development, often engaged in activities which are tightly organised, managed and controlled by coaches.

After having read Game Sense literature and following the chance meeting with Dr Richard Light the idea of learning to play a sport like rugby union through a games-based approach triggered some critical reflection upon the way I was coaching and the ways I had been coached during my career. It brought back memories of the enjoyment and the skills and understanding I developed with my mates so long ago. As I read, talked and thought about the idea of coaching through modified games my interest grew. The possibilities for coaching in ways that were motivating and helped players develop perception, decision making and tactical understanding excited me. I have since begun to incorporate Game Sense into my coaching. This study is, therefore, the reflections of an experienced player and coach informed by a developing knowledge of Game Sense as a beginning researcher.

In 2004 I was reunited with Richard Light at the University of Sydney and my thoughts again turned to the impact that TGfU and Game Sense had on elite level coaching. In 2005 in preparation for the PhD study I conducted a pilot study on the impact of Game Sense on elite level rugby union coaching in Australia. The results of the research suggested that games were a significant activity employed by coaches in their training sessions. The results also suggested that while games were used by coaches the pedagogy underpinning Games Sense was not well understood or implemented in practice sessions (Light & Evans, 2010). Similar results were reflected in the initial stages of the PhD research project. Consequently the research project changed track to determine why coaches did not engage with the Game Sense pedagogy and the study became an examination of the coaches' development through the lens of the impact of Game Sense. The study investigated the life histories of coaches and their attitudes towards education and learning to determine how these influenced their uptake of Game Sense.

In 2005 I presented a conference paper at the Teaching Games for Understanding (TGfU) conference held in Hong Kong. During the course of the conference I met Rod Thorpe who gave me a newspaper article on the changes that the New Zealand All Blacks coaching staff had made to the way they viewed the coaching process. At its centre was a belief that coaches needed to engage with the players, take an athlete-centred approach and reject the skills and drills approach to coaching that had been commonplace in New Zealand (Kitson, 2005).

The publication of Bunker and Thorpe's (1982) Teaching Games for Understanding (TGfU) over two decades ago triggered some initial re-thinking about physical education pedagogy but had little significant impact at the time (Holt, Streat, & Bengoechea, 2002). However, within the context of increasing interest in constructivist approaches to teaching in the physical education field there has been a virtual explosion of interest in research on TGfU and its growing range of variations such as Play Practice (Lauder, 2001), Game Sense (den Duyn, 1997) and the Games Concept Approach (GCA) (Light, Swabey & Brooker, 2004). Within the rapidly growing body of literature arising from this interest some attention has been paid to the ways in which this constructivist, student-centred, inquiry-based approach to teaching conflicts with the deeply held beliefs about teaching and learning that teachers have (see for example, Butler, 1996 and Rink, 2001). Such development over this period has led to increasing critical attention to pedagogy in physical education and growing awareness of the limitations of entrenched traditional approaches that are guided by out-dated pedagogy (Light & Butler, 2005). This is an important development in the physical education field but far less research attention has been paid to sport coaching. As some researchers suggest, coaching has been regarded as a simple and unproblematic process in the coaching literature (Cushion, Armour & Jones, 2006). It has not had the same critical attention to pedagogy that physical education has over the past decade. Such critical research attention to coaching at the elite level is important, not only for providing a deeper understanding of the coaching process at this highly competitive level and how it develops, but also for the influence that coaching at elite levels has on coaching and learning in youth and children's sport (Light, 2004b).

This research project inquired into the application of an innovation in coaching, called Game Sense, to coaching rugby union at the most elite levels in Australia and New

Zealand. Researchers have noted the challenges that Game Sense and similar teaching/coaching face in making a significant impact in schools and in sport coaching (Brooker & Abbott, 2001; Butler, 1996; Light, 2004b). Much of this is due to the ways in which the notions about learning which underpin it challenge common-sense views of learning as a process of transmitting objective knowledge (Rink, 2001). As recent writing suggests this is also the case with coaching (Cassidy, Jones & Potrac, 2004). Coaching at the most elite levels of rugby union presents other problems associated with economic forces and the emphasis on winning in international competition. The enormous symbolic and economic importance of rugby union at its most elite levels in Australia and New Zealand and the importance placed on winning games provide a particular environment that is most unlike the other settings in which research on Game Sense has been conducted. Within this special environment the uptake of any new approach to coaching and the development of coaching knowledge are likely to involve very distinct challenges and problems.

Following from Light's (2004a) examination of Game Sense coaching in Victoria and the Australian Capital Territory this research project makes an extensive examination of coaches' attitudes to, and knowledge and experiences of, Game Sense at the most elite levels of rugby union coaching in Australia and New Zealand. It inquires into the coaches' interpretation of Game Sense, their use of it and their views on its possibilities for elite level rugby union coaching. It uses the coaches' interpretations of responses to Game Sense as a lens through which to investigate the complex social nature of coaching and the ways in which coaches at the elite level have developed their beliefs about coaching and their practice of it. As the work of Merleau-Ponty (1962) and Bourdieu (1984) suggests, interpretation is shaped by experience, by the embodied experiences of the individual over the course of his or her life. This implies that coaches' interpretations of Game Sense are acutely shaped by their own experiences of sport over time as both players and coaches. This study traces the life experiences of coaches and how their experiences of sport and coaching have shaped the way they coach and the views they hold of coaching and learning which have developed over their lives. It will attempt to answer the core research questions: What are their common-sense beliefs about coaching and how do they shape their interpretation and use of Game Sense as a new pedagogy? This study will use a case study methodology similar to that of Light, (2004a) but aims to concentrate on one distinct population of

coaches operating at the most elite level in the sport of rugby union, whereas Light drew his findings from the coaches' experiences in four different sports at different levels.

The study uses a theoretical framework drawing on the analytical concepts of French sociologist, Pierre Bourdieu. This includes the use of habitus and its relation to practice and field to explain the practice of coaches. It considers participation in activities, the role of agency and collaboration and the importance of identity and culture in the learning process. The study also used Lave and Wenger's (1991) recent concepts of situated learning, legitimate peripheral participation and communities of practice to understand the ways in which coaches develop particular beliefs about coaching and learning. Lave & Wenger (1991) do not suggest that situated learning is a pedagogical approach to learning but rather a way to analyse how people really learn.

I have a background in elite level rugby union as a player and coach and have held discussions with some of the top coaches in Australia and New Zealand about their use of game-based coaching and their views on Game Sense. This places me in a good position to investigate issues involved in applying Game Sense in elite level rugby union. The eight case studies focus on rugby union coaching at the most elite level in Australia and New Zealand and uses interviews, observations and field notes conducted over a 12 month period from 2007 to 2008. The study examines the backgrounds of the coaches, their coaching beliefs and values, their attitudes to Game Sense and their experiences of using Game Sense and/or game-based coaching. The research attempts to provide an understanding of the complex nature of coaching and the practical issues that arise in the development of Game Sense coaching.

Chapter Two Literature Review

2.1. Introduction

This chapter traces the development of Game Sense from its roots in Bunker and Thorpe's 1982 *Teaching Games for Understanding*. The use of games in practice sessions is not new and has a history preceding Bunker and Thorpe's (1982) seminal publication of *Teaching Games for Understanding* (Grehaigne, 1992; Grehaigne, Godbout & Bouthier, 1999; Mahlo, 1974; Mauldon & Redfern, 1969). Coaches in many sports have long used games as part of their approach to designing practice sessions (Light, 2006a). "Pick up" games such as touch football have been part of the coaching environment for many years especially in rugby league and rugby union throughout 1950s and 60s (Dwyer, 2004). The remainder of the chapter examines learning in and through sport with a focus on the range of learning that is possible. Its view of learning as a complex and transformative process is a departure from the traditional views of learning that have informed coach education. This is followed by a discussion of contemporary developments in coaching. Finally the chapter discusses the elements which constitute the trajectories of coaches into the profession of coaching.

2.2. The Genealogy of Game Sense

2.2.1. Early Development of Games-Based Coaching/Teaching

Over 40 years ago, and prior to the seminal work of Bunker and Thorpe in 1982, Wade, (1967) saw the need to coach through the use of games and challenge exercises in an attempt to maximise participation by soccer players. Wade's play-orientated style of coaching soccer is possibly the first attempt at publication of an approach that sees the player and their needs as fundamental to establishing a learning environment. This attempt to approach coaching from a game perspective encouraged the use of small sided games with simple rules to maximise player contact with the ball during practice. It also advocated the need to make training fun and enjoyable. Wade's views on coaching were similar to the constructivist-informed approaches to teaching physical education and sport (Kirk & MacPhail, 2000; Kirk & MacPhail, 2002) advocated over the past decade:

Clearly the teacher (coach) who can set problems and also guide a child towards appropriate solutions has an advantage. But any teacher with imagination can set problems and guide a child towards possible answers. (Wade, 1967, p. xiii)

Wade (1967) identifies four fundamental principles for coaching that resonate with the principles of Teaching Games for Understanding (TGfU) and Game Sense. These principles involve the coach: 1) maintaining interest through maximum participation, 2) taking responsibility for players understanding the content of training, 3) stimulating players to reach their potential and 4) being able to explain the game within an environment that fosters integrity and fair play. In 1969 Mauldon and Redfern proposed that games could be used as a viable alternative for developing skills in schoolchildren rather than direct instruction. Drawing on the work of Wade and Mauldon and Redfern, Bunker and Thorpe published TGfU in 1982. It was proposed that TGfU was an avenue to improve or rectify the sports performance of those who had developed skill at the expense of game knowledge and understanding.

Since the publication of TGfU there have been a number of developments or approaches to coaching and teaching that has embraced the fundamental tenets of TGfU. This includes the work of Griffin, Mitchell and Oslin (1997) who proposed the Teaching Games Model (TGM). At a similar date the Australian Sports Commission had been consulting with Rod Thorpe and published Game Sense (den Duyn, 1997). Play Practice was published in 2001 by Launder and also used a games centred approach to teach sport skills (Launder, 2001). In 2005 Grehaigne, Richard and Griffin published another game centred version called the Tactical Learning Decision Model (TLDM) (Hopper, Butler, & Storey, 2009). All these models are based on, or share, similar characteristics to TGfU. They all take an athlete or student-centred approach and recognise that learning takes place within the social context of a game. Participants develop embodied experiences which are facilitated through reflection, discussion and interaction with others. Games or game situations are designed by taking into account the athletes' or students' level of ability and the game is changed to introduce constraints that foster problem solving (Hopper et al., 2009). It is also argued by these authors that learning occurs because players are motivated and enjoy the experience (Kidman, 2005).

The terms TGfU and Game Sense have increasingly been used interchangeably in publications. Rob Thorpe was asked to comment on this development and made this response.

I am not sure, as some use the phrase interchangeably, (that) there is much difference, but I see Game Sense as incorporating more than the original teaching games for understanding. (Kidman, 2001, p. 26)

This suggests that Thorpe felt that there is significant alignment between TGfU and Game Sense. Furthermore when asked to comment on why Game Sense was innovative and on what was the difference between Game Sense and TGfU he indicated that the key difference was about empowerment through questioning and a desire for player ownership when using Game Sense (Kidman, 2001).

2.2.2 Teaching Games for Understanding (TGfU)

As outlined above, TGfU is more of a development of ideas on coaching and teaching and the use of games were in use well prior to Bunker and Thorpe's publication in 1982. It was, however, seen as being revolutionary at the time and is still invariably described as innovative in contemporary literature despite being published 26 years ago. Bunker and Thorpe developed TGfU in response to their observation of players who were technically sound but were not good games players. A number of issues separate the TGfU approach to teaching from previous attempts to locate games within the teaching and coaching field. Bunker and Thorpe (1982) identified a number of key issues that were inhibiting students' ability to grasp the games they were practising. Firstly, they identified an exaggerated emphasis on students' learning techniques that were divorced from the full version of the game. They proposed that this emphasis on technique and the disconnection from the game resulted in poor decision making and inadequate tactical awareness when students played the full game. In addition it was observed that there was a general inability to reproduce skills in a game. Students had on many occasions asked Bunker and Thorpe, "When do we get to play the game?" as an indication of their frustration with the traditional approach to coaching that requires that players learn skills prior to playing the game (p.5). Several researchers suggested that an over-emphasis on technique may be the reason why senior national teams in the United Kingdom had performed poorly in international competition (Bunker & Thorpe, 1982, 1986; Thorpe, Bunker & Almond, 1986).

Along with contextualising learning within modified games and the use of questioning, the development of game categories within which all games share the same tactical problems forms a core element of TGfU and is a distinctive feature of the model (Bunker & Thorpe, 1986; Griffin & Butler, 2005). This categorising of games into invasion games, striking games, net wall games and target games is based upon the idea that, despite the differences in technique and equipment between games, tactical knowledge and decision making ability is transferable. The underpinning idea is that within each distinct category the same tactical and strategic requirements are present so that, for example, the tactical ability to create a two-on-one situation in attack in hockey can be transferred to rugby union. In competitive levels of sport such as rugby union this means that players can develop tactical knowledge and decision making ability across a range of different games that motivate them by the different challenges they entail (Light, 2006). For a physical education teacher this offers an ideal way of organising the curriculum in games teaching using one term to practise invasion games using the TGfU principle of sampling where a large amount of time is spent on one invasion game with the tactical learning being transferred to other games in the same category (Griffin & Patton, 2005)

There has been a great deal of research published over the past ten years on tactical approaches to teaching games such as Teaching Games for Understanding (TGfU) as an alternative to 'traditional' technical coaching approaches that focus on the development of technique (Hopper, Butler & Storey, 2009). There have been several books devoted to TGfU such as the series of edited volumes published from conferences, (Butler, Griffin, Lombardo & Nastasi, 2003; Kidman, 2001, 2005; Launder, 2001; Slade, 2005). There is also a regular series of international conferences on understanding approaches to teaching and coaching held under the auspices of Association de Internationale des Ecoles Superieurs d'Education Physique (AIESEP). The first was held in New Hampshire, USA in 2001 and attracted 150 delegates and the second in Melbourne in 2003, attracting 250 delegates from 19 different countries (Light et al., 2004). A third was held in Hong Kong in 2005. The fourth was held in May 2008 in Vancouver, Canada and the fifth will be held at Loughborough University in the UK in 2012. Special issues of major journals such as the *Journal of Teaching in Physical Education* (1996), *Physical Education and Sport Pedagogy* (2005) and the *Journal of Physical*

Education New Zealand (2006) have been devoted to tactical approaches to teaching (Light, 2005, 2006b; Rink, 1996).

The TGfU model has at its core a number of pedagogical principles which underscore its application. These include sampling, representation, exaggeration and tactical complexity (Bunker & Thorpe 1986). The goal of sampling is to provide opportunities for students to experience various game forms which allow learning to be transferred from one game type to another. Students are provided with opportunities to explore the differences and similarities of games. Representation involves manipulation of the advanced or mature form of the game into a condensed version which has similar tactical requirements. This allows the use of a modified game to represent other forms of the game so that teachers do not have to rely on one traditional game for teaching purposes. Exaggeration involves making changes to the game to emphasise a specific tactical goal or problem, for example, in soccer the use of more attackers than defenders encourages scoring. Tactical complexity requires that the game matches the development level of its players. The complexity of the game is increased as players improve their understanding and are able to provide solutions to problems presented in the game. The implementation of TGfU by the teacher is cognisant of the developmental needs of students.

The underlying view of TGfU is that it involves problem solving and students learning how to make intelligent decisions. While understanding and game appreciation are the goals, technique and skills are seen as complementary to understanding and are addressed as part of the development of students within the game. Skills need to be contextualised within a modified game designed by the teacher or coach to achieve specific outcomes. However, at the core of the TGfU approach is the belief that learning how to play and when to execute skills is more valuable than how to execute skills (Bunker & Thorpe, 1982, 1986).

The learning that takes place in TGfU activities is fundamentally different from the traditional teaching of games because the assumptions and structures of TGfU are student-centred with an emphasis on participation. Learning also occurs because the opportunities that are generated require feedback and discussion both between the players and with the teacher. Similar approaches to learning have been adopted in other

areas of education from the work of Vygotsky (1978). This leads to students taking a reflective stance and facilitates self-directed learning.

This approach requires a significant shift towards a different relationship between the teacher and student. The teacher creates a learning environment where students are encouraged to find solutions to problems within a game context. Crucial to the TGfU approach is the relationship with students, where questioning or problem solving is seen as teaching and such questioning is the basis for collaboration and cooperation.

Teachers need to take a questioning approach to ascertain whether students understand their development (Griffin, Brooker & Patton, 2005). Teachers are required to take a step back and be less concerned with telling students what to do and how to do it and assume a role as facilitator (Griffin & Patton, 2005).

Learning in TGfU involves activities that include social, physical and cognitive learning outcomes. The TGfU approach provides students with opportunities to work in small groups allowing interaction and discussion which leads to positive interdependence. Learning is the responsibility of students and a TGfU approach assumes that students are not passive recipients but rather, active participants in the learning and teaching process. One of the advantages of the TGfU approach to teaching games is its capability to engender intrinsic motivation which enables learners to achieve self-determination and leads to long lasting learning and participation (Griffin et al., 2005).

Kirk (1983) introduced the notion of the intelligent performer which recognised the contribution of various principles of play such as timing, decision making and tactical awareness that were required in particular game situations. The use of games in practice sessions provides a fluid environment where students have to make decisions and solve problems. This encourages collaboration and cooperation between players and considers the learning needs of the student or player (Griffin et al., 2005).

Critical to the early establishment of TGfU as part of the teaching curriculum and an important component of professional development for teachers in the United Kingdom was the Coventry Project on Teaching Games in 1982 within which teachers were invited to participate in practical workshops on TGfU. The process provided an environment in which teachers could challenge their views on teaching games, and an

avenue through which to critique their involvement through action research which emphasised reflection (Almond, 2001; Jeffray & Almond, 1986)..

This learner-centred approach was a departure from the traditional coaching approach common to most sports. The TGfU approach also introduced pedagogical principles which were not evident in other coaching approaches (Griffin & Butler 2005). The notion of game sampling was introduced so that the connection between game types could be experienced and players/students could transfer tactical knowledge from one game to another within a game category. Representation meant changing or modifying games but maintaining the tactical requirements of the full game. A simple form of the game meant that children could understand and play it. The approach also utilised the game categorisation developed by Thorpe, Bunker and Almond (1986). Exaggeration involves manipulating rules and conditions to over-emphasise elements of the game, usually tactics, which require development by students. Finally it was argued that games should be designed to reflect the tactical maturity of students. The TGfU approach encourages the development of skills and tactics together and not isolated from the game environment. Progress is contingent on mastering skills and tactics within the game before moving on.

2.2.3 Issues in implementing TGfU

Most research on TGfU has been conducted in the area of physical education and researchers suggest that interest in TGfU arises from a recognition of its potential to offer physical education teachers a student-centred approach that is consistent with the constructivist learning theory used in other subject areas such as mathematics and science education (for example see Kirk & MacPhail, 2002; Light, 2002). Despite the growth in research and writing on TGfU it has yet to make a significant impact upon physical education teaching (Kirk & MacPhail, 2002; Light, 2004a). A decade ago Kirk and Claxton (1999) suggested that, despite the potential that TGfU offers to address many of the problems facing teachers of physical education and sport in schools, it continues to meet resistance. Some studies have examined issues holding back the development of TGfU in schools by looking at teachers and pre-service teachers (for example see Butler, 1996; Light, 2002, 2004a).

Butler (2005) provides an insight into the difficulties of implementing TGfU by arguing that implementation relies on the views, beliefs and perceptions of teachers who are exposed to the approach. He established that many teachers, particularly seasoned teachers, take a traditional view of teaching where they direct and deliver lessons. In TGfU lessons students are responsible for and have ownership of their own learning. This can be problematic for teachers who think they need to control lessons.

Rossi, Fry, McNeill and Tan's (2007) research where a variation of TGfU called Games Concepts Approach (GCA) was mandated in Singaporean schools revealed that teachers had a poor understanding of the approach and felt that it was a "teaching trick" for improving other physical education objectives. Light and Butler (2005) found that while pre-service teachers in Singapore were receptive to "trying things out" and had some encouraging views about the efficacy of TGfU they were sceptical of its pedagogical value. Research reported by Nash (2008) also raises questions about student teachers ability to implement TGfU in the workplace. The successful implementation of TGfU was related to student teachers' lack of confidence and knowledge about TGfU.

Alexander and Penney (2005) point out that there is a range of factors under the banner "quality of working life" that impinge upon or prevent teachers from adopting TGfU. These include self efficacy, the goals of teaching, resources, the skill development needs of teachers and the respect of peers in the workplace. Furthermore they contend that; "the degree to which teachers have a successful working life will determine to what level teachers acquiesce to competing pressures and take up a new pedagogy" (p.300).

Workplace socialisation may also be a strong determinant of teachers' agency to introduce changes within the teaching culture. Where the culture is already well-established or embraces a traditional view about teaching this prevents teachers from adopting innovative approaches. The initial concern of student teachers may well be about "fitting in" so they may feel hesitant to implement innovative teaching and learning pedagogies (Sirna, Tinning & Rossi, 2009). Fernandez-Balboa (2009) also points out there are difficulties and challenges associated with people fitting into the teaching environment. The culture of the teaching environment contributes to the pedagogical decisions that teachers make in the day-to-day practice of teaching (Sirna et al., 2009).

Rossi (2001) does not specifically outline the habitus of teachers, however he does draw attention to the agency of teachers and their ability to adopt new pedagogies in their practice. Instead they prefer to fall in line with accepted traditions or conventional doctrine:

The perception of what is good teaching or coaching prevails at the expense of critical pedagogy. In order to fit in, our professional identities are shaped by time honoured conventions which are misplaced, favouring instead to adhere to the intro-demo-practice-game format together with an emphasis on control, organisation and discipline, which have been the cornerstone of skill instruction for many teachers. The overriding requirements of discipline and control prevent even adventurous teachers from taking risks in adopting innovative pedagogy. (Rossi, 2000, p. 50)

According to Light and Tan (2004) Bourdieu's notion of habitus may also provide a valuable concept for understanding how teachers' beliefs and practices are developed. In a study on pre-service Physical Education teachers in Australia and Singapore, they show how the life histories and experiences of teachers are tied up in the embodiment of their social history which shapes their social action. Thus, teachers' experiences of sport and life histories can influence their views on the efficacy and value of TGfU, how they interpret it and their uptake of it. Fernandez-Balboa (2009) also suggests that our endeavours and attitudes towards teaching have solid links to our life histories.

Finally, the successful implementation of the TGfU approach is dependent on practitioners having a deep knowledge of game play, game design and the provision of questions and feedback at appropriate moments and stages of the lesson (Chandler, 1996; Harvey, 2009; Thorpe & Bunker, 2008). This requirement to understand teaching as having deep structures is in competition with surface approaches of teaching skills and drills (Brooker & Abbott, 2001; Chandler, 1996).

Any decision to teach will be a reflection of the assumptions that the teacher has about learning (Davis & Sumara, 2003). Or as proffered by Ramsden (2003), "To teach is to make an assumption about what and how the student learns" (p.8). Those who adopt a teacher-centred approach where they transmit a body of information to receptive or unreceptive students who absorb without question the material will be reluctant to adopt or see value in student-centred approaches such as TGfU (Butler, 2005; Light & Butler, 2005; Rossi, 2000).

Technique vs Tactics

Much of the debate on tactical approaches to coaching and teaching has contrasted a tactical model with a 'traditional' technique-focused model (Turner & Martinek, 1992). Few, however, would suggest that there is in practice a clear-cut dichotomy between the two models. As coaches in the Turner and Martinek study suggest, there is often considerable overlap. Indeed, much of what is promoted in the Game Sense approach would likely be seen as basic 'good coaching' by many coaches (Light, 2004a). There are, however, fundamental differences between the conceptions of coaching and learning that underpin these two instructional models. The traditional approach is based on analysing skills and technique that are assumed to be fundamental to successful play. Technique is practised and developed until it is good enough to enable the game to be played.

Traditional technical approaches to teaching/coaching games are based on the idea that technique must be developed before playing the game (Blomquist, Luhtanen & Laakso, 2001). Game Sense is different in that it contextualizes learning within games or game-like situations that make training more like game conditions. Its focus is on the game and the intellectual aspects of play like decision making and tactical knowledge and not on the refinement of technique. Bunker and Thorpe (1982) argue that too much emphasis is placed on developing physical skills out of context, at the expense of the other dimensions of game play such as tactical understanding and decision making. Motor skill execution is only one part of performance in games and is highly dependent upon the context within which it takes place (Abernethy, Hanrahan, Kippers, Mackinnon & Pandey, 2005; Blomquist, Luhtanen & Laakso, 2001). Bunker and Thorpe (1986) argue that the traditional focus on specific motor responses in the form of technique fails to account for the contextual nature of games. Good coaching needs to reflect the fact that both motor skill execution and game knowledge contribute to good game performance.

2.2.4 Game Sense

Game Sense is the Australian derivative of TGfU developed during the mid 1990s through collaboration between Rod Thorpe, the Australian Sports Commission and local coaches (Light, 2004a). It was developed for coaching with the name changed to Game

Sense to distance it from schools, physical education and teaching as well as to make it more appealing to coaches than TGfU. It is similar to TGfU in sharing its use of modified games and game-like activities for learning, using questioning instead of direct instruction and the four game categories (Kidman, 2001, 2005). It differs from TGfU in that it is less structured than TGfU with no model and a looser notion of how coaches interpret and use it yet retaining the emphasis on the use of modified games, coach questioning and the empowerment of players through a player centred approach (Kidman, 2001, 2005; Light, 2004a). Recent work on the theorisation of learning and the pedagogy of Game Sense by Light (for example see Light, 2004a) has further defined it and identified how it differs from, for example, the North American development of TGfU (for example see Griffin & Butler, 2005).

Game Sense places all the learning within modified games or game-like situations and is player-centred rather than being coach-centred as traditional approaches tend to be. Tasks are set for the players and they solve the problems arising from playing games designed by the coach to achieve specific learning outcomes and objectives guided by the questioning of the coach rather than a directive approach by the coach. The use of questioning is seen as an important feature which encourages the empowerment of players (Kidman, 2001, 2005). A number of authors have proffered that Game Sense creates conditions for implicit learning and in doing so generates deeper learning and more transportable learning outcomes (Brooker & Abbott, 2001; Hadfield, 2005; Kidman, 2005).

Rather than practise techniques used out of context, Game Sense uses games or modified games as the basis of a training session. It has at its core an emphasis on players developing an understanding of the game instead of completing repetitions of a technique. This approach, especially at a junior level, is aimed at increasing motivation, developing decision making, having fun and affirming a lifelong involvement in physical activity (Pope, 2005, 2006). At a senior or elite level Game Sense not only offers fun in training but also a coaching activity that features implicit learning and intrinsic motivation which contributes to a desire to learn and creates adherence on the part of players (Hadfield, 2009). The refinement of technique is not sacrificed in the Game Sense approach, however it requires the coach to observe and provide timely feedback to players.

2.2.5 Features of a Game Sense Approach

The role of the coach

The role of the coach in Game Sense is a departure from the traditional approach where the coach would decide on what is required and instruct the player. In Game Sense the coach is responsible for structuring the environment for learning through the use of a game. This is analogous to Davis, Sumara and Luce-Kaplers' (2000) views about liberating constraints and its importance in the balance between structure and freedom to ensure that there is a focus on problem solving in the learning environment. The coach acts more like a facilitator than a director. Instead of the coach telling players what to do, players make decisions and solve problems within the game (den Duyn, 1997). Game Sense requires the coach repositioning him or herself by stepping off centre stage as the distributor of knowledge to become a facilitator of learning. This is something that many coaches struggle with (Light, 2004a). This is made even more of a problem through their sense of surveillance under the critical gaze of other coaches, relevant people and even the media in the case of some elite level sports and by the pressure for results in highly competitive sport (Evans, 2006a; Halloran, 2007; Heron & Tricker, 2008; Hooton, 2008).

Relationships

One major difference between Game Sense and traditional technical approaches that is significant for this study is the relationship between coach and players. Many coaches find it difficult to make a shift towards a different relationship with players. Coaching like teaching is embedded in power relationships which are hierarchal in nature, making it difficult for some coaches to step back from the traditional role of coach (Cassidy, Jones & Potrac, 2004; Kidman, 2005).

In the technical approach the coach directs training and passes on his or her knowledge. In Game Sense the coach sets the environment for learning and the players develop their own knowledge through engaging with the environment and through collaboration with other players. In a Game Sense approach the coach has a more equal relationship with the players and acts more as a facilitator than one who commands (Jones, 2006). This also reflects a different notion of learning. The technical approach is based on an

objective and behaviourist view of learning as a process of transmission where knowledge is internalised by the recipient. Game Sense sees knowledge, the learner and the learning as inseparable (Light & Fawns, 2003). It sees the teacher (coach) as a partner in learning and learning as an ecological process inseparable from the environment (Davis, Sumara & Luce-Kapler, 2000; Dewey, 1916/97; Lave & Wenger, 1991; Light & Fawns, 2003). Learning is seen as not just adding on new knowledge, but as involving transformation and adaptation (Davis et al., 2000; Prawat, 1999).

Power, coaching and Game Sense

Sport and coaching like many other forms of social interaction involve a hierarchy and power relationships between its participants (Gore, 1997; Messner, 2008; Potrac, Jones, & Armour, 2002). Coaches wield a significant amount of power and influence over the athletes they coach (Galipeau & Trudel, 2006; Lombardo, 1999; Masters, 2008; Potrac et al., 2002; Potrac, Jones & Cushion, 2007; Stirling & Kerr, 2009). So much so that many athletes are in awe of their coaches: “power of the coach is likened to that of a priest whose absolute knowledge is not questioned or challenged” (Stirling & Kerr, 2009, p. 228). Athletes often spend many hours with coaches over a protracted period of time forming unique working relationships (Lombardo, 1999; Stirling & Kerr, 2009). Athletes are also aware of the power coaches have, in particular the knowledge they possess and how it could make them better players. They also see coaches as having the power to select them in teams, thereby affecting their future (Taylor & Garratt, 2010).

The successful implementation of Game Sense requires collaboration between the coach and players and also between players in the production of knowledge. This co-production of knowledge requires a relationship that focuses on dialogue rather than the directive nature of a monologue. Traditional directive forms of coaching are based on a monologue where players’ actions are directed by a coach who is viewed as an expert (Light & Fawns, 2003). This assumption of the coach as an expert who passes on their knowledge to passive and receptive players has at its core a hierarchal power relationship. Therefore Game Sense, like other forms of constructivism, requires a more equal distribution of power to ensure inclusiveness with the coach adopting a facilitation role in the learning process. The challenge for the coach is to design the learning environment in such a way that learning occurs and this may require the understanding that learning takes place by indirect methods (Dewey, 1916/97).

The work of Foucault also helps to understand the notion of power in coaching. His theory of surveillance and a view of knowledge as power have implications for coaching (Gore, 1997). Traditional forms of coaching which value and privilege knowledge require subservient players to follow the directions of the coach. This tends to operate on an implicit level to reinforce well established hierarchical relationships between the coach and players. It also has the potential to operate in a skills and drills scenario where the coach watches players to create the uncomfortable feeling of being under observation.

Game Sense requires coaches to take a more democratic approach in their coaching. This may prove difficult for many coaches given their backgrounds, socialisation and their enculturation in coaching that explicitly and implicitly states what reflects exemplary coaching practice. Even when presented with good arguments to move towards Game Sense, coaches may have trouble making the required adjustments to their practice.

The use of questioning

While many coaches have used games-based training in the past, one of the major characteristics of Game Sense is the value of questioning. This is not easily recognised or implemented by coaches (Chandler, 1996). Considering that using modified games is not necessarily a new idea, the emphasis on questioning is in fact what distinguishes Game Sense from other coaching approaches (Light, 2006a). The use of questioning encourages players to take responsibility for learning. When coaches ask open questions, players have to interpret and reflect on their actions and solve problems, thus leading to a deeper understanding of their experience. This empowerment approach fosters collaboration between players and with the coach.

The relationship between technique, skill and tactics

It could be argued that Game Sense facilitates the movement from technique to skill by contextualising its use. Skill is described as the product of technique and pressure (Christina & Corcos, 1988; den Duyn, 1997; Magill, 2004; Martens, 2004; Pyke, 2001), where pressure represents the game context, decision making, timing, perception, space

and time (den Duyn, 1997). By placing learning within games in a Game Sense approach players are able to use and develop skills not techniques. To achieve this when implementing a Game Sense approach, the coach is required to design a game that best fits the needs and aspirations of players. Play Practice outlines a number of principles that can be used which include shaping the play, focusing the play and enhancing the play (Lauder, 2001). Shaping play requires the game to have its own rules, size and shape of playing area, goal and numbers of players. Focusing play involves linking teaching with the real game and looks for opportunities to question players about their execution. Enhancing play requires the coach to be able to identify critical moments during the game that are important for illustrating or communicating a message about a skill (Lauder, 2001).

In Game Sense skill, tactical knowledge and decision making are inseparable. The separation or reduction of skilful play into smaller discrete units advocated in motor learning and skill acquisition approaches ignores the complex nature of games and the effects of the environment in which a game takes place. Skilful play is recognized as being able to implement the right skill at the right time and requires the player to be knowledgeable, to have tactical awareness and decision making capabilities (Martens, 2004). By concentrating efforts on technique rather than aspects of understanding it is argued that this limits the ability of players to be skilful (Bunker & Thorpe, 1982; den Duyn, 1997). In Game Sense it is not a case of choosing between skill and tactical knowledge because they cannot be separated (Brooker & Abbott, 2001; Brooker, Kirk, Braiuka, & Bransgrove, 2000; Light & Fawns, 2001).

2.2.6 The Impact of Game Sense on Coaching

Game Sense has made some impact upon coaching in Australia and New Zealand (Kidman, 2005; Light, 2004a). Many rugby coaches working at high performance levels use games in their training and some have heard of the Game Sense approach but the extent to which game-based training in general, and Game Sense in particular, is used is yet to be established. Significantly for this study, Light (2006a) suggests that, while many coaches in Australia use games as part of their training they do not adopt the player-centred pedagogy of Game Sense. Game Sense appears to have much to offer coaching at all levels but, while it seems to have influenced practice in coaching within

Australia, there is, as with all new approaches, resistance and a range of challenges to be overcome before it will be widely implemented.

A subtle but important consideration is that the term “game sense” has entered into the discourse of sport and coaching but with a rather different meaning to the athlete-centred strategy intended in Game Sense. “Game Sense” is often referred to as a personal quality or a type of game-based intelligence much like Bourdieu’s “le sens pratique” where players have developed an intuitive feel for the game (Harris, 2009; Tucker, 2009).

The effective use of Game Sense requires a different set of skills and attributes and requires a significant change or shift in attitude on the part of the coach (Kidman, 2005). Game Sense requires the coach to observe and evaluate performance. This facilitation role affords players the space and opportunities to work through problems collaboratively. This can be at odds with the need of many coaches to be vigilant with constant error correction and explicit demonstrations of knowledge as seen in traditional approaches. When adopting Game Sense a new dynamic is established as the relationship between coach and player has a more equitable sharing of power. This change may prove difficult for many coaches and players who have been accustomed to traditional directive coaching (Kidman, 2005; Light, 2004a). Coaches often take a directive approach and rely on craft knowledge embedded over time with common sense beliefs which are reliant on the development of technique. (Brooker & Abbott, 2001).

The culture of coaching in elite level professional sport has certain expectations which can work against experimentation and the introduction of innovations such as Game Sense (Kidman, 2005). The pressure to coach winning teams may inhibit coaches’ tendencies to be innovative; rather forcing them to adhere to current conventions about coaching (Evans, 2006b; Light & Evans, 2010). The culture of coaching also has other pervasive factors which work against the introduction of innovation such as the view about what constitutes effective use of training time. The emphasis on organisation and management where training should have the appearance of order and cohesion is at odds with the messy and sometimes chaotic appearance of Game Sense (Kidman, 2005; Light, 2004a; 2004b). This traditional ideology about coaching reduces learning to a neat, simple and linear process (Light & Fawns, 2001).

One of the challenges associated with Game Sense is that it requires time to see results especially for players and coaches who have been accustomed to a technical directive style of coaching (Kidman, 2005). It may also be difficult to accommodate the development of all the players at the same time using Game Sense. This proves challenging for some coaches working in elite settings where it is assumed that all participants are at the same level of expertise. Game Sense is contrasted with the traditional technical approaches where coaches make decisions which favour methods which appear in the short term to return quicker results or improvements (Kidman, 2001, 2005). In contrast the use of Game Sense may appear as "rolling out the ball" and observers may consider that good coaching has been replaced by the use of a game (Light, 2004a p.126).

Unlike the field of physical education the literature on coaching offers little direction in regard to pedagogy, an area about which coaches themselves often seek guidance (Brooker & Abbott, 2001; Dickson, 2001). It is only recently that pedagogy has been raised and discussed as making a contribution to coaching (Cassidy et al., 2004; Jones, 2006a). Woodman (1993) had identified pedagogy as an element missing from coach education nearly twenty years ago. Furthermore, recent developments have seen sports pedagogy emerge as an issue for coaches to consider in their practice (Kirk, 2009; Tinning, 2008).

The introduction of Game Sense has also been met with a lack of knowledge about its use, pedagogy and underlying notions of learning. The confusion about the interpretation of Game Sense in coaching is reflected in Light's (2004a) research where Australian coaches had difficulty understanding how to teach within the game context. Some coaches suggested that Game Sense was just playing games all the time (p.11). As pointed out by Thomas, (1996) one of the problems associated with the introduction of Game Sense is, "the perceived misunderstanding by some sporting organisations/coaches that the inclusion of any game constitutes a Game Sense approach" (p. 115). Research reported that elite rugby coaches used games in their training programmes but their value was limited to testing player skills, developing independent players, improving decision making and providing motivation (Evans, 2006b; Light & Evans, 2010). The coaches did not however see Game Sense as a learning and teaching platform or understand its pedagogical principles. They had views about learning that were different from those associated with Game Sense.

The success of Game Sense requires practitioners to have a deep knowledge of game play and the ability to design learning environments that accommodate coaching goals (Chandler, 1996). The coach needs to be able to utilise questions at appropriate moments and stages of the session in order to enhance learning (Chandler, 1996). This is a departure from simply having technical knowledge and a good memory for drills. Pedagogy has been a difficult area to address and may explain the slow up take of Game Sense in coaching (Kirk, 2009; Woodman, 1993). Coach education programs in Australia to date have not embraced Game Sense as a part of their certification. However, the New Zealand coach education system has taken up and promoted player-centred approaches to coaching as part of the government agenda for improving coaching (Cassidy & Kidman, in press; Kidman, 2006; SPARC, 2006).

Game Sense has been used in sports such as touch football, soccer, basketball, cricket, soccer and hockey (Charlesworth, 2001; Evans, 2003; Slade, 2005; Webb & Thompson, 1996; Webb & Thompson, 1998). A number of prominent international coaches such as Rick Charlesworth (hockey), Pierre Villepreux and Wayne Smith (Rugby) have used Game Sense (Kidman, 2001, 2005). The use of Game Sense or Teaching Games for Understanding by coaches may, as some authors propose, produce more complete players than is possible by using a technique based approach (Brooker & Abbott, 2001; Bunker & Thorpe, 1982; Light, 2004a; Thorpe et al., 1986). Its application is not limited to novices (Kirk & MacPhail, 2000). As Rick Charlesworth coach of the Australian National Women's hockey states: "the Game Sense approach is relevant to the ongoing development of elite players" (p.164).

2.2.7 Game Sense in elite level sport

The past decade has seen increased interest in the application of tactical approaches to sport coaching, giving rise to sport-focused approaches for coaching such as Game Sense (den Duyn, 1997) and Play Practice (Lauder, 2001) and increasing writing and research on games-based coaching. Kidman (2001, 2005) examined New Zealand coaches' use of 'empowerment' approaches to coaching from a humanistic perspective and Light (2004a) examined the experiences of coaches in Victoria and the Australian Capital Territory (Australia) in using Game Sense. Kidman 2005 reported on interviews with a range of New Zealand coaches who had used Game Sense and TGfU to inform their coaching practice. The sports included netball, softball, field hockey, basketball

and rugby union at an elite level. Light (2004a) focused his research on coach educators and coaches working in sports such as soccer, netball and soccer. Research by Webb and Thompson (1996) reported that Game Sense has been adopted in the highest levels of accreditation in the sport of touch football.

While these researchers and others have examined elite sport there remains a lack of specific and focused attention on coaches' use of Game Sense or other tactical approaches in elite level sport (Brooker & Abbott, 2001; Light, 2006a). As pointed out by Brooker and Abbott (2001) research is required to determine whether the lack of published research material is due to the widespread acceptance of Game Sense or whether coaches do not fully understand the potential extent of the application of Game Sense in elite settings.

2.2.8 Differences between TGfU and Games Sense

Game Sense is a variation of Teaching Games for Understanding (TGfU) developed in Australia during the 1990s (see Den Duyn, 1997) through collaboration between the Australian Sports Commission (ASC), Rod Thorpe and local coaches. Although very similar to TGfU there are differences; the main one being that Game Sense was developed specifically for sport coaching while TGfU was developed for physical education. Thorpe visited Australia regularly during the nineteen nineties where he worked with local coaches to develop a variation of TGfU for sport coaching named Game Sense. Many coaches were already using Thorpe's ideas such as games-based coaching to contextualize learning but he provided a structure for this work and most importantly, introduced the emphasis on questioning in place of direct instruction (Light, 2004). *Using questions instead of telling players what they should do moved the focus of coaching from the coach to the players. The key features of Game Sense are that 1) most learning is shaped and contextualized within games or game-like activities that involve competition and decision-making and, 2) that the coach asks players about technique and strategy to stimulate thinking and players' intellectual engagement. Game Sense uses similar pedagogy but is less structured than TGfU (Hopper, Butler & Storey, 2009) as is evident in the absence of a model for Game Sense in comparison with the 6-Step model in TGfU (Bunker & Thorpe, 1982).*

The ASC and local coaches wanted to avoid association with school-based physical education and to avoid being too prescriptive for coaches to encourage existing good practice, to provide some structure for its development and to develop ‘thinking players’. Games Sense is thus looser than TGfU and more open to different interpretations than TGfU. In particular, there have been attempts by North American researchers to better define what it is and how it should be practised (see for example, Griffin & Butler, 2005). From the development of Game Sense and its first publication (den Duyn, 1997) it has had an impact on coaching in a range of sports (see for example, Light & Evans, 2010). It has also been taken up in schools where the differences between it and TGfU are often difficult to see, thus leading some researchers to suggest that there is no difference. For example, Kidman (2001, 2005) suggests that Rod Thorpe saw little difference between TGfU and Game Sense. The two terms are often used to refer to the same approach to physical education teaching in Australia but research and writing on Game Sense in sport coaching suggests there are significant differences particularly those between sport coaching and teaching games in school physical education (see for example, Light, 2004; Light & Evans, 2010).

The coaching and physical education contexts

Typically in school-based physical education students taught using TGfU learn how to play a game by understanding the game while developing the skills, tactical knowledge, vision and other perceptual abilities needed to play and enjoy playing the game. This invariably involves learning through modified games that begin simply and become progressively more complex as they approach the full version of the sport. In this way skill and tactics are developed within the context of games with the focus on learning to play the game well and not on mastering discrete skills or techniques.

On the other hand, Game Sense is typically used with players who know how to play the game in a basic way and who have chosen to play it for a season and not just for a few weeks, regardless of age. This applies to 6-year old children in a soccer club as much as it does to elite level professional rugby union or cricket players competing in a World Cup. The focus then is not on developing an overall ability to play the game but is, instead, more on developing particular aspects of play typically focused on the next competition match. This could arise from analysis of the previous week’s match aimed at correcting mistakes or addressing weaknesses in play or could arise from strategies

developed to exploit the next opponents' perceived weaknesses or counter their strengths, considered within an overall season-long plan. This could involve working on particular skills such as passing under pressure by constructing a context that replicates or even exaggerates the pressure under which passes must be made in competition matches, or setting up particular match scenarios where particular players must make instant decisions.

How learning occurs in TGfU and Game Sense

Bunker and Thorpe categorised games (invasion, target, striking and wall and net) so that players could transfer their tactical knowledge across games within the same category and this is adopted in Game Sense. This is typically used to help design curricula in Physical Education so that common tactical knowledge is developed across different sports within a category using ideas such as sampling where a major sport within the category is used with briefer experiences of other sports in the category. When Game Sense is used in coaching this idea can be used to make warm up games interesting yet relevant due to common tactical problems and solutions (Light, 2004). For example, 'end ball' can be played by rugby players as a warm up using a rugby ball. Although the techniques are different and there is no backward pass requirement the manipulation of space and time involved in 'invading' opposition territory is similar.

Learning in Game Sense and TGfU has been most thoroughly theorized by Light and colleagues over the past six to seven years in relation to both PE and sport coaching from a constructivist learning theory perspective with learning seen to occur in a similar way (see for example, Light & Fawns, 2003; Light, 2004; Light, 2008; Light, 2009). The basic pedagogical approach is also similar but Game Sense is less structured leaving more room for interpretation and, although widely used in school physical education, it is specifically focused on coaching sport where the aims are more tightly focused on performance than in TGfU.

2.2.9 Game Sense Pedagogy

My use of the term pedagogy in this thesis refers to more than the idea of it being a 'science' or 'art' of teaching. Instead, I adopt a broader, more inclusive notion of

pedagogy focused on learning as being “any conscious activity by one person designed to enhance learning in another” (Watkins & Mortimore, 1999, p. 3). Using it in this sense, I focus on how the rugby union coaches in this study set out to achieve specific learning objectives and on the activities they use. I do, however, recognise an even broader notion of pedagogy in reference to the range of unintended, implicit learning that occurs as part of social life, as identified in the learning theory of Lave and Wenger (1991) and the social theory of Bourdieu (1986).

The core idea of both TGfU and Games Sense is the use of a game as a context for learning along the lines of the pedagogy suggested by Dewey (1916) in which learning occurs through interaction with the environment rather than by direct instruction. This is underpinned by rejection of the separation of technique from tactical knowledge evident in the traditional focus on ‘skill drills’ which are underpinned by the assumption that skills have to be learnt *before* a game is played (Light, 2008). Both theories shift attention from the teacher/coach to the student/player as inquiry-based, student/player-centred pedagogical approaches. This is achieved by taking a problem-solving approach that sees aspects of the game as being problems, and challenges students/players to solve them while being guided by teacher/coach questioning. This encourages students/players to think about what they are or should be doing and places them at the centre of the learning process. This emphasis on questioning and not the use of games is the most distinctive feature of Game Sense when compared with traditional, directive instruction (Light, 2006; Light & Evans, 2006). The pedagogy used in Game Sense and TGfU places emphasis on the coach/teacher designing the learning environment (the modified games), setting problems for the students/players to solve, using questioning to stimulate thinking and reflection, facilitating group discussion and collaboration and allowing players to test and reflect upon strategies, tactics and/or skills formulated to solve the problem(s).

2.3 Understanding Learning in and through Sport

Originally the traditional skill acquisition model encompassing an information processing model and theories about contextual interference which were proposed by Magill (2004) and Schmidt (1988, 1991) did not take into account the holistic and complex nature which represents learning. Fleming, Robson and Smith (2005) attempt to expand upon this by proposing that learning in a sports coaching environment can be seen as taking place through one of a number of mediums. Such learning can be achieved through visual, auditory, written or kinaesthetic modes or a combination of these. This approach presents learning as being more than an unproblematic simplistic process. However, it does fail to extend the process to take into account other factors, both conscious and unconscious, that affect learning. Davis et al. (2000) propose that 80% of what we learn takes place at a non-conscious level. Similarly Dewey (1916/97) notes “the unconscious influence in the environment is so subtle and pervasive that it affects every fibre of character and mind” (p. 17). Before Davis et al. (2000) proposed the influence of non-conscious learning, a number of authors proposed the idea that learning takes place at an unconscious or subconscious level and that cognitive processes may be detrimental to learning sports skills (Austin & Pargman, 1981; Gallwey, 1974, 1976). The athlete may lose the natural coordination of a skill if they think too much about its execution (Masters, 2008). Traditional views of learning with their basis in motor learning and information processing find it difficult to account for implicit learning which Masters (2008) suggests is more powerful in the development of expertise in sports skills.

Abernethy et al. (2005) propose an ecological information processing model to explain skill acquisition and this approach more clearly takes into account the complexity of learning but still reflects an objectivist view of learning as a relatively linear process (Light, 2008a). Since the end of the 1990s, research on learning in TGfU and Game Sense teaching approaches has been increasingly informed by constructivist learning theory (Griffin & Patton, 2005).

2.3.1 Constructivist Theories of Learning

Butler (2005) argues that learning is not merely the transmission of knowledge from one to another but is a far more complex process. Many other researchers in the physical

education and coaching fields have also argued for a view of learning that recognises complexity instead of trying to reduce it to a simple linear process, suggesting that constructivism offered a means of doing so (Light & Fawns, 2003; Light & Wallian, 2008). In 1998 several researchers suggested that the view of learning underpinning TGfU was consistent with constructivism (Grehaigine et al., 1999; Kirk & MacDonald, 1998). This was soon followed by increasing interest in and use of learning theory as a means of explaining and understanding how learning occurred through TGfU (Kirk & MacPhail, 2002; Light, 2004a).

Constructivism can be considered a broad church and as suggested by Davis and Sumara (2003) there is no one constructivism but rather a banner under which a number of learning theories that reject the dualism of mind and body and directive forms of teaching are embraced. At the core of constructivism is the rejection of traditional behaviourist views of learning by breaking down skills and knowledge into smaller parts, and the rejection of the cookbook or one-size-fits-all approach, in favour of a perspective that sees learning as holistic, lifelong and as a process of adaption, change and transformation (Fosnot, 1996). A significant element of constructivism is that it is shaped by experience and reflection on experience by the learner. Constructivism is not a process of adding on new information but is more closely associated with adaption, change and transformation. Those who take a constructivist approach recognize the centrality of the learner's activities and that learners can bring existing knowledge and experiences that need to be considered in the learning experience (Biggs, 1996). A constructivist perspective views learning as not just occurring in discrete, prescribed and formal contexts but as something that is ongoing and occurs on a day-to-day basis and is shaped by social interaction in socio-cultural settings (Light, 2008b).

Constructivism is a theory about knowledge and learning; it describes both what "knowing" is and how one 'comes to know.' It describes knowledge as temporary, developmental, not objective, internally constructed, and socially and culturally mediated. (Fosnot, 1996, p. x)

Fosnot (1996) points out that a constructivist approach requires meaningful problem solving, that arguing and interaction on the part of learners is required and those learners construct their own meaning. Phillips' (1997) essay on constructivism provides a useful basis to understand the "within group variation" or diversity that covers constructivism and that constructivism can be distinguished by "two camps" (p. 85).

The first is psychological or cognitive constructivism, where the work of Piaget (1970) and von Glasserfield (1996) has made a significant impact and second is where the work of Vygotsky (1978) and Bruner (1966) has led to social constructivism (Phillips, 1997).

Psychological or cognitive constructivism stresses that learning occurs at an individual level and that it is a psychological process where the learner constitutes his/her own meaning. It occurs the learners make their own interpretation and adapts accordingly from the learning experience. The learners' previous knowledge and experience is important and affects their interpretation of the learning environment. It is seen as an ongoing cyclical process. While learning is viewed as taking place at an individual level it is not a process of adding on new information but should be seen as involving the whole person in change and adaptation. The role of social interaction and the social environment is not ignored but viewed as accommodating, rather than central to, learning (Phillips, 1997).

Social constructivism on the other hand affords greater importance to the role and contribution of social and cultural contexts in learning. Social constructivism places a greater emphasis on the role of social interaction and the context as agents for generating change and transformation in the learning process. Development is understood by Vygotsky (1978) as the process mediated by various cultural factors acquired in the course of human development that turn from being external social phenomena into cognitive tools that are later used independently by the individual. Davis and Sumara (1997) reflecting on the work of Vygotsky (1978) and Lave and Wenger (1991) suggested that all our interpretations and understandings are co-produced or emerge out of complex social experiences.

Recently there has been significant attention and growth in research on the influence of constructivist theories in the area of physical education (Grehaigne et al., 2005; Light, 2008a; Rink, 2001). More specifically research on TGfU has used social constructivism and situated learning perspectives to understand learning (Kirk & Macdonald, 1998; Kirk & A MacPhail, 2000; Light & Fawns, 2003). In Game Sense players' existing knowledge is adapted and modified by new learning experiences. The development of Game Sense shows that there is a shift in the epistemology that is informing teaching and learning and in turn coaching. The rejection of the Cartesian dualism which has

historically guided teaching practices is now being challenged by more complex learning theories in the class room and in PE by constructivist approaches

The theory underpinning this way of looking at learning which incorporates situated learning, liberating constraints and implicit learning is what Davis, Sumara and Luce-Kapler (2000) refer to more generally as complex learning theory and which has been used to theorise learning in physical education and sport (Light, 2008a). This offers a framework to inform and integrate a range of pedagogical practices into physical education and coaching. Constructivism, as a nonlinear and dynamic evolutionary process, can better explain cognition and learning which happens in game situations of constant change than dualism. Constructivist theories contrast with the dominant behaviourist perspectives of 40 years ago, and have been applied to the teaching of games and sport through student-centred, inquiry-based pedagogical models such as TGfU and Game Sense.

2.3.2 Complex learning theory

A number of authors have proposed that attention to learning styles by coaches in their practice can accelerate or expedite learning by athletes (Brunner & Hill, 1992; Fleming et al., 2005; Penney, 2006). The organisation and presentation of information using learning styles is viewed by some as an innovative method of coaching (Penney, 2006). Its popularity has spread and has entered into the discourse of rugby coaching (for example see Cain, 2008). *The use of learning styles reduces learning to a simple unproblematic task ignoring the complexity of learning and the environment in which it takes place and its veracity has been questioned (Coffield, Moseley, Hall & Ecclestone, 2004a, 2004b; Davis et al., 2000; Garner, 2000; Willingham, 2006). Davis et al. (2000) challenge the simplistic view of teaching through learning styles indicating, “that most of learning is not conscious and that there are limits of human awareness” (p. 22). A focus on complex learning has the ability to account for implicit, embodied and non conscious forms of learning which are more powerful and pervasive in nature. Biggs suggests that while concentrating on learning styles provides some appeal it discounts the importance of context in learning (Biggs & Tang, 2007). This was a concept that Dewey (1916/97) felt was a critical element in learning and that indirect teaching and the environment were more formative, as evidenced when he stated: “We never educate directly, but indirectly by means of the environment” (p.19).*

Situated learning, as a form of social constructivism, provides an opportunity to take a view of learning as being complex. It also offers a way to understand the trajectory of coaches and how they learn to be certain types of coaches.

2.3.3 Situated Learning

Brown, Collins and Duguid, (1989) proposed a model for situated cognition that was to be used in classroom practice. Collins (1988) described situated learning as “the notion that of learning knowledge in contexts that reflect the way the knowledge will be useful in real life.” (p. 2). The emphasis is on learning being contextualised in the real world or authentic settings, a view shared by Dewey (1916/97). Lave and Wenger’s (1991) view of situated learning takes a constructivist view and expands experiential learning to incorporate the social, cultural and physical aspects of learning and the relationships formed. Their more socially constructivist model, situated learning theory, does not see students as isolated learners, but focuses on learning as a social practice in social and cultural settings. Kirk and MacPhail (2000b) and Jones, Armour and Potrac (2004) made the connection that situated learning assumes active engagement between players and coaches and that this arrangement produces a community of learners.

Lave and Wenger’s notion of situated learning has attracted much attention in the physical education and coaching fields (Butler, 2005; Kirk & Kinchin, 2003; Kirk & MacDonald, 1998; Kirk & MacPhail, 2000b; Light, 2006c; Ovens & Smith, 2006). Their approach is a particular form of a socio-cultural perspective on learning that has much to offer in research in physical education and sport (Wright, McNeill & Fry, 2009).

Cassidy and Rossi (2006) recognise the role of experiential learning in the workplace and identified Lave and Wenger’s (1991) theory of situated learning as a way of explaining the trajectory of coaches towards proficiency. Situated learning theory enables the examination of development as a process of coaches entering into a community where they move to fuller participation through socially mediated practices. It also provides a way of understanding what Cushion (2001) describes as “interlocking communities” (p.184) as part of the trajectory of coaches. This often involves smaller discrete communities with their own identity and membership.

Situated learning is a holistic view of learning aligned with social constructivism as a social process that is shaped by the socio-cultural situation within which it takes place. It suggests that learning is always situated and that what is learned is particular to the socio-cultural context of the learner. What is learned and the context are inseparable. Light's (2006) study of learning in an Australian surf club shows how learning is situated in a particular community of practice but also how learning can be physically situated such as learning to swim in the surf in contrast with swimming in a pool. Situated learning is the engagement in learning practices which are unique to a particular community and are essential in order to become a competent member of that community (Ovens & Smith, 2006). The way people are engaged with each other and the learning that takes place is seen as interrelated and dependent. In simple terms learning and participation are inseparable.

Situated learning, in broad terms, views learning as a relationship between the cognitive processes and the social structures that construct the learning environment (Lave & Wenger, 1991). Learning occurs through participation, active engagement and collaboration between those involved in the field of endeavour with the environment. Situated learning according to Lave and Wenger is grounded in social co-participation. In this theory skills and knowledge are viewed as adaptable and the process of learners making decisions and improvising enables a process of transformation to occur.

2.3.4 Legitimate Peripheral Participation

Situated learning involves a process of legitimate peripheral participation, where learners participate in a community of practice (Lave & Wenger, 1991). This participation or engagement towards full participation is seen as a socio-cultural process. Legitimate peripheral practice also describes the relationship between "old timers" and "new comers". Lave and Wenger (1991) view apprenticeship as an aspect of legitimate peripheral participation. The apprenticeship model is based on a structured pattern of learning experiences (see Davis et al., 2000) and not on learning being reduced to the repetition of mechanical tasks.

To further distinguish situated learning from other approaches such as "in situ" or "learning by doing". Lave and Wenger (1991) suggest that it is "a view that learning is an integral and inseparable aspect of social practice" (p.31). Furthermore, the theory of

situated learning, as with other approaches to complex learning, is concerned with relational characteristics of knowledge and learning, negotiation of meaning and the engagement of participants in the process as underlying principles. Additionally the whole body is involved and learning is not the passive absorption of facts or information from a teacher or coach. Lave and Wenger (1991) state that “legitimate peripheral practice is proposed as a descriptor of engagement in social practice that entails learning as an integral constitute”. Furthermore they make the following point: “Legitimacy of participation is a defining characteristic of ways of belonging, and therefore not only a crucial condition of learning, but a constitutive element of its content” (Lave & Wenger, 1991 p. 35).

The term peripheral emphasises that the learner moves from the periphery and enters into a community of learners and that there is no final central location. Legitimate defines ways of belonging and peripheral is a positive term that should be interpreted as the initiation towards full participation or access to an area of practice or community membership.

2.3.5 Communities of Practice

Lave and Wenger (1991) propose that those who are engaged in legitimate peripheral practice are participating in a community of practice. This community of practice is not defined by the number of participants but by the desire of the participants to become knowledgeable in a field of practice or skill.

Those who participate in this way of learning could be viewed, according to Lave and Wenger (1991), as apprentices, in that the larger community reproduces itself by the recruitment of new apprentices. According to Lave and Wenger “Even in cases where a fixed doctrine is transmitted, the ability of a community to reproduce itself through the training process derives not from the doctrine, but from the maintenance of certain modes of co-participation in which it is embedded” (p.16).

This co-participation can be in the form of master and apprentice or new comers and old timers. Lave and Wenger, (1991) propose that learning occurs by structuring the learning environment in such a way that it is practice-centred and the activities are related to “situational particulars” and “context” (p.17). The situated learning approach

involves the whole body (not just the mind) in the process and sets a frame work or structure that encourages improvisation, interaction and decision making embedded in participation.

A community of practice can be a well formed and distinct entity but may also be informal with the ability to be pervasive without being explicit. A community of practice can evolve over time and can impact on a person's life. Through the course of our lives we belong to or participate in many communities of practice that operate in many spheres including workplaces, industries, and schools and anywhere where people join together to pursue a common practice (Wenger, 2009). Learning occurs through engagement in social practice. Members of communities of practice share common purposes and through regular social interaction they solve mutual problems, develop resources and share practices. This approach to learning ensures that certain desirable practices are reproduced.

Coaching has the capacity to be considered a community of practice. Culver and Trudel (2006) outlined the potential for team sports to establish coaching communities of practice. In reality for this to occur depends on the dynamics of the coaching environment and the degree to which the coaching environment is contested (Mallett, Rossi & Tinning, 2009). Occhino et al. (2009) suggest the highly competitive nature of professional coaching in certain sports raises difficulties in establishing communities of practice. The quality or approach to leadership, the level and nature of respect between the coach and others, the ramifications of winning and the closely associated perception of future employment contribute to the establishment of a community of practice. Culver and Trudel (2006) propose that the types of social interactions entered into by coaches' influences the quality of coaching and the development of practice. All these features taken into consideration raise questions about the feasibility of a community of practice in professional sport and coaching. At the very least it seems a problematic goal. In order for the coaching environment to be considered a community of practice according to Wenger (1998) a number of conditions need to be present including mutual engagement, joint enterprise and a shared repertoire.

2.4 Contemporary Developments in Coaching

2.4.1. Traditional approaches to coaching

The traditional model or approach to coaching places the coach as the central figure who is responsible for deciding what and how training is delivered. This coach-centred approach uses directive or prescriptive methods with a heavy basis in the sciences (Cassidy et al., 2004; Jones, 2006b; Kidman, 2001, 2005; Kirk, 2009). This scientific model relies on an approach to coaching which has its roots in motor behaviour and skill acquisition theory where there is an emphasis on an information processing model to explain the process of learning (Magill, 2004; Schmidt, 1988, 1991). Such an approach is out of context and isolated from the actual game (Butler, 2005). This process assumes a reductionist position where information in the form of skills is taught through techniques by the coach, and the players absorb and reproduce the information. Lave and Wenger (1991) see this as an attempt to reduce learning to a strictly intellectual process which is internalised by the individual and is unproblematic. In this situation the coach is the holder of the information and the players are passive receivers or, as Kirk and MacPhail (2000a) propose, empty vessels that receive information. This linear or Cartesian view of the learning process assumes that the player can, with practice, reproduce the skill after the information has been transferred to them. In this view there are limited opportunities for player decision making as the coach, according to Kidman (2001), will provide answers to players during practice sessions. Furthermore, “coaches believe that unless they are seen to be telling athletes what to do and how to do it they are not doing their job properly” (Kidman, 2001, p. 13). This, according to Cassidy et al. (2004), is the coach positioned as the boss or expert. The perception of coaches as experts can also be seen in Light’s (2004a) study of Australian coaches, where coaches discuss the challenges of using Game Sense. Light comments that “Game Sense can be somewhat threatening to coaches who are used to the traditional role, where the coach is supposed to know it all” (p.129).

2.4.2 Socio-cultural views of coaching

The past six to eight years have seen the emergence of a socio-cultural perspective on coaching that challenges and questions the dominant view of coaching as a simple process of an expert transmitting a set body of knowledge to players as passive receptors. Most of this work has been done by researchers who have drawn on recent developments in physical education pedagogy which involve the application of contemporary learning theory to teaching and coaching sport. This work suggests that

learning to play sport involves far more than the refinement of de-contextualised technique and the internalisation of an external knowledge. It also suggests that learning to play sport and learning to coach is a very social activity. These developments basically show how coaching and learning to play sport are far more complex procedures than traditional approaches seem to assume. As Davis et al (2000) suggest is the case with teaching, most coaching seems to be based upon a view of learning as a linear, binary (mind and body) process in which players learn by adding on knowledge or skills. On the other hand contemporary learning theory sees learning as a transformative process that actively engages the learner as a participant in the process (Prawat, 1999). This is evident in some of the more recent coaching literature that has focussed on player-centred coaching (for example, see Kidman, 2001, 2005; Light, 2004a; Jones, 2009). Kidman interviewed a number of coaches in New Zealand who use approaches similar to Game Sense to examine what it has to offer coaches at all levels and to identify problems involved in its application. One of her subjects, Wayne Smith, former coach of the All Blacks, is a proponent of the Game Sense approach and employed it while he was national coach.

Cassidy, Jones and Potrac (2004) suggest that traditionally coaching can be viewed as training where the main aim should be for the athlete to develop competence in a skill or range of skills. They argue that this simple description places limits on athlete and coach interaction. This interaction should be stimulated through a strong association between teaching and coaching (Jones, 2006, 2007, 2009). This association is based on the assumption that the athlete is a thinking, feeling and physical being with needs in these areas. Drawing on the work in physical education by Mosston and Ashworth (1990), Cassidy et al. (2004) identify five approaches to coaching: Direct, Task, Reciprocal, Guided Discovery and Problem Solving which a coach could utilise. Coaching should, then, through the selection of an appropriate method, seek to develop athletes as problem solvers less reliant on the coach. This approach would engage athletes' cognitive, affective and psychomotor abilities and allow them to identify their learning needs and take responsibility for their learning. This approach is a departure from the direct approach which sees the coach as the central figure prescribing training. To ensure maximum learning outcomes coaching sessions should have relevant problem solving scenarios and an expert debrief at the completion. This debrief allows the coach to provide content and context.

As an example of a socio-cultural approach to coaching, the All Blacks in 2005 critically assessed a number of the foundations underpinning their operations (Kitson, 2005). Firstly the 'haka', a ritual war dance performed before all international matches were reviewed. As a consequence all personnel and management associated with the All Blacks understand the cultural meaning and importance of the haka. Secondly, the coaching staff made a decision to embrace athlete-centred activities to improve the decision making ability of players in the high pressure environment of international rugby. The traditional skills approach previously driven by coaches was seen to inhibit players required to perform at this level. Thirdly it was important for players to have a balanced life. Players' identity should not be determined solely by their rugby ability. Fourthly it was necessary for all players to take a leadership role in implementing decisions. This empowerment approach galvanised players into a team and it was considered that this approach would enhance the ability of players to handle situations both on and off the field. Furthermore Jones (2009) outlines how caring for athletes promotes empowerment and encourages athletes to explore situations and to find solutions to problems. This emergence of a socio-cultural approach develops players as multi dimensional people and not simply as athletic talent.

2.4.3 Coaching Effectiveness

The term coaching effectiveness holds a prominent place in coaching discourse and literature. However, its meaning is difficult to determine precisely. A number of researchers have defined what "effective" means. The term effectiveness in a general sense means a coach's ability to observe, analyse, synthesise and be flexible (Brooker & Abbott, 2001). They also argue that effectiveness requires the coach to be critical of their past traditional approaches which have relied on direct technical instruction.

Does effectiveness also mean winning and does winning mean that coaching has been effective? In an attempt to quantify and measure coaching the term effectiveness has often been used to describe a coach's performance (Cassidy et al., 2004). This is often referred to as the win/loss record and more broadly includes the key performance indicators of players such as fitness levels or game statistics. If this approach were to become common place then how would less tangible humanistic variables such as social and cultural aspects be judged in regard to effectiveness? Lyle (2002) makes the point that effective coaching may well be about good practice related to delivery.

Effectiveness is not about winning or losing but the attainment of an agreed goal. According to Lyle (2002): “Effective coaching performance takes place within the acknowledged set of constraints and, perhaps more importantly, within a given time, place and organisational setting” (p. 266).

The organisational setting takes into account the culture of the team and its participants. Athletes in the past have been largely ignored in the assessment of coaching performance (Rushal & Wiznuk, 1985). Their work sees players and athletes providing feedback as a way to interpret effectiveness. Brooker and Abbott (2001) discussed the merits of player perceptions about coaching and coaching practices as factors contributing to effectiveness. Player satisfaction, according to Solomon (1999), may be a predictor of effectiveness. Kidman (2001) supports this concept and describes an effective coaching style as one where athletes have an opportunity to be involved in decision making activities leading to player empowerment. This approach to effectiveness is an extension of the coach’s ability to the point where the athlete is a part of the relationship and is a reflection of the coach’s inclusiveness of athlete aspirations (Lyle, 2002,). This implies that goals exist within a dynamic environment that may or may not be associated with winning. Cassidy, Jones and Potrac (2004) suggest that effectiveness be replaced by quality. Similarly, Vallee and Bloom (2005) discuss that success is not about winning and not necessarily about the best players: “That success may be attributed to the relationship these coaches formed with their athletes” (Vallee & Bloom, 2005, p. 190).

A recent newspaper report on Wayne Bennett’s approach to coaching rugby league makes the following observation:

The recurring theme down the years has been that parents want Bennett to coach their sons. They know he (Bennett) will turn them into better footballers, sure, but more importantly, he will turn them into better people. (Smith, 2006, p. 31)

The idea that effectiveness is representative of improved performance which relies on players to be intelligent performers requires a recognition that players should also be empowered and be involved in the decision making related to performance (Brooker & Abbott, 2001; Kidman, 2001, 2005). Effectiveness and success involve the identification of coaching traits that reflect coaching excellence, the need for a range of coaching pedagogies and a place where athlete welfare, personal relationships and the

role of reflection are valued. These aspects of effectiveness in coaching are not readily quantifiable as are instrumental or practical characteristics such as organisation, technical knowledge or athlete management

2.4.4 Coach reflection

Experience does not necessarily always produce an expert coach however expert coaches are experienced (Abraham, Collins & Martindale 2006). The movement towards being an expert has been generated over time through a process of reflection (Cassidy et al., 2004). Of course the idea of reflection is not new. In education Dewey (1916/97) set out three important characteristics necessary for a person to engage in reflection. These are whole-heartedness, open mindedness and responsibility. Furthermore, according to Dewey (1963) those who investigate their assumptions take responsibility for their actions which seems very relevant for coaches to develop and refine their practice.

Schon (1983, 1987) points out that reflection is a central activity of professionals seeking to become better practitioners. Reflection is a process that identifies other areas within a profession, often referred to as “craft” approaches that are separate from technical knowledge. In a 2005 study of Canadian coaches, Vallee and Bloom noted that reflection was one of the common areas required by expert coaches desiring to build a successful university sports program. Coaches viewed reflection as a way to learn from mistakes or as an analysis and evaluation tool for coaching performance that determined what can be done better in the future (Abraham et al., 2006; Knowles, Tyler, Gilbourne & Eubank, 2006).

Coaches who take the time to reflect on their actions are able to evaluate and rationalise their reasons for coaching (Abraham et al., 2006; Brooker & Abbott, 2001). By reflecting on coaching practices, coaches can challenge their assumptions about what is good coaching, questioning beliefs and cultural elements of coaching previously taken for granted (Brooker & Abbott, 2001; Butler, 2005). Reflection can provide a conduit for coaches to develop an understanding that coaching is a complex activity and that learners or athletes have different needs. Without the ability to be reflective coaches may not develop an understanding of the impact of training sessions. A process of reflection can assist with clarifying the difference between what was intended and what

actually occurred. In a practical sense this gap, difference or contradiction may provide the foundation on which future sessions are based. Effective coaching may well depend on the degree of reflection undertaken. Reflection is an area of critical thinking that positions coaches in such a way that it allows for a fuller appreciation of what is possible and the degree to which innovative pedagogy can be introduced.

2.4.5 Quality coaching

As the previous discussion of 'effective' coaching suggests, quality coaching might be a more accurate and useful term. Rather than considering whether a coach is efficient or effective, Cassidy et al. (2004) propose that we consider the question of quality coaching. Coaching in recent times has transcended previous assumptions that one person, the coach, instructs and the athlete learns. Issues such as instrumental and intrinsic characteristics are important concepts. Cassidy et al. (2004) suggest that a focus on quality requires practitioners to explore ways in which their practice can be more meaningful, purposeful, just and enjoyable. More recent education literature (Davis et al., 2000) and some physical education literature (for example see Kirk & MacPhail, 2000b, 2002) suggests that the learner is not an empty vessel but is a being with previous knowledge and experiences that shape their learning. This means that coaches, like teachers, need to understand or consider what experiences and knowledge the athlete has, and the environment in which they act, in order to accommodate meaningful change and learning. This theory is supported by Davis et al.'s (2000) notion of structuring learning activities, where structuring acts or tasks that embrace the balancing of freedom and restraint leading to 'liberating constraints' may lead to learning and creativity. Likewise, Dewey (1916/67) suggests that we cannot teach directly but that, instead, the teacher facilitates learning by structuring the environment. Furthermore Cassidy et al. (2004) explain that content knowledge is multifaceted and is more than evidence of a good memory for drills but also displays an understanding of pedagogical approaches that facilitate learning by the athlete. This knowledge can be broken down into subject matter content knowledge, pedagogical content knowledge and curriculum content knowledge. Woodman (1993) also asserts that while sports concentrate on athletic performance and achievement, the pedagogy of coaching has been largely absent in coach education programs within Australia.

2.4.6 The impact of professionalism on rugby coaching

Any study of coaching innovation or change must consider the social, cultural and economic context in which it is located. Given the profound historical and contemporary changes in the practice of rugby union at the elite level in Australia this is of particular importance for this study. One of the most significant changes in the long history of rugby union was its formal acceptance of professionalism in 1995 (FitzSimons, 2003). The transition from amateur to professional status was a defining moment in the history of rugby union. As suggested by FitzSimons (2003), “It was the time that rugby union became a big boys’ sport” (p.312). This has had a profound impact upon coaching. Rugby union has its origins in the 19th century elite, middle class secondary schools in England and was used as a vehicle to educate young men for leadership and responsibility in industry (Chandler & Nauright, 1999; Light, 2001; Nauright & Chandler, 1996). The same was evident in Australia and New Zealand from the 1800s. This remained constant until the introduction of the Rugby World Cup in 1987.

The change from amateur to professional rugby union has been supported by the emergence and commercialisation of the Rugby World Cup (RWC). Chandler and Nauright (1999) stated that 1987 was selected for the inaugural RWC to prevent conflict with other major sporting events so as to maximise worldwide audiences. Developments cited by Chandler and Nauright (1999) during the 1987 RWC indicate that, in part, the amateur code had been compromised by ‘grey area’ payments to New Zealand players. The future of the RWC was enshrined by the profits (\$3.4 million) and the 300 million television viewers. This television audience grew in subsequent RWC from 1.75 billion in 1991 to 2.7 billion in 1995. The 1991 RWC generated 11.7 million pounds in broadcasting rights and 3.7 million pounds in sponsorship. Australia’s victory in 1991 delivered a record windfall of \$1,203,016 to the Australian Rugby Union. Australia’s poor performance in 1995 resulted in a trading loss of \$800,000 (FitzSimons, 2003).

Prior to the 1995 RWC SANZAR was formed to enhance the profitability of rugby in the Southern Hemisphere. A deal of \$555 million was secured with News Corporation to establish and run the Tri Nations and the Super 12 competitions for 10 years. It must be pointed out that the transition was as much about the struggle for power in the Super league war between Murdoch and Packer as were the other associated developments such as the Rugby World Cup and the introduction of professional rugby union

(FitzSimons, 2003). This new professionalism of rugby was a result of changing attitudes by players who wanted reward for effort and the transformation of rugby from pastime to spectacle (Chandler & Nauright, 1999). Consequently coaching rugby union like playing rugby union became a profession.

On Monday the 16th of April 1995 New South Wales Rugby announced that rugby union was no longer an amateur sport. In Paris on 27th of August 1995 the International Rugby Board made a similar declaration. This new order in rugby is captured in FitzSimons' (2003 p.312) quote of Brian Thorburn, Marketing Manager of the Australian Rugby Union in the Australian Financial Review July, 2001: "Every aspect of business (rugby) has grown. We've been commercially astute, but we've had a winning product, the Australian Wallabies.

The commodification of rugby is evident in the sponsorship deal made with Adidas in 1997. They paid NZ \$70 million for the sponsorship rights to the All Blacks jersey (Coakley, Hallinan, Jackson & Mewett, 2009). More recently the publicity surrounding the Super 14 team the Western Force's contract deal with Matt Gitteau, an amount of \$4.5 million, staggering by Australian standards, and the discussions regarding Lote Tuqiris being the first million dollar a year player in Australia are evidence of the growing commercialisation of rugby union (Jenkins, 2006b, 2006c; Wilson, 2006).

The implications for professional coaching are the same as those faced by players, which are that success and winning (the product) are important commercial imperatives. Mark Ella, a previous Wallaby captain, accentuates the point: "In the modern era coaches, and players, are expendable. If you don't deliver the results, you can expect to be moved on" (2008, p. 53), especially if you are a coach who has committed your organisation to expensive player recruitment activities. Winning is now more than ever connected with profit and a career coach needs to coach winning teams. This is a change from previous eras where coaches made a contribution to rugby union as a pastime based on amateur values. The enormous growth of the economic value in less than a decade in which rugby union has become a commodity traded in the national and international market place has changed coaching from an amateur pastime to a fully professional career for many. It has also placed a great deal of importance on success in competition as the immediate and explicit measure of a coach's worth and effectiveness. The recent demise of Eddie Jones as the Wallabies' coach, Jeff Miller the Queensland

Reds' coach and both Wayne Smith and John Mitchell as coaches of the New Zealand All Blacks indicate that administrators are willing to make changes if teams underperform or fail to win (Jenkins, 2006a).

2.5 Coach Development

2.5.1 Coaching as a profession

As sports like rugby union become professional and the commercialisation of sport continues, coaching is increasingly viewed as a profession (Cassidy & Kidman, in press; Ryan, 2008). This relatively new profession has created interest as to how it can be aligned to labour markets and economies and also what constitutes the practice of coaching (Crespo, 2008; Lyle & Cushion, 2008). Coaching unlike other professions has no familiar pathway to recognised professional development. The question is how do coaches develop expertise and what are the various elements that contribute to the development of that expertise? Taking a broad conceptual view of coach development provides an avenue to understanding the complexity and variability in experiences that lead to becoming a coach (Cote, 2006). In this context, activities relating to the apprenticeship of coaching such as coach education, coaching experience, playing experience and mentoring are addressed. In addition individual biographies and life experience and how these shape the development of knowledge and practice within a social theory perspective are considered.

2.5.2 Coach Education

Many coaches depend on coach education programs to enable them to enter into the professional arena and ply their trade (McCullick, Belcher & Schempp 2005). Coach education programs, playing experience and coaching experience have been cited in the literature as major avenues of development for coaches. However established coaches devote little time on an annual basis to formal coach education activities (Cote, 2006). The introduction of coach education in different sports and countries is predicated on the view that it would improve the level of coaching (Phillips, 2000; Woodman, 1993). Many countries including Australia and New Zealand have implemented large scale coach education programs which require the attainment of accreditation by potential coaches. In some sports these programs have been mandatory and elaborate (Cassidy &

Kidman, in press; Wright, Trudel & Culver, 2007). Coach education is viewed as “central to the professionalism of sports coaching” (Lyle, 2007, p. 19). To date there has been little research undertaken on the effectiveness or impact of these programs (Lyle, 2007; Lyle & Cushion, 2008; Trudel & Gilbert, 2006).

The majority of coach education programs to date have been informed by the bio-sciences and have used motor learning and skill acquisition principles to guide coaching practice (Cassidy et al., 2004; Cushion, 2001b; Cushion et al., 2006; Jones, 2006b, 2007; Kidman, 2005). This approach limits the ability to see coaching as a complex social activity. Criticisms of coach education are that most programs as they stand now are limited in their ability to prepare coaches for the professional world of coaching, although some participants in these programs see a sports science degree as more than useful (Abraham et al., 2006). The complex nature of coaching is difficult to address in short courses, and larger scale coach education programs have been shown to be ineffective in modifying coaching behaviour once participants return to the real world of coaching (Abraham & Collins, 1998). Similarly certification itself may not be sufficient or adequate in preparing coaches for either recreational or professional coaching (Cassidy & Rossi, 2006). As a recent study by O’Connor and Cotton (2009) of 37 rugby coaches in Australia suggests, coaching qualifications have a minimal effect on coaching practice and experience did not make any significant change to the practice of coaching with very little time being devoted to games (20% of session time). Cote and Frazer-Thomas (2008) maintain that at the elite level game play should contribute 80% towards training time but the reality indicates that a games approach is pushed to the background and training sessions continue to be highly directed and technical in nature. In Australia, there exists a coaching culture that favours coach directed (instruction) activities rather than an athlete centred approach.

2.5.3 Coaching Experience

The concept of experience covers a number of areas which are discussed below. The actual day-to-day activities or experience of coaching is valued over formalised coach education programs (Wright, Trudel & Culver 2007). Coaches argue that experience forms an important part of their development and coaches develop their personal views about coaching through ongoing engagement in the practice of coaching (Culver & Trudel, 2006; Lyle, 2002). There may even be a “threshold of experience” to becoming a competent coach (Cote, 2006). Coaches rely heavily on craft knowledge developed through the experience of coaching where that experience emphasises teaching technique to improve sports performance (Brooker & Abbott, 2001). To this end “many coaches operate within a comfort zone of skills and drills replicating the same way that they were coached as athletes” (Cassidy et al., 2004, p. 3).

Coaching experience is seen as the major avenue for developing expert coaching knowledge. Abraham, Collins and Martindale (2006) argue that this approach leads to the development of ‘tacit’ knowledge which is based on ‘weak’ problem solving methods such as trial and error. Coaching experience has a significant impact on the practice of coaches when compared to the contribution of formal coach education programs (Nash & Collins, 2006). Cassidy and Rossi (2006) argue that experience by itself is not ample for the full development of a coach and furthermore that training and education can ‘accelerate’ the development process and complement informal experience.

Coaches also gain knowledge and experience from being coached themselves, through observation of other coaches and by reading books and articles about coaching (Galipeau & Trudel, 2006; Irwin, Hanton & Kerwin, 2005; Lemyre & Trudel, 2004). Empirical studies in the area of coaching knowledge indicate that coaches value and place importance on the experience of observing other respected coaches (Cote, Salmela, Trudel, Baria & Russell, 1995; Jones, Armour & Potrac, 2004; Saury & Durand, 1998). This apprenticeship style of learning has at its core the replication of the unquestioned principles of coaching (Cassidy et al., 2004). Coaching experience is also influenced by the type of interactions that coaches have been engaged in (Jones, 2004). Finally most elite level coaches have coaching experience prior to becoming a high-performance coach (Erickson, Cote & Fraser-Thomas 2007). According to Dewey

(1933, 1963) genuine education is grounded in experience and that experience contains an element of reflection which completes the process, therefore experience alone is not always sufficient in the learning process. Practitioners need to be able to identify problems, anomalies or puzzling situations and undertake a thoughtful process that seeks answers. This deliberate effort to look back is seen as a way of improving a situation for future reference: “Meaningful strategies are not isolated random actions, but carefully coordinated and independent tactics designed to achieve important and valued goals by the participants in the action” (Kruse, 1997, p. 74).

Cassidy and Rossi (2006) suggest that research indicates that actual coaching experience is highly valued. This supports Lyle (2002) who indicates that experience plays an important part in ‘becoming’ a coach. However he also recognises that education and training cannot be overstated when examining the requirements of a profession (p.275). Innovation implies something new and a change to the orthodoxy. Change is often met with suspicion and reluctance. The age old phrase “if isn’t broken why fix it” tends to pervade coaching practices (Cassidy, Jones & Potrac, 2004, p. 3).

Consequently, tried and trusted methods gleaned from experience have tended to override both integration of academic knowledge into coaching practice, and the innovation that reflection upon such applied knowledge can produce. (Cassidy, Jones & Potrac, 2004, p. 3)

This is further elaborated: “In short, many coaches, wary of stepping outside a comfort zone of given drills and discourse, tend to coach the way they were coached” (Cassidy, Jones & Potrac, 2004, p. 3). This view of coaching presents barriers when implementing a Game Sense approach.

2.5.4 Playing Experience

Coaches can learn how to coach and gain experience about coaching from their early experiences as players (Galipeau & Trudel, 2006; Wright et al., 2007). Players themselves see playing experience as an important requirement before moving into coaching (Hutchinson, 2008). Most high-performance coaches played the sport they coach and it is rare that non players coach high performance or elite teams (Erickson et al., 2007). Playing experience is a valuable precursor to coaching and coach development where it is viewed as a significant advantage due to the game knowledge

that ex-players have accumulated through their immersion in the sport (Dickson, 2001; Rodgers, Reade & Hall, 2007). Many coaches are recruited based on their experience as player or athlete (Nash & Collins, 2006). Their experience, sport-specific skills and technical knowledge are considered as important pointers to future success (Gilbert, Cote & Mallett 2006). This view of technical knowledge and its necessity is also expressed by a number of leading coaches (Jones et al., 2004).

The recruitment of experienced players and the value placed on that playing experience occurs at the expense of education in the appointment of coaches (Lyle, 2002). This in part is related to playing experience also forming part of an apprenticeship where players observe the practices of coaches over the period of their participation in sport (Cassidy et al., 2004; Cassidy & Rossi, 2006). Coaching knowledge in this sense is 'passed on' often without critical examination or analysis. This lack of reflective development of coaching knowledge leads to robotic practitioners (Cassidy & Rossi, 2006). Cushion, Armour and Jones, (2006) describe these experiences of athletes or players as 'deeply integrated past experiences' that ultimately influence coaching practices and behaviours. The experience gained from extensive and diverse participation in sport also provides coaches with opportunities to access unmediated knowledge of coaching, teaching and interpersonal practices where coaching skills, knowledge and values are learned (Erickson, Cote & Fraser-Thomas, 2007).

2.5.5 Coaches' beliefs practices, change and habitus

Every element of coaching is informed by personal beliefs. These include opinions, experiences and values. Furthermore, Cassidy et al. (2004) point out that these deep seated values held by coaches influence practice. Coaching literature pays little consideration to the life histories and life experiences that shape the beliefs of coaches and the factors that contribute to the way coaches acquire knowledge (Jones, 2006).

Coaches typically develop their knowledge, beliefs and experience of coaching in a number of ways. As players they gain knowledge from their experience of being coached and as some authors suggest this can strongly influence the way they coach when playing days are over (Cassidy et al., 2004; Cassidy & Rossi, 2006; Lyle, 2002). Tinning (1996) calls this process passing on the information, which is unhindered or

unquestioned in its future application? This can lead to a situation where the practice of coaching leads to the reproduction of practitioners who “accept without question the manner and mode of their mentors” (Tinning, 1996 p.14).

Coaches’ knowledge is closely linked and entwined with their identities and social history. The knowledge they use in their everyday activities is ‘practical’ and this practical knowledge is closely linked to ‘social conventions’ and about how they are seen to coach in certain situations. That is, “the decisions that coaches make in taking up regimes that embrace drills and skill, taking an authoritarian style or wearing certain types of clothing are unconscious and follow a particular logic.” (Cassidy et al., 2004 p.128).

These assumptions often go unchallenged over the many years of a coach's life. Therefore attention to Bourdieu’s (1977) analytical concepts of social theory and reproduction in particular habitus may provide a useful way to understand the influences that impinge on decisions to adopt innovative coaching practices such as Game Sense. This approach using Bourdieu’s analytical concepts has already been used to explain the challenges associated with teachers adopting innovations such as TGfU in their practice (Light & Tan, 2004; Rossi, 2000). While there has been little written on coaching habitus, Horton’s (2009) examination of recent developments in professional rugby focused on the history of rugby and its cultural effects on coaching. His work raises the effect of tradition on coaching practices and hints at a coaching habitus:

Significantly, in the professional arena, its traditions, passion, pride and ‘camaraderie’ are elements even the most instrumental technically rational coaches would never completely expunge from their coaching rationale. (p.969)

The deep seated values of habitus are seen as "a person’s beliefs, ideals, speech and appearance that have been impressed upon them (coaches) through their interactions with social agents and institutions" (Hay, 2005, p. 46). More generally, Jones et al. (2004) suggest there is a strong link between experience, coach knowledge and the practice of coaching and it is embodied in a coaching habitus. This coaching knowledge and practice is often tacit, difficult to verbalise, implicit and to a large degree unconscious on a day-to-day basis. Kirk (2009) provides a link between habitus, learning and pedagogy in sports coaching when he suggests that highly trained individuals such as coaches have a habitus that relates directly to their immersion and

socialisation. It involves developing a set of dispositions and views that leads to an accepted belief of how things are done (Lyle, 1999). These become unconscious or second nature as coaches negotiate their work space. Jones (2004) also raises the concept of a collective or similar habitus where coaches share similar social spaces when he states that: “Coaching and the coaching process while being original to ones self is at the same time common to a wider group” (p.119). This socialisation may also impact on coaches and may mean they act often unconsciously to satisfy the expectations of a group.

The habitus includes the socially constructed and embodied dispositions of coaches which manifest themselves in perceptions, appreciations, behaviours and competencies (Kirk, 2009; Mauss, 1973). These embodied dispositions occur over a life time and are a product of history, experience and social location and also include the cultural nuances of individual sports. Furthermore, "habitus serves to define and redefine the coaching terrain, producing rules and particularities of membership that are reciprocally constructed through social practice (e.g. social practice places limits on what is and what is not thinkable or intelligible” (Taylor & Garratt, 2010, p. 131).

Cassidy, Jones and Potrac (2009) suggest that apart from the research reported by Cushion and Jones, (2006) there has been a paucity of research analysing the work and background of coaches using Bourdieu's concepts. Cushion's (2001a) research which centred on symbolic violence and capital, described coaches as having a particular coaching habitus that structured their practice: “the coach's habitus is structured through social practice, perhaps through the day-to-day engagement in the coaching process as a player or coach, and it is the coach's habitus that structures action” (p.188).

Cushion (2001) maintains that this habitus which includes both cultural and social capital is a prerequisite to becoming an elite level coach in order to negotiate the robust environment of professional football. This suggests that to function as a coach they must have sufficient capital and have developed an appropriate habitus. The disposition of the coaches involves the practical mastery of their occupation and occurs through day-to-day activities. He points out:

the coach's disposition in the coaching process lies at the intersection of the conscious and unconscious, while the coach's practical mastery is developed and

maintained by a deeply embodied habitus and that the traditions of coaching become embodied in the habitus. (p.188)

Harvey, Cushion and Massa-Gonzalez (2010) used Bourdieu's notion of habitus to explain the difficulties in coaches taking up Game Sense pedagogy in their coaching practice. Harvey et al. (2010) reported that the values, beliefs and dispositions of the two coaches in their study were challenged by the TGfU approach, explaining that “as well as acting as a filter through which all new knowledge must pass coaches’ habitus and experiences reflect a practitioner’s values beliefs and dispositions about their practice” (p.18).

Chapter Three Theoretical Framework

3.1 Introduction

According to LeCompte and Preissle (1993) “the purpose of theories is to help us sort out our world, make sense of it, guide how we behave in it, and predict what might happen next” (p.120). The works of Bourdieu, (1977) and Lave and Wenger (1991) are of significance in this research as they both focus on the role of practice and the complex nature of learning. This includes a view of learning as a social practice where culture, beliefs and values are learned through engagement in learning communities.

Analysis for this research project will use a framework provided by Bourdieu’s (1977) analytical concepts of habitus, field, capital and practice and Lave and Wengers (1991) concept of situated learning. The powerful contribution of informal learning in the day-to-day activities of professional coaches and the role that people's life histories and experiences has in the pedagogical decisions they make means that the notion of habitus provides a persuasive argument to understand the uptake of Game Sense by coaches. Bourdieu’s (1977) analytical concepts of habitus and agency have previously been used to explain the difficulties in the uptake of TGfU by teachers in secondary schools (Light & Tan, 2004; Rossi, 2000; Sirna et al., 2009).

Situated learning will be used as an analytical concept to explore the relationships between coaches, players and the coaching environment. This approach will illustrate how learning occurs and explore how elite level coaches in Australia and New Zealand developed as they have. It can be argued that coaches are part of the greater community of practice that is sport and more specifically a community of practice that is rugby coaching. As already discussed there have been attempts to locate coaches in *communities of practice within organisations such as clubs and teams* (Culver & Trudel, 2006, 2008; Galipeau & Trudel, 2006). However, as pointed out by other researchers, this is not a simple or straight forward assumption and in many cases, especially in professional sport, coaching takes place in contested environments (Mallett et al., 2009a; Mallett, Rossi & Tinning, 2009b; Occhino et al., 2009).

3.2 Habitus

The modern use of habitus emanates from the philosophical writings of scholars such as Aristotle who described the term “hexis” to mean “an acquired yet entrenched state of moral character that orients our feelings and desires in a situation, and thence our actions” (Wacquant, 2006, p. 315). Thirteenth century scholar Thomas Aquinas argued that habitus involves growth and durable dispositions that are set between “potency and meaningful action” (p. 315). Edmund Husserl offered habitus as the conduit between ‘past experiences and forthcoming actions’. Even Bourdieu’s contemporary Merleau-Ponty contended that the: “the lived body is the silent spring of social behaviour” is consistent with habitus (p.315). However Bourdieu who was familiar with the work of these previous scholars further developed the notion of habitus in his theory of social reproduction. Bourdieu’s desire was to transcend objectivist and subjectivist views and to revoke the common sense duality of individual and society. Bourdieu’s notion of habitus as an “embodied system of dispositions” rejects the dualism of mind and body and also provides a link between agency and structure (Light, 2008b, p. 26). “Habitus is one’s disposition, which influences the actions that one takes” (Dumais, 2002, p. 46). It is generated by someone’s place within a social structure and by internalising that social structure. As a result one comes to understand or determine what is possible and what is not possible and what is practical within that social structure.

Bourdieu (1977) argues that habitus is both structured by our past social experiences and is also responsible for structuring our immediate responses to emerging circumstances. It operates to guide our actions even if it is not a conscious strategic decision. Habitus is constructed over the individual’s life experiences, across and through socio-cultural fields. It also reflects the successful negotiation of environments in a person’s life; it is not coherent and displays varying degrees of integration and tension depending on the social settings that influenced it (Wacquant, 2006). In this regard Bourdieu and Wacquant contend that habitus is intentionally “vague and fuzzy” (Bourdieu & Wacquant, 1992, p. 22). The habitus shapes perception and structures social action (Light, 2008b). The way humans construct meaning is through social interaction.

Habitus to a large degree operates at a non-conscious level. Bourdieu saw habitus as the way humans master their social world. To him it was a way of understanding the

relationship of the person with the world: “the body is in the social world and the social world is in the body” (Bourdieu 1982 as cited in Bourdieu & Wacquant, 1992, p. 20). The habitus is durable and long lasting as it is developed at a subconscious or non-conscious level and is embodied. It includes aspects such as dispositions and trajectory.

Bourdieu’s analytical concepts have been taken up in the sociological research of sport (Shilling, 2003; Tomlinson, 2004; Wacquant, 1995a, 1995b). Bourdieu made a connection to sport generally and more specifically to explain his work and used the term “le sens pratique” to describe how people develop a natural feel for expert participation in sport (Bourdieu & Wacquant, 1992, p. 129). “I have put forth a theory of practice as the product of a *practical sense*, of a socially constituted “sense of the game” (Bourdieu 1980 as cited in Wacquant 1989, p.43). According to Macey 2001 “Bourdieu uses the term to describe the unconscious internalisation of objective social structures which appear spontaneous and natural, but which are in fact socially conditioned” (p. 175). Wacquant (1995a, 1995b) used Bourdieu's analytical concepts in a study of black American professional boxers and argued that a pugilist’s habitus was more than the acquisition of boxing skills but that it had evolved from the social world and the interactions between boxers in their gymnasium.

The notion of habitus is the central concept used by Bourdieu to avoid the oppositional relationships between agency and structure. The notion of habitus also rejects the division of mind and body. The term habitus is difficult to define and as explained by Bourdieu is intentionally vague. More specifically, “habitus is in cahoots with the fuzzy and the vague” (Bourdieu , 1987, as cited in Bourdieu & Wacquant, 1992, p.22). A key principle of Bourdieu’s work is that he refused to delineate between the conscious and unconscious in both the development of the habitus and how the habitus shapes social action. He also provides a means of understanding how humans master their social world through immersion in it (Bourdieu & Wacquant, 1992). Furthermore, the relationship between the individual and the social is mutual possession.

Habitus is constructed over the life time of an individual through experiences within particular socio-cultural contexts/fields. The habitus is a set of embodied values and dispositions gained from our cultural history which shapes perception and structures social action and remains with us across contexts. Light (2008b) points out that “through participation in practice within particular socio-cultural contexts, people

develop particular tastes, preferences and a practical sense of the environment” (p. 27). The way we think and evaluate certain conditions is socially produced. To this end habitus is a concept that expresses on the one hand, the way in which individuals become themselves, develop attitudes and dispositions and on the other hand the way those individuals engage in practice (Webb, Schirato & Danaher, 2002). Habitus captures the range of actions possible by humans.

There is a strong relationship between habitus and field and this operates in two interrelated ways. First it has a conditioning effect: “the field structures the habitus, which is the product of the embodiment of the immanent necessity of a field”. Second: “habitus contributes to constituting the field as a meaningful world, a world endowed with sense and with value, in which it is worth investing one's energy” (Wacquant, 1989, p. 44).

The powerful contribution of informal learning in the day-to-day activities of professional coaches and the role that people's life histories and experiences have in the pedagogical decisions they make means that the notion of habitus provides a persuasive argument to understand the uptake of Game Sense by coaches. Bourdieu's analytical concepts of habitus and agency have previously been used to explain the difficulties in the uptake of TGfU by teachers in secondary schools (Light & Tan, 2004; Rossi, 2000; Sirna et al., 2009).

Habitus can be interpreted as values and dispositions gained from our cultural history that remain with us across contexts. This embodied social history of a person structures actions. It is the “unconscious taking in of rules, values and dispositions as the habitus which are defined as durable regulated improvisation” (Webb et al., 2002, p. 36). Coaches' life histories and movement through various fields allows for the embodiment of certain experiences which lead to durable dispositions and inclinations. Coaches' individual habitus has the potential to shape their interpretation of innovations such as Game Sense. There may also be a collective coaching habitus for those who share experiences in similar fields. There is an argument that it is possible to conceive of coaches having both an individual and collective habitus. Wacquant's (2006) interpretation of Bourdieu's work discusses ‘sociation’ and ‘individuation’, where ‘sociation’ contends that our judgements and acting are a result of society and are shaped by those who have been subjected to similar social conditions.

Habitus is a concept that expresses on the one hand, the way in which individuals become themselves, developing attitudes and dispositions, and on the other hand, the way those individuals engage in practice. A coaching habitus, for example, may dispose the individual coach to certain activities and perspectives that express culturally and historically constituted values, as people reproduce objective structures of the society, culture or community that they exist within (Webb et al., 2002, p. X11).

In addition Kirk (2009) makes the point that many of our actions over time become automatic and non-conscious responses to the social requirements of a particular setting. The unconscious and embodied nature means that it operates at a level just below consciousness.

3.2.1 Field

Bourdieu describes a field as a partially autonomous entity that is dynamic and fluid and where there is a constant struggle and contest over resources. Fields are set by boundaries where the boundary or context of the field is shaped by sets of rules, guidelines, expectations and values (Crossley, 2001; Reay, 2004; Taylor & Garratt, 2010). Each field does not operate in isolation; rather it is also affected by other fields. Bourdieu often used sport in his writings as an example of a field that was once largely an autonomous field, until recent times when it became entwined with other fields such as business, media and government (Webb et al., 2002, p. 30). Business and media now exert powerful influences on sport that have resulted in it being corporatized (Coakley, 2007; Coakley et al., 2009).

Fields follow a specific logic, that is fields such as religion, media and economics for example follow specific logics or have a specific logic embedded in that field. “The limits of the field are situated at the point where the effects of the field cease” (Wacquant, 1989, p. 39).

The principal dynamics in a field are its structures, and movement within the field is contingent upon capital which has a specific relationship to a field. Fields are also contested spaces or areas where struggles are often geared towards preserving or maintaining hierarchical arrangements and are closely associated with capital. In this regard capital has power that is related to the field. Fields are also spaces where people

attempt to advance or improve their position within such a field depending on the type and accumulation of capital. "The strategies of agents depend on their position in the field, that is, in distribution of the specific capital" (Wacquant, 1989, p. 40). The dynamics of a field are related to its structures.

Wacquant (1989) uses Marx's interpretation to explain a field and its relations:

I define a field as a network, or a configuration, of objective relations between positions objectively defined, in their existence and in the determinations they impose upon their occupants, agents or institutions, by their present and potential situation (situs) in the structure of the distribution of species of power (or capital) whose possession commands access to specific points that are at stake in the field, as well as by their objective relation to other positions (domination, subordination, homology etc.). Each field presupposes, and generates by its very functioning, the belief in the value of the stakes it offers (p.39).

Furthermore in relation to habitus, "It is important to understand the habitus in terms of dispositions acquired by 'social and economic conditions' that influence a trajectory through a particular field" (Wacquant, 1989, p. 40). Coaches' life histories and movement through various fields allow for the embodiment of certain experiences which lead to durable dispositions and inclinations. Coaches' individual habitus has the potential to shape their interpretation of innovations such as Game Sense. There may also be a collective coaching habitus for those who share experiences in similar fields (Crossley, 2001; Jenkins, 2005; Reay, 2004; Ritzer, 1996; Wacquant, 1989).

3.2.2 Capital

The ability to access resources and the ability to exercise power within the field is contingent upon the degree to which a person or group of people can access or manipulate capital. Capital has power and function within a specific field and its distribution helps structure the field.

Movement within the field requires varying types of capital depending on the nature of the field. What is capital in one field holds no influence in another. People seek to improve their position within a field and this movement is related to the type and distribution of capital in that field (Wacquant, 1989).

Bourdieu conceived of capital as taking social, cultural or economic forms and being accumulated and transformed from symbolic forms to more powerful material or economic forms depending on the field. In the case of coaching, Cushion's work with professional football coaches delineates a view that coaches need certain types of capital in order to be effective in their work as coaches (Cushion, 2001a; Cushion & Jones, 2006).

The location and power within a field are determined by the accumulation and distribution of capital in the form of cultural, social or economic resources. Baum (2007) outlines social capital as that which exists between tightly or closely knit groups who share many common characteristics. Baum uses social capital to explain why disadvantaged people in the community fail to access and utilise health services effectively. Access to capital, in this case social capital, serves to reproduce certain inequalities between classes of people. That certain people have access and others do not means that social connectedness can determine how people gain access to resources.

3.2.3 Practice

Bourdieu's (1977) concept of practice involves the day-to-day activities that emanate from the dispositions that are formed from experience in particular social fields. Culture is embodied and reproduced through practice and is largely dependent on the positions held in social fields.

Practice mediates between habitus and field (Bourdieu & Wacquant, 1992). It is through participation in particular social practices that certain forms of culture and social structures are embodied and reproduced. The dispositions which are constituted in the habitus are a result of social practice over a period of time. It is at the level of practice that coaches' dispositions and perceptions embodied in the habitus are realised (Taylor & Garratt, 2010).

The capacity of social structures to reproduce bodily culture is not altogether determined objectively or as a result of conscious free will but is determined by the interaction of the social context and the social action of agency. Those who participate in or occupy a field together share a similar habitus. It is through the shared nature of practice that culture is reproduced in social fields.

At the level of agency, practice involves conscious intended action and unconscious unintended action. The practice of coaching at an elite level often requires the coach to have developed a certain intuitive ability to react, respond and act unconsciously. This intuition is often referred to as having a "feel" for acting in certain situations. Bourdieu (1977) refers to this as embodied learning or embodied actions which occur at unconscious level and not necessarily as a result of logical reasoning.

Many of the activities involved in social life, including coaching, occur at a subconscious level where cultural dispositions are expressed and reproduced. In the initial stages of learning actors efforts are organised and carried out at a conscious level but over time and through experience actions become embedded and they appear to be effortless. This effortless quality of action becomes embedded as second nature and no longer requires the same conscious attention as do new experiences.

In the course of engagement in social practice, habitus is developed through the process of internalising and embodying the dispositions and tastes of particular social fields. Habitus results from a practical engagement in practice often at an unconscious level and is manifested in tastes and senses. The habitus embeds certain dispositions which are reflected or represented in the way we behave and present ourselves in social life such as eating, walking and deportment (Sirna et al., 2009). Social relationships are expressed, confirmed and reinforced through the embodiment of culture into habitus.

3.3 Situated learning

Situated learning is engagement in learning practices that are unique to a particular community and are required in order that one may exist in that community as a competent practitioner. The learner becomes familiar with local conditions, or as described by Light (2008b) they become habitual, allowing them to contribute to the reproduction of that community. This occurs not through direct instruction but by engaging within a unique community. In this sense learning involves participation in social practice which is culturally and socially located. The whole person is involved and learning occurs on a daily basis (Lave & Wenger, 1991).

3.3.1 Communities of practice

Wenger (2009) suggests that the term community of practice is a simple one and has been in existence since people gathered together in pursuit of common goals through regular interaction. Wenger describes it as “groups of people who share a concern or a passion for something they do and learn how to do it better as they interact regularly.” (Wenger, 2009).

A community of practice involves people who collectively learn and share a particular domain of endeavour. The notion of ‘community of practice’ refers to any collective group who together contribute to shared or public practices in a particular sphere of life (Kirk & MacDonald, 1998). It is not just a group of interested people but is defined by a commitment towards learning from each other, committed to a specific domain and a shared competence that identifies them from other groups. A community of practice involves people who are practitioners where they have a shared repertoire of resources. This may involve experiences, storytelling or tools and includes problem solving. It requires regular interaction over a period of time where information is discussed, shared, refined and where it contributes to an ongoing practice. Culver & Trudel (2006) argue that the coaching staff of a team or club has the capacity to be a community of practice where their shared objectives lead to a "sense of mission" (p.99). Their interactions will be influenced by three elements mutual engagement, joint enterprise and a shared repertoire (Wenger, 1998).

Mutual engagement is individually formed but requires interaction with others where tension and challenges are created and centred on collaboration and negotiation between learners (Culver & Trudel, 2006). These would be evident in activities such as coaches’ meetings where discussions take place over issues like preparation for the season, methods for training or tactics and strategies. Mutual engagement is the process that binds members together into a social entity. Joint enterprise is the actions or approaches which are collectively negotiated allowing a uniqueness to develop that is indigenous to the group (Culver & Trudel, 2006). It involves a continual renegotiating by its members. Goals and aspirations are the result of engagement by those involved in the negotiations and not of an outside dictum, and result in a collective ownership of ideas and actions. Shared repertoire is a type of community coherence and the result of a history of mutual engagement. The instruments of a shared repertoire include communal

resources such as routines, sensibilities, artefacts, vocabulary and/or styles that members have developed over time. It is an ambiguous, fluid concept and represents the indigenous nature of a particular community of practice.

Coaches can be identified as a community of practice where there are specific social contexts, activities and discourses that ground their work (Culver & Trudel, 2006). This ability to identify coaches and the practice of coaching means that there is a trajectory within the coaching community that is contingent upon moving towards full participation.

3.3.2 Legitimate Peripheral Participation

Legitimate Peripheral Participation (LPP) is a positive and empowering term and is a means by which learners understand engagement in social practice. LPP represents how individuals become part of a community of practice where they have increasing access to common resources, how their identities are shaped by participation and are on a trajectory towards fuller participation. Understanding is gained or accessed through growing involvement (Lave & Wenger, 1991).

Situated learning involves a process of LPP, where learners participate in a community of practice (Lave & Wenger, 1991, p. 29). This participation or engagement in full participation is seen as socio-cultural. Legitimate peripheral practice is also a way to describe the relationship between “old timers” and “new comers”. Lave and Wenger (1991) view apprenticeship as an aspect of LPP. The apprenticeship model is based on a structured pattern of learning experiences (see Davis et al., 2000) not on learning being reduced to the repetition of mechanical tasks.

3.4 Integration of theories.

Fox (2000) proposes that sociological theory and learning theory can be integrated and used to understand the role of practice and this has recently been developed in relation to research on physical education and sport (Light, in press). Following from this emerging work in PE and sport this thesis integrates the social theory of French sociologist Pierre Bourdieu (1977) and the constructivist learning theory of Lave and

Wengers (1991). As Light (in press) argues, the integration of social theory and learning theory rests upon their emphasis on practice, as being part of any human activity or action on or in the social world (MacIntyre, 2007). In recognising the significance of the body and embodied learning that occurs through participation in social practice within particular social fields, practice forms a key concept of Bourdieu's. In Lave and Wenger's (1991) work on situated learning they also emphasise the central role that practice plays in the non-conscious, implicit learning that occurs through participation in the practices of a community of practice.

From this perspective the development of expertise in coaching involves learning more than the mechanics or techniques of coaching. It also involves learning the culture, values and beliefs that make up the doxa of the field or that are important in the relevant community of practice. Coaching a rugby union team does not take place in an isolated, social vacuum but occurs within the larger social field of sport or the sub field of rugby union or, on a smaller scale, a community where the practice of coaching has a particular value and meaning. Learning and development through practice in this case occurs through the day-to-day activities of coaching through which coaches embody knowledge through participation in practice within a particular socio-cultural context. This is largely an implicit, tacit and non-conscious process occurring over time. This embodied notion of practice assumes that there is a non-conscious priority of action over thought (MacIntyre, 2007). Given the non-conscious priority of action, Bourdieu's analytical concepts provide an insight to understand how the participants' habitus is structured over time to then structure the uptake and understanding of Game Sense in their coaching practice. Furthermore, the collective nature of attaining standards required within a specific community such as coaching also brings into consideration the collective nature of habitus (Crossley, 2001; Wacquant, 1998).

The ideas of Bourdieu (see for example, 1977) and Lave and Wenger (1991) help highlight the role that the socio-cultural context plays in reproducing the values, beliefs and culture of the particular field or community of practice within which participants seek to be skilful in a particular area. Examining the construction of habitus at the level of a social field or at the level of sub fields allows for understanding how habitus is constructed at a macro social level on a collective or individual basis. Tightening the focus to a community of practice within the larger social context allows for a more

detailed micro examination but needs to be considered within the larger notion of a sub field of a field.

The development of expertise thus occurs at the macro level of fields and at a micro level within communities of practice. This occurs through ongoing participation in practice within particular socio-cultural fields and/or communities of practice and leads participants to adopt standards, values and beliefs of the community of the field and develop a set of dispositions (Bourdieu, 1986; Lave & Wenger, 1991). From a situated learning perspective this requires entry into a community of practice where participants over time learn, not only how to be a rugby union coach but also, non-consciously, the values and culture of the community (Lave & Wenger, 1991). The concept and use of a community of practice recognises the smaller social spaces that the participants move in compared to the larger social spaces of a field or subfield in their trajectory towards being a rugby coach.

The use of Lave & Wenger's (1991) concept of a community of practice accounts for the micro social communities that make up the larger social fields and subfields associated with commodified sport such as rugby union. It is within these smaller communities of practice that it is possible to bring a tighter focus to how coaches develop attitudes and dispositions through their participation in the practices of rugby. More specifically, the concept of a community of practice provides a tighter, smaller social framework, to help understand how the participants learn and develop certain values beliefs and inclinations towards the practice of coaching and which shape their interpretation and use of Game Sense. In this thesis the participants' backgrounds are examined in relation to their entry into sport and their movement towards a career as rugby union coaches. In this respect it provides an avenue to understand the uptake of Game Sense by the participants as they move through social spaces which constitute their trajectory and in particular how the habitus is constituted.

Chapter Four Methodology

4.1 Introduction

This chapter outlines the research methodology used in the study. The study was designed to inquire into the use of Game Sense by elite level rugby union coaches in Australia and New Zealand. More specifically the research sought to investigate the life histories of the coaches and their views about learning and relationships in order to understand how their interpretation and use of Game Sense was shaped by this.

The chapter sets out the decisions made in designing the study, the appropriateness of the design in answering the research question and the issues that arose in making those decisions. It also outlines the place of the researcher and how the researcher's interest, bias and background have been accounted for in the research. The chapter begins with a discussion of the research strategy which adopts a comparative approach using case studies in Australia and New Zealand. It then moves on to elaborate upon the methodology, the participants in the study, and the process of data generation and analysis and how ethical considerations were addressed. Taking a reflexive approach the researcher's role in the research is also made clear because of the ways in which it might influence the data generation and analysis (Bourdieu & Wacquant 1992). Finally a pilot study was completed prior to undertaking the research and this is discussed as part of the methodology.

4.2 Research design

4.2.1 Comparative Study

This study involves a comparison of case studies at two sites, Australia and New Zealand. May and Cantley (2001) suggest that comparative studies provide opportunities not only to examine differences in practice between two sites in context while allowing analysis of why and how societies develop in different ways but to predict what might happen in the future. A case study provides for deep understanding but it is difficult to form generalisations from it. Conducting research within two of the strongest rugby union playing nations in the world offers a means to compare findings across different cultural settings and consider the results beyond one specific case.

Australia and New Zealand share a similar history and pattern of colonisation which firmly entrenched the values, beliefs and culture of Imperial England.

The success of this cultural power rested with the ability of the imperial system to have its main social tenets accepted as appropriate forms of behaviour and ordering by the bulk of the client population, or at least by those important sections of that population upon whom the British relied for the mediation of their ruling practices, objectives and ideology. (Stoddart, 1988, p. 650)

After colonisation this influence and the role of sport would later translate into their support and participation in the Empire and Commonwealth games. This participation was built on belief in the “games ethic” and “muscular Christianity” and the transfer of a moral code that would uphold the ideology of the British Empire (Nauright & Chandler, 1996; Stoddart, 1988).

In a contemporary sense; "Sport plays a significant role in the history, culture, economy and politics of both Australia and New Zealand" (Coakley, Hallinan, Jackson & Mewett, 2009, p. 420). The International Rugby Board (IRB), the governing body which controls and governs rugby union throughout the world, admitted Australia and New Zealand as full members in 1949 (Horton, 2009). The ongoing participation in professional rugby union competitions between the two countries has become a vital economic activity for both. (Harcourt, 2007) with Horton (2009) suggesting, “that the game in each of the participant countries had become “glocalised”, with the local rugby union cultures forming part of the global game yet simultaneously creating definitive local varieties.” (p.975). Both the Australia and New Zealand governments are responsible for the development and implementation of national sports programs. More importantly both are involved in the globalisation of sport through their participation in and support of the Olympic Games, Commonwealth Games and the RWC (ASC, 2009; SPARC, 2009).

Although both Australia and New Zealand play rugby union its social and cultural position occupies different spaces in its respective communities. In Australia it has been *an exclusive practice of the middle classes from the early nineteenth century operating as a ‘practice of distinction’ for the social elite (Light & Kirk, 2000)*. Despite the huge changes in its meaning and practice since the professionalisation of rugby union in 1996 and its globalisation through the Rugby World Cup, it is still associated with the middle

classes. While cricket is the dominant summer sport in Australia rugby union competes with Australian football, rugby league and soccer (football) for an audience in winter. On the other hand rugby union is *the* dominant sport in New Zealand, is played across all classes and plays a central role in defining and projecting a national identity to the world (Jackson, 2004). Rugby union is profoundly tied to the culture of New Zealand (Coakley, Hallinan, Jackson, & Mewett, 2009; Pringle, 2008); its place in New Zealand culture and society is characterised by different cultural values (Coakley et al., 2009; Pringle, 2008). Indeed it is argued by a number of commentators that the national mood of New Zealand is related to the fortunes of the All Blacks (Pringle, 2008).

The landscape of participation, the culture of rugby union and its relationship to the broader culture in both countries is markedly different, with much of this related to the relationship to, and influence of, indigenous culture. In New Zealand the Maori people were able to establish a treaty known as the Treaty of Waitangi to enshrine certain rights; no such treaty has been established in Australia with Indigenous people. The Maori have represented New Zealand since the first organised international tour in 1888 and a Maori board of rugby union was established in the early 1900s to organise and advocate participation by Maori in rugby. The significance of Maori culture in New Zealand and in New Zealand rugby union is powerfully expressed in the performance by the All Blacks of the world famous haka, a traditional Maori war dance, before every match. The 'haka' sets New Zealand apart from other rugby playing nations (Coakley et al., 2009). By comparison, participation in rugby union by Indigenous Australians has been insignificant when compared to their counterparts in New Zealand despite the success and fame that a few Aboriginal players such as the Ella brothers have enjoyed. Historically the exclusive practice of rugby was restricted to the wealthy schools of the social elite in Australia, (Light & Kirk, 2000). Indeed, the ARU has recently been criticised in the media for not attracting Indigenous players to the highest levels of participation (Ella, 2010).

The similarities and differences between the cultural meanings of rugby union and the cultural context within which it is practised in New Zealand and Australia invites a comparative study and offers the opportunity to contextualise the influence of a pedagogical approach in elite level rugby union. A comparative study approach provides an opportunity to understand the uptake of Game Sense by elite level rugby union coaches in two countries where rugby is an important activity in each country's

sporting profile and where large scale coach education programs are in place, yet where there some distinct cultural differences. Primary data supplied in April 2008 by the ARU and NZRFU indicate that they have similar numbers of registered rugby union coaches 11,817 and 10,287 respectively.

4.2.2 Case Studies

Yin (2003) suggests that case studies provide the most appropriate strategy for examining practice within broader social contexts. Case study research involves a researcher exploring single entities, cases or phenomena over time and can include certain social groups. Tight (2003) suggests that case studies are particularly useful in small-scale research where the study of practice or innovation is the goal of the research process, as is the case in this study. By limiting the number of cases at each site the research avoids what Hantrais and Mangen (1996) describe as the safari effect, where too much ground is covered in the field work at the expense of adequate analysis and reporting in comparative studies.

The use of case study methodology provided an opportunity to gain an in-depth understanding of a unique population of elite rugby coaches. It was not possible to include the whole population of coaches working at this level due to the closely focussed nature of case study research and the time involved in collecting the data. However, the cluster of cases at both sites provides a representative sample within this unique population of coaches. In Australia only one of the head coaches working at the Super 14 level did not participate in the study. He was invited but declined to participate. Both clusters include two coaches who have worked with the national teams of their respective countries. The remainder of the coaches work with the best players at state and provincial level on a daily basis. It is plausible therefore to make claims about the interpretation and use of Game Sense with a population of coaches working at this level from the research study. It may also provide insight into what might occur elsewhere within the community of coaches. Case studies and the associated methodology allowed for a deeper understanding of how the coaches' backgrounds and attitudes shaped the decisions they made in their daily work as coaches. Detailed information was collected using semi-structured interviews, observations and field notes during a sustained period of time (Creswell, 1994; Merriam, 1998; Yin, 2003).

Recent work by scholars in the area of sports coaching has advocated that future research should investigate coaches' backgrounds in order to understand how they arrive at the decisions they make about coaching (Cassidy et al., 2004; Cushion, Armour & Jones, 2003; Jones, 2006). The biographies of coaches provide an insight into how experience shaped the pedagogical decisions they make (Cassidy & Rossi, 2006). Cassidy (2004) argues that in future, research attention needs to be paid to coaches' life histories, their socialisation and their interpretation of quality coaching and their views of coaching as a socio-cultural practice. The use of case studies enabled me to understand "why coaches coach the way they do" (Jones, 2006b). Coaching is closely associated with the relationships between coaches and athletes and this affords an opportunity to link research to socio-cultural practices.

4.3 Methodology

In adopting a case study approach this research utilises a number of ethnographic techniques to gather data in situ. In addition, a comparative study using the case studies was employed to explore in-depth the social aspects of coaching within the social context of where coaches work in order to locate the coaches' beliefs about coaching that guide their practice within a larger socio-cultural context. The eight case studies involved semi-structured interviews, observations and field notes conducted over a 12 month period in 2007 and 2008. The backgrounds of the coaches were examined in order to locate the development of their coaching beliefs and values, and the ways in which these shape their interpretation of Game Sense, their attitudes to it and their application of it. Results provide understanding of the complex nature of coaching and of the practical issues that arise in the development of Game Sense coaching (Cassidy et al., 2004).

Ethnography has traditionally been used in sociology and anthropology with a particular emphasis on communities in unique cultural settings (Goetz & LeCompte, 1984). While this study does not focus on discrete communities it does make use of ethnographic techniques such as interviews, observations and field notes to allow the researcher to understand the commonsense beliefs and rules that were adopted by the coaches in their understanding and application of Game Sense in the everyday activity of coaching. Using interviews, observations and field notes allows the generation of data in the natural setting of the coaches' work.

The study set out to develop a deeper understanding of the coaches at work and to build on the researcher-participant relationship over time (Ritchie & Lewis, 2003). It also uses a reflexive approach that takes into account the effect of the researcher on the data generated. By focusing questions on the coaches' beliefs and how they interpret and use Game Sense it is assumed that this may have an effect upon the coaches' practice, and the study allows the researcher to observe and account for this. The study also allows for the use of interpretive content analysis in which the data generation and analysis and the formation of theory is grounded in, and sensitive to, the context of the data and is an ongoing process. Content analysis focuses on matters in everyday social life and human communication (Krippendorff, 2004; Neuendorf, 2002).

While Australia and New Zealand are very similar, different cultures and beliefs permeate their approach to sport (Coakley et al., 2009; Pringle, 2008). In previous visits to New Zealand I sensed a difference in the approach to coach education between Australia and New Zealand. In New Zealand there was an emphasis on the cultural aspects of team performance and a genuine desire to be inclusive of players. In Australia the coach education system is firmly located in the biophysical sciences of coaching, drawing on the areas of physiology, motor learning and skill acquisition to inform practice (Dickson, 2001; Woodman, 1993). These beliefs in Australia ignore the socio-cultural conditions that impact on coaching and view it as a simple positivist activity.

The methods outlined in this study reflect Bourdieu and Wacquant's (1992) assertion that research should strive to produce accounts of human behaviour and social experience. Bourdieu himself paid particular attention to the body and sport with a focus on practice (see for example Bourdieu, 1978). Lave and Wenger (1991) also stress learning through participating in practice. They view the process of learning as being situated within specific social contexts. Coaches, like other learners, learn how to be somebody and their identity is shaped by their entry, active participation and engagement in communities of practice. With this in mind the study takes up a theoretical framework based on Bourdieu's social theory and Lave and Wenger's (1991) theory of situated learning.

4.4 The cases and context

The research examined a purposively selected sample of coaches from a limited pool of elite coaches working in Australia and New Zealand (Henry, 1990; Neuman, 2006).

This was an in-depth investigation with an exploratory approach where the participants are experts and have the capacity to inform the research. In Australia and New Zealand there are currently, at the elite senior level of rugby union, approximately 16 professional head coaches working with Super 14, National Provincial Championship (NPC) or National teams.

4.4.1 Site selection

The challenge was to identify and gain access to coaches who could participate in the study and legitimise a comparative study. The Super 14, National Provincial Championship and Tri-Nations tournaments are the only rugby union competitions in Australia and New Zealand where there are full time professional coaches working with full time professional players. Therefore the decision was made to compare coaches who worked in these competitions in Australia and New Zealand.

4.4.2 The participants

Four elite head coaches were purposively selected at each site. All the head coaches are practising at the National Provincial Championship, Super 14 or national levels. While the case study approach adopted in this study limits its capacity to generalising from the results, the inclusion of a significant number of head coaches working at the provincial and national level in this study provides insight into a unique population.

The Australian component of the study is comprised of the head coaches of three provincial teams and the national team. The New Zealand component of the study comprised the head coaches of three provincial teams and one from the national team. The participants in the study were coaches who were currently working at the most elite level of rugby union, who regularly work with the best players in Australia and New Zealand and who were selected because of their exclusive or distinctive positions. Their positions in the rugby world ensure that they are immersed in the field of coaching where their experience means they live and breathe the culture which, according to Neuman, (2006) makes these coaches ideal participants.

4.4.3 Participant selection

I was already familiar with two of the Australian coaches prior to undertaking the research. I had played rugby union with them and approached them directly to participate in the study. The remainder of the coaches were associates of friends who were currently professional coaches, and I arranged contact with the coaches through these friends. I had established contact with two of the New Zealand coaches through participating in coach education programs and coaching seminars in New Zealand. I felt comfortable in contacting them directly to participate in the study. The remaining two coaches were contacted after discussions with a prominent coach educator who had worked with these coaches. She provided me with contact details and then after introductions I approached them.

4.4.4 Participants' profiles

Australian site

Below are the profiles of the participants in the study, a fuller version is detailed in Appendix 1.

Ellery

Ellery was born in 1960 and had a long history as a player prior to coaching. He had previously worked as a teacher before his professional appointment as a coach. At the time of the data collection Ellery was the head coach of an Australian team in the Super 14 rugby competition.

Lincoln

Lincoln was born in 1958 and spent his childhood and the majority of his adult life in a large country centre where he had worked as a teacher. Prior to taking up his appointment as a full time coach he worked for the Australian Institute of Sport (AIS). At the time of the data collection Lincoln was the head coach of an Australian team in the Super 14 rugby competition.

Elvis

Elvis was born in 1965 and grew up in a state where rugby union was a minor sport. Prior to taking up his appointment as a full time coach he worked in a professional capacity as a town planner. At the time of the data collection Elvis was the head coach of an Australian team in the Super 14 rugby union competition.

Joseph

Joseph was born in 1951 in Brisbane and prior to his appointment as a full time coach he had held a management position in the freight forwarding industry. At the time of the data collection Joseph was part of the coaching staff of the Australian team.

New Zealand site

Paul

Paul was born in 1968 and grew up in a large regional centre on the south island of New Zealand. Prior to entering full time coaching he worked as a development officer for the New Zealand Rugby Football Union (NZRFU). At the time of the data collection Paul was the head coach of a NPC team in New Zealand.

Walter

Walter was born in 1959 and had spent his formative years in a small rural town on the north island of New Zealand. Prior to entering full time coaching he worked as a development officer for the New Zealand Rugby Football Union (NZRFU). At the time of the data collection Walter was part of the coaching staff for the New Zealand national team.

Rodney

Rodney was born in 1959 and spent his formative years in a small farming community and town on the south island of New Zealand. Prior to becoming a full time coach he had his own business. At the time of the data collection Rodney was the head coach of a Super 14 team in New Zealand.

Arnold

Arnold was born in 1954 and grew up in a major city on the north island of New Zealand. Prior to entering coaching full time he had his own business. At the time of the data collection Rodney was the head coach of a Super 14 team in New Zealand.

4.5 Data Generation

This study is not ethnographical but it does involve the study of people or groups where the main aim is to understand how their actions, beliefs and artefacts have been influenced and shaped by culture. The researcher's goal is to get as close as possible to the participants and their world and to report the account faithfully. The ethnographical approach is eclectic and can utilise a range of theoretical perspectives from many disciplines to explain findings. It also has the capacity to utilise a range of data sources including interviews, observations and field notes (Grbich, 2004). For the eight cases in this research study ethnographical techniques of interviews and observations with field notes to generate the data were used. The data were triangulated by the use of the *participant coaches, the researcher as an instrument and the use of literature to inform the analysis. The data were generated by the use of interviews, observations and field notes that provided another level of triangulation.*

4.5.1 Interviews

Interviews can vary in type and purpose depending on the circumstances of use but their main purpose is to learn about the participant and the participant's context. Field interviews involved asking questions, listening, expressing interest and making a suitable recording. The interviewees are active participants whose "insights, feelings and cooperation" (Neuman, 2006, p.406) inform the area of investigation. However the interview process reveals not just the participants' views in isolation but is a form of joint participation with the researcher (Neuman, 2006; Russell, 2004).

The atmosphere of the initial interviews with the Australian coaches with whom I was familiar was immediately friendly and I felt at ease and comfortable at once. They responded quickly, inquiring about the study and indicating that they were interested in games-based training. The remaining Australian coaches with whom I was not familiar were initially reserved but after being introduced to the nature of the study and their role in it, they appeared to me to be receptive. The New Zealand coaches whom I had previously met at coaching seminars and conferences were similarly friendly when I arrived for our first interview. They were hospitable and took time to introduce me to key personnel in the organisation such as players, administrators and assistant coaches. One coach took me to a team lunch to ensure I was made welcome. The remaining coaches in New Zealand after a brief introduction were keen to make me feel comfortable with one even suggesting that our future interviews be conducted at his home.

After establishing rapport and trust with the participants data were generated through a series of one-on-one, semi structured, and conversational interviews. This involved three rounds of interviews with each coach. The initial interview was used in part to gather biographical information on the participant's entry into and participation in sport from their childhood, details of influences on their early participation in sport and their movement into coaching. The participants' life experiences as players and coaches were important in shaping their attitudes towards Game Sense. The second round of interviews focused on the coaches' attitudes and views on coaching and learning, and their relationships with players. Their views on learning and relationships shape the decisions they make to engage with Game Sense. The third round of interviews examined coaches' interpretation and knowledge of Game Sense and how they use it in their coaching.

After the biographical and background information was collected in the first round of interviews the second and third round interviews were guided by the following six focus questions:

1. What knowledge of Game Sense do coaches have and how do they interpret it?
2. What experience of Game Sense coaching do they have in terms of attending seminars, being coached when players or of trying it themselves?

3. What beliefs about coaching and learning do the coaches have and how does this shape their views on Game Sense?
4. What do the coaches see as the possibilities for incorporating Game Sense into their training regimes and the problems or challenges involved with it?
5. What specific features of rugby union do the coaches see as facilitating the adoption of Game Sense pedagogy or as limiting its implementation?
6. How does Game Sense pedagogy and the relations that it encourages between coaches and players fit with the social world of the coaches and the ways in which they relate to players.

The interviews were used to explore emerging themes generated by the real world experiences of coaches working in a professional environment. The initial interviews lasted between 45 minutes and an hour. These were followed up with two subsequent interviews lasting from 30 to 45 minutes and were designed to confirm themes and draw out new ideas. Interviews were digitally recorded and transcribed verbatim and returned to the participants for checking.

4.5.2 Observations and field notes

The use of observations is a particularly appropriate technique when it involves learning about, understanding, or describing a group of interacting people. Observations are ideally suited to investigate people who are engaged in public or semi-public settings (Russell, 2004). The research study was concerned with understanding how coaches interact with players and other coaches when their work takes place in the public domain.

Observations began from the initial meetings with the participants to discuss the research project. The initial meetings were always at the coaches' place of work where they were in constant contact with players. During this period I gained an understanding of the setting in which these coaches worked on a daily basis.

A total of three observations were used for each coach to record their work as they interacted with players and staff in the task of coaching. The information gathered was compared with the data from the interviews. The goal of the observations was to ascertain whether coaches used Game Sense, games or game scenarios in their sessions

and to observe their interactions with players and assistant coaches. Game Sense requires a particular approach to coaching that places the player/s at the centre of the learning activity. The observations noted whether coaches used questioning to engage with players and to what degree this facilitated discussion and the co-production of new knowledge between coaches and players.

The observations, with field notes, formed a part of the triangulation for the research and were used to compare what was said in interviews with what was practised in coaching sessions. The observations involved watching the participants in action, coaching the players they work with on a daily basis. In order to capture the information from the observations an observational instrument was designed (see Appendix 2). The instrument assisted in capturing detailed information on whether coaches used Game Sense in their training sessions. It noted coaches' interaction with players and assistant coaches and instances of questioning, a pedagogical principle of Game Sense.

After conducting interviews I made relevant notes and wrote down observations made during my time in the field. While it was not always possible to write detailed field notes on observations I did pay particular attention to what Neuman (2006) calls "marker events" (p.408) which were noted and detailed in the observational instrument (see appendices). I often wrote down notes during or after observations and immediately after completing interviews. I expanded on brief observational notes after leaving the site, usually while in my office or hotel room where I typically spent between 30 to 40 minutes expanding on field notes and creating separate files while they were still fresh in my mind (Ritchie & Lewis, 2003). The completed field notes provided descriptive details of my impressions of interviews and observations, these constituted the direct observation notes. The separation of inferences then allowed for multiple meanings to be drawn from the direct observation notes (Neuman, 2006). These were followed up with analytical memos in order to identify themes which were used as part of the analytical process.

Russell (2004) suggests that the personal qualities of the researcher contribute to the effectiveness of the research when using participant observation. Engagement with the research and the people on the site requires certain personal characteristics such as "who and what you are may well make a crucial difference" (p. 474). Having a background as a player and rugby union coach allowed the researcher to gain access to, and the

confidence of, the participants. In addition many of the players and coaches were known to me so that there were times when some interaction occurred. Notably, in New Zealand the coaches made an effort to introduce me to the players in their teams.

4.6 Analysis

Transcripts of interviews were analysed using qualitative inductive content analysis. Content analysis is useful in analysing data generated from open ended questions in the form of text (Neuman, 2006). It can reveal messages from the text which are not normally evident through casual observation. Content analysis is empirically grounded, exploratory and inferential in its intent and seeks to provide “valued” knowledge (Krippendorff, 2004, p. x).

Hammersley and Atkinson (1995) suggest that analysis is not necessarily a distinct stage but has its genesis at the very onset of the research process with the formulation of the research question. In this case, the process of analysis started with a pilot study before the actual study commenced and continued as an ongoing process throughout the data collection phase of the research.

Neuendorf (2002) suggests that within the area of qualitative research, content analysis is the fastest growing technique in the Social Sciences (p. 1). According to Krippendorff (2004) content analysis is potentially one of the most powerful and important techniques for analysing data in the social sciences. Amongst many other research applications the use of content analysis is well suited to research in the area of pedagogy (Neuendorf, 2002). An advantage of content analysis is its ability to be context specific, which means the researcher can process data from text that is significant, meaningful and important (Krippendorff, 2004, p. 41). An important feature of content analysis is its ability to generate meaning from a range of sources including text. It has the ability to identify social phenomena evident in text. Finally content analysis can also account for data which are generated from unstructured sources.

Content analysis focuses on matters of everyday social life and human communication. “It also inquires into how people coordinate their lives and the commitments they make to each other, their conceptions of society, what they know and why they act the way they do.” (Krippendorff, 2004, p. xiii). Content analysis was therefore appropriate to

this study given that the nature of the research was to inquire into the life histories of coaches, their relationships and how they interpreted, understood and implemented Game Sense in the everyday activity of coaching. It was also used to make meaning of the values and beliefs held by the coaches. In addition content analysis is particularly well suited to research situations which employ ethno-methodological approaches.

Propp (1968) suggests that empirical research that utilizes interpretive analysis is more precise and challenging than other forms of content analysis. The objective of the analysis was to build a series of categories from the interview transcripts of the eight coaches. The aim of interpretive analysis is the formation of theory from observations and the coding of data from text in qualitative research (Neuendorf, 2002). This involved theoretical sampling, the formulation of analytical themes and categories, involving cumulative and comparative analysis, leading to the formulation of types or conceptual categories. A particular strength of interpretive content analysis is its utility in situations where the context of the data is an important feature (Krippendorff, 2004).

Content analysis has a procedural logic, the analytical constructs of which allowed me to draw inferences from the data. Analysis is not a mechanical process but requires both creativity and competence. This may explain why Neuendorf (2002) preferred manual coding rather than computer driven software to code the text because of its ability to get close to the data. I used manual coding was preferred to computer assisted analysis techniques in this study for the same reason. To assist with the logical development of coding and the management of data I kept a system of manual files for the purpose of coding. This included a coding book and a reflexive file.

The analysis used a systematic approach to determine themes. As the transcriptions were the unit of analysis the process began with reading and re-reading the interview transcripts after each round of interviews were completed, to identify recurrent themes. It involved the use of single words and phrases to identify themes from the interview transcripts. These themes were then systematically identified across the data set and re-grouped together into significant categories. This approach to identifying categories from the responses to research questions allowed for the development of an inductive schematic using established theory. This was achieved by summarising the coded material, explaining the coded material and structuring the categories in the results section (Titscher, Meyer, Wodak & Vetter, 2007). Following the conclusion of the last

round of interviews data were coded into core categories that were then compared to, and used in conjunction with, observation data and field notes to further explore the themes identified in the analysis of the data. The construction of categories with reference to latent contexts takes into account the meaning of words and phrases from the text.

The validity of the coding was enhanced by my intimate knowledge of the language present in the discourse of rugby coaching. In addition, my immersion in the culture of coaching over a period of 15 years and my background as a player accounted for the social context required to assist with reliability (Neuman, 2006).

4.7 Relations in the field

Merely stepping into the world of the participants does not guarantee an entree to the rich data which are anticipated in a research project. Wolff (2004) suggests that the term “access” is a more useful way to describe and understand the personal nature associated with research that delves into naturally occurring social fields. Therefore access to the research field involves more than just “ground clearing” so that the real research can begin (Neuman, 2006, p. 389). Gaining meaningful access serves as a way to understand the relationships involved in the social world of the researcher and the researched. It also provides insights into the act of research as a social event and into the field that is to be researched (Neuman, 2006).

Prior to the commencement of fieldwork I spent considerable time establishing relationships with the participants in order to enhance my ability to generate useful and informative data. Trust was established by making time available to the participants to discuss the research project and its implications. My background as a rugby player and coach allowed rapport to be established quickly. I expressed a firm promise that information was confidential and would not be available to other participants who were competitors in the tournaments in which they all participated. This helped to establish an atmosphere where my bona fides were not brought into question during the research process. I paid particular attention to my dress and personal appearance and tried to project a professional but friendly demeanour when interacting with participants.

Apart from the head coach who declined my invitation to participate, the Australian coaches were happy to be involved in the study and I had very few problems in organising meetings for interviews. The interviews normally took place during the competition season and at times it proved challenging to complete the interviews within the time allotted by the coach. Russell (2004) suggests that the routines and priorities of the workplace may provide barriers to the researcher. In this case, however, this in itself provided valuable contextual information on the demanding elements and complexities of coaching at this level and contributed to the overall research and analysis. Similarly, in New Zealand I had no difficulty in arranging times for interviews and site visits. Once I was on site the coaches were extremely friendly and displayed openness about their coaching methods which often resulted in questions and requests for feedback and advice on their coaching. This was a quality displayed by all the coaches on the New Zealand site. I also felt that the New Zealand coaches both on site and at their workplaces were more relaxed than their Australian counterparts.

4.7.1 Chronology of site events

The chronology of site events is summarised in Table 4.1

Table 4.1 Chronology of site events

Date	Event
January 2007	Preliminary meetings with coaches in Australia
February-August 2007	Fieldwork in Australia
August 2007-February 2008	Post field work analysis of data collected in Australia
August 2008	<i>Preliminary meetings with coaches in New Zealand</i>
September 2007-March 2008	Fieldwork in New Zealand
March-September 2008	Post field work analysis of data collected in New Zealand

4.7.2 Foreshadowed problems

A research initiative starts with the identification of research problems which stimulate the researcher into critical thinking (Malinowski, 2005). The foreshadowed problems for this research are embedded in my own experiences of coaching and coach education. Much of what passes for coach education in Australia is deeply embedded in the sports sciences with little to no attention paid to pedagogy (Dickson, 2001; Woodman, 1993). On the other hand my experiences in New Zealand suggest that coaching and coach education has shifted to embrace more humanistic ideals including the uptake of Game Sense (Cassidy & Kidman, in press).

Secondly, I conducted a pilot study in 2005 and this suggested that the use of games was a significant activity employed by coaches in their training sessions. However while games were used by coaches the pedagogy underpinning Games Sense was not well understood or implemented in practice sessions (Evans, 2006b; Light & Evans, 2010).

Thirdly, an article by Kitson in (2005) outlined the changes that the coaching staff of the New Zealand All Blacks had taken to rectify what was described as “narrow-minded, coach-dominated regimes” of skills and drills and to move towards humanistic coaching ideals (p.9). These experiences and observations foreshadowed the difficulties presented by the adoption of innovations such as Game Sense and its pedagogy.

4.7.3 Research challenges

The original research question in the PhD proposal was designed to investigate how the development of Game Sense and the ideas underpinning it, had impacted upon the practices of elite level rugby union coaches in Australia and New Zealand. It was concerned with how they interpreted Game Sense and their thoughts about its efficacy. Given that similar results of the pilot study were reflected in the initial stages of the PhD, the research project changed track to determine why coaches did not take up the Game Sense pedagogy, and the study became an examination of the coaches’ development through the lens of the impact of Game Sense. The study investigated the life histories of coaches and their attitudes towards education and learning in order to determine how they influenced coaches’ uptake of Game Sense. During the initial field

work in Australia the central research focus morphed to take into account these changes and to include Bourdieu's (1987) notion of habitus and the title became:

Elite rugby union coaches' interpretation and use of Game Sense in Australia and New Zealand: An examination of coaches' habitus, learning and development

As a result I developed a number of focus questions to guide the research process. These questions also took into consideration the results of the pilot study and the results from the early stages of the field work.

What were the coaches' life histories and background in sport?

What knowledge of Game Sense do elite level rugby coaches have and how do they interpret it?

What experience of Game Sense coaching do they have in terms of attending seminars, being coached when players or of trying it themselves?

What specific features of rugby union do the coaches see as facilitating the adoption of Game Sense pedagogy or as limiting its implementation?

What are elite rugby coaches' beliefs about teaching/coaching and learning, and how does this shape their interpretations of, and attitudes toward, Game Sense and how did these beliefs develop?

What beliefs about coaching and coaching philosophies do the coaches have and how do these shape their views on Game Sense?

What do the coaches see as the possibilities for incorporating Game Sense into their training regimes and the problems or challenges involved with it?

How does Game Sense pedagogy and the relations that it encourages between coaches and players, accord with the social world of the coaches and the ways in which they relate to players.

4.8 Researcher's Role

According to Creswell (1994) qualitative research is interpretive research and this requires that the researcher's biases, values and judgments be made explicit in any dissertation that represents the study. This includes how the researcher's past experience, familiarity with the topic and setting and how their association with informants shapes interpretation. Secondly there is a need for researchers to discuss how they have been engaged with the setting of the research.

The study emerged from my experience as a professional rugby union coach, a participant in coach education programs at both sites and my background as a player. While the study is focused on the practice of coaching rugby union in Australia and New Zealand it is also anchored to my previous experiences of coaching rugby union professionally in Australia and Japan. My position as the researcher is, therefore shaped by experiences as a player and coach informed by developing knowledge more generally in constructivism but specifically in Game Sense. After coaching for 15 years and completing both tertiary and post graduate studies in sports science and coaching I commenced a PhD. My experience in coaching afforded me an opportunity to witness the challenges of applying the sciences to coaching. During this period I developed a better understanding of Game Sense and its underpinning pedagogy which also prompted deeper reflection on my experiences of coaching.

While my approach was intended to be that of a non-participant observer it was not always possible to remain detached. Access to the site and to the participants was accomplished by some familiarity between the participants and the researcher.

4.8.1 Reflexivity

The goal of interpretive content analysis, as with any approach to qualitative research, is to achieve "ecological validity" (Neuman, 2006, p.405). This is achieved in content analysis by close examination of the data, identification of themes and categories and by taking into account the context of the data (Neuendorf, 2002). Given my involvement and experience in rugby union it was imperative that I take a reflexive approach. Reflexivity requires the social scientist to make clear their assumptions and values (Karakayali, 2004). In order to achieve this, the researcher is required to be explicit

1067

Thesis

regarding their position in the research process, as such positioning of the researcher ensures that their interpretations can be examined or assessed according to how they are situated in their own social context (May, 1999). This requires the researcher to systematically reflect on their personal assumptions and be sensitive to the effect their personal biographies have on the research process (Baumgartner & Hensley, 2006).

Positivist and interpretive approaches rest upon different paradigms and the effect of the researcher is addressed by different approaches. In positivist research the bias of the researcher is addressed by the standardisation of the data with close attention to validity and reliability. However, in qualitative research the researcher is encouraged to be immersed in the culture of the study with the aim of becoming a “neutral vessel of cultural experience” (Hammersley & Atkinson, 1983, p. 14). Neuman (2002) points out that neither method is completely successful in eliminating the effect of the researcher. The researcher brings to the research certain dispositions and attitudes which colour the way they see the world as “who you are and where you are within such a world have a role in creating the world and in fashioning the coloured glasses through which you see it and it sees you” (Schwartz & Jacobs, 1979, p. 50).

Researchers cannot divorce themselves from the social world in order to research it. In order to account for the researcher’s position in the social world Bourdieu suggests that the researcher needs to take a reflexive stance where the analysis turns both on the researcher and the research process. In doing so the social researcher explicitly sets out to offer theoretical accounts of the practice of others. The researcher needs to be able to implement a research position that allows them to “overturn the natural relation of the observer to his universe of study, to make the mundane exotic and exotic mundane” (Bourdieu & Wacquant, 1992, p.27). This approach to research is what Bourdieu describes as the ability to be reflexive. The reflective pose of the researcher is a necessary prerequisite to any rigorous sociological practice (Bourdieu & Wacquant, 1992, p.33). Further, Bourdieu states in a workshop with Wacquant:

The necessity of the reflexive return is not the expression of a sort of epistemological “sense of honour” but a principle that leads to constructing scientific objects into which the relation of the analysts to the object is not unconsciously projected. (Bourdieu & Wacquant, 1992, p.35)

The use of interpretive content analysis requires the researcher to be reflexive to ensure the ongoing constant development of meaning through the process of identifying categories in the context of the data.

A reflexive position takes into account the 'coloured glasses' through which the researcher sees the world. I endeavoured to be reflexive throughout the research process and was particularly focused on being reflexive during the field work. My position and inclinations are fully described in this chapter, taking into consideration my place in both sites, my engagement in social interaction and the goal of trying to be socially unconscious through the analytical tools used in this study. I have attempted to be clear about my social interaction with the participants at both sites. Further attention to or emphasis on my part in the study would have limited the focus on the participants.

4.8.2 Ethical issues

Before beginning the research I gained ethical clearance from the University of Sydney (see Appendix 3). This involved supplying a plain language statement to all coaches and having them sign a consent form (see Appendix 3) after I fully explained the research and the fact that publications are likely to arise from it. Prior to undertaking the research I assured each participant that the research was safe and intended no harm. I explained that identities of the participants would remain anonymous and that any publication of the research would use pseudonyms. I stated that the recorded digital interviews were stored in a locked and secure location with access limited to myself and my supervisor.

Cohen, Manion and Morrison (2000) claim that the key to preventing ethical dilemmas lies in establishing good relationships with participants. This develops feelings of rapport, trust and confidence between the researcher and participant. In the instances where the participant was not initially known to me, I used an intermediary to provide an introduction. I then made contact and organised a meeting with all the participants to establish rapport and to explain the goals of the research prior to commencing the study. Meetings lasting for between 30 and 40 minutes were held with each of the participants in which the research project was outlined and when they were also informed that they could withdraw at any time without penalty if they so desired. They were also given information on the ethics approval process and given a telephone number they could

call if they felt any impropriety had occurred as a result of their participation in the study.

The research project was conducted in natural settings, for example, the observations took place at training grounds and the interviews took place at the offices of the participants. The interviews took place at a place and time that suited the participants. This helped to generate rapport, trust and confidence in the research project. Utilising research methods that included observations and follow-up interviews provided detailed information for the researcher, enabling a more thorough examination of elite coaching practices. By using this form of multi-dimensional assessment (triangulation), the reliability and validity of the study was increased (Burns, 2000).

During the course of the analysis interview transcripts were sent back to the participants in order for them to verify that the transcripts were an accurate representation of what was communicated during the course of the interviews. There have been no adverse reactions or discrepancies noted by the participants after reading the transcripts. This strengthens the validity of the study.

Additionally, a pilot study was conducted in 2005 with similarly qualified coaches working in Australia which was useful for testing the validity and reliability of this study. Overall, the project did not enquire into the personal lives of the coaches. Personal opinions were sought; but sensitive issues did not arise in relation to the topic areas covered in the study. Nonetheless, in order to avoid any discomfort the participants were informed prior to the interviews that they were free to leave at any stage during the interview and could refuse to answer any questions they did not feel comfortable answering. The pilot study did not reveal any sensitive issues which needed to be addressed in this study.

An information letter outlining how the data will be written up was provided prior to the commencement of the research and discussed with each coach (see Appendix 3). The coaches were assured that the research was to be used only for scholarly purposes and initially will only be used for the completion of a PhD at the University of Sydney. After agreeing to participate in the research project, the participants were told of the opportunity to view the PhD upon its completion. Most importantly, the letter of advice

to the coaches included evidence of ethical approval by the University of Sydney's Research Ethics Committee to carry out the research.

After each interview, the participants were thanked for their valuable insights and assured that their contribution was worthwhile. Again, this built upon the initial rapport, confidence and trust established between the researcher and participants prior to the commencement of the project.

4.8.3 Issues of Trustworthiness

Ely, Anzul, Friedman, Graner and Steinmetz, (1991) suggest that the “language of positivists research is not congruent with or adequate to qualitative work” (p.95). Theoretical sensitivity, the ability to recognise what is important in the data and the requirement to give it meaning, are important factors that distinguishes qualitative research from other research (Strauss & Corbin, 1998). With this in mind I have adapted from Creswell (1998) his suggestion that the following avenues assist with (trustworthiness) validity and reliability.

I entered into prolonged engagement with the participants to learn the culture within which participants exist and practise. In addition I also spent six months living in New Zealand during the collection of data to immerse myself in the culture.

Triangulation of the data was established through the use of three data generation methods including interviews, observations and field notes. These were used to compare interview data with the information gleaned from observations in the field. The study also utilised multiple reference points including the participants, my place in the research and the literature for data. Clarification of my bias was established from the outset of the research with the views and assumptions of the researcher made clear. A reflexive approach which detailed the professional and personal experience of the researcher was also established from the outset. Participant confirmation was achieved by providing the coaches with copies of the interview transcripts to read and confirm the veracity of the information. The coaches confirmed via email that the information contained in the transcripts was a fair reflection of their answers. The use of rich

descriptive language allowed the information to be transferred to other settings. This could be useful in determining whether the findings are accurate.

In general terms the researcher took a position that “takes a step back” from the research and tried to make meaning of data which were not apparent in the initial stages. I adopted an attitude of scepticism towards the data and treated them as provisional until the research confirmed analysis. Finally I adhered to a strict research process, which ensured academic rigor, thus providing a sound basis in order to minimise bias (Strauss & Corbin, 1998).

4.9 Pilot Study

In 2005 as a beginning researcher in preparation for the PhD study I conducted a pilot study on the impact of Game Sense on elite level rugby coaching in Australia. The results of the research suggested that games were a significant activity employed by coaches in their training sessions. The results also suggested that while games were used by coaches the pedagogy underpinning Game Sense was not well understood or implemented in practice sessions, as noted by Evans (2006b) and Light and Evans, (2010). Similar results were reflected in the initial stages of this research study. After undertaking the initial fieldwork for this study in Australia it appeared the participants held similar views about Game Sense. The use of a reflexive approach allowed me to make changes to the original research based on the generation of data. The original question posed for the study was, “How has the development of Game Sense, and the ideas about coaching underpinning it impacted upon the practices of elite level rugby union coaches in Australia, how do they interpret it and what are their thoughts about its efficacy?” This subsequently changed to “What are elite rugby union coaches’ interpretation and use of Game Sense in Australia and New Zealand? An examination of coaches’ habitus, learning and development.” This then focused more closely on the life histories of coaches, their attitudes towards learning and the views they held toward players and other staff in order to explain their understanding, knowledge and implementation of Game Sense as a lens for understanding coach development. The study was widened to include coaches in New Zealand.

Since graduating with an exercise and sports science degree some 15 years ago I have increasingly questioned its application in the area of coaching. A strong desire to

implement coaching programs based on the principles of motor learning and skill acquisition has limited their ability to meet the real-life experiences and challenges of coaching. My initial attempts to solve problems and improve play were based on a narrow view of learning as a simple unproblematic process which did not reflect the complex, social and cultural nature of coaching. It was not until I was introduced to Game Sense and the pedagogy that underpins its application and reflected on my own experiences as a player and coach that I started to question the area of learning in coaching.

4.10 Significance of the Research

This study builds on the growing amount of research directed towards building an understanding of, and tactical approaches to, teaching physical education and coaching sport. In particular it addresses an oversight in the literature by focusing on elite level coaching. Most research has been conducted into physical education and grass roots coaching. It will extend knowledge on the application of social constructivist approaches to teaching and learning in coaching.

It will also make a contribution to developing an understanding of coach development, coaching beliefs, personal experiences and attitudes that is necessary for the successful implementation of innovation in coaching and for Game Sense in particular. The research will help to develop and modify the Game Sense approach to better suit elite level rugby union coaching and help in identifying the ways in which coaches interpret and respond to Game Sense.

4.11 Conclusion

The following four chapters outline the results of the study. The first chapter identifies a coaching habitus. The second examines how a coaching habitus is constructed and how the coaches' background, experiences and movement through various fields and sub-fields have shaped their attitudes to coaching. The third chapter examines the coaches' views about learning and their relationships with players in a professional coaching environment. Game Sense requires a relationship with players that are significantly different from past approaches to coaching. The fourth chapter examines and discusses

the coaches' knowledge of Game Sense and how they apply it in their professional lives.

Chapter Five: Identification of a coach's habitus

5.1 Introduction

Constructivist perspectives on learning suggest that the ways in which a learner interprets and makes sense of learning experiences are profoundly shaped by the knowledge, attitudes and inclinations that the learner brings with him/her (Light, 2008a). When coach development is seen as an ongoing, social process of learning (the view I have taken in this thesis) it emphasises how coaches' interpretation and subsequent adaptation and use of Game Sense is profoundly shaped by the values, beliefs, knowledge and inclinations that have arisen from their experiences of sport and coaching over their lives. Bourdieu's (1977) concept of habitus offers a powerful means of identifying these values, beliefs and inclinations toward action, and an understanding of how they have been developed. This comprehension is central to understanding the processes of coach development and the ways in which coaches respond to innovations and changes in coaching practice. In this study it is pivotal to understanding the ways in which experience shapes the participants' interpretation of Game Sense and the ways in which they choose to take up or not take up its core ideas and its pedagogy. While Bourdieu emphasises habitus as a collective concept applied to institutions and social groups such as class, he also recognises the variations that occur on an individual basis and which arise from the different life trajectories that individuals experience (Wacquant, 2006).

This chapter identifies an individual coaching habitus that structures the coaches' practice, attitudes and dispositions towards coaching. It does so by examining: 1) their views on the characteristics of good coaches, 2) their views on the characteristics of great rugby union players and how to develop them and 3) examines their dispositions towards innovation in coaching. The analysis of this chapter draws on Lau's (2004) framework that comprises three interconnected or interlinked categories namely (1) fundamental beliefs, un-thought premises or taken-for-granted assumptions (hereinafter belief-premises); (2) perception and appreciation or understanding (hereinafter perception-appreciation); and (3) a descriptive and prescriptive practical sense of objective possibilities ('that's not for the likes of us' and 'that's the only thing to do' respectively) and of the forthcoming (p. 377). This approach supports Wacquant's (2006) view that, "habitus is accessible to methodological observation" (p.318).

Lau 2004 contends that his “interpretation is congruent with the argument that habitus is non-reductionist” (p. 370). Taking this approach to operationalising habitus allays some of the fears outlined by Swartz (1997) who claims that; “habitus is difficult to specify empirically” (p. 290). By using Lau’s themes to interpret habitus in this way it also makes some headway towards answering Jenkin’s (2002) concerns with the ambiguity and vagueness of habitus, claiming that; “we still do not know what the habitus is” (p.93). The use of Lau’s approach to the identification of habitus reduces some of the doubts often raised about Bourdieu’s work and provides for a tighter treatment and operationalisation of habitus for the purposes of this study. Lau does qualify his approach by making the point that these categories are provisional and subject to further refinement.

The data in this chapter were generated through interviews, observations and field notes. This chapter identifies the coaches’ habitus at both Australia and New Zealand sites using Lau (2004) categories namely, 1) their views on the characteristics of good coaches, 2) their views on the characteristics of great rugby union players and how to develop them and, 3) their dispositions towards innovation in coaching as a way of identifying the participants’ individual coaching habitus.

5.2 Australian site

5.2.1 Belief-premises: Views on Good Coaching

The participants were asked to suggest what they thought were the characteristics of a good rugby union coach. In analysing data arising from their responses four consistent characteristics were suggested by the coaches as being those of a good coach, indicating their beliefs about coaching. Listed in order of importance these characteristics were that good coaches:

- 1) Earn respect from players
- 2) Possess extensive knowledge
- 3) Display a strong work ethic, commitment and enthusiasm
- 4) Manage people well

These characteristics are interrelated but are discussed under separate headings.

5.2.1.1 Earn respect from players.

The most consistent mark of a good coach as nominated by the coaches was that he/she is respected by their players. According to all of them, good coaches are always respected. Firstly, good coaches have a level of respect generated from being fair and honest with people in the organisation, and through the display of personal traits valued by players. These were typically associated with an enthusiasm and a passion for rugby union and for their work as coaches. As well as fairness, strong leadership skills, such as being decisive about making difficult decisions and taking full responsibility for them as part of leading through example, were also valued. In other words, a good coach must display the characteristics he expected his players to show in training and in matches. Secondly, the participants felt that good coaches earn respect from players by having superior technical knowledge about the game and more specifically knowledge in the areas in which they are experts. The importance of not only having extensive knowledge, but also making it explicit, features as a means of generating player respect for coaches. In responding to a question about the traits of good coaches, Joseph said:

I think just respect. I guess the players have to respect the coach. And as I said before, I said working with the players to get a result. The coach has to be the one leading the show and the players have to go down the path that he wants them to go down. But the players also have to be sitting beside him in the driving seat to get there, if that makes sense. (Joseph Interview 1 09/02/2007)

In a later interview Ellery felt that it was important for players to respect the coach's knowledge. When describing his relationship with players he said:

Yeah, well I think that there is mutual respect, I respect their individuality and they respect my knowledge and hopefully what I bring to the table in terms of helping to improve them as players because a coach's main job is to improve players. (Ellery, Interview 1 06/02/2007)

5.2.1.2 Possess extensive knowledge

All four coaches felt that a good coach needs extensive, superior knowledge about both the game and training as well as in coaching approaches and techniques. For most of

them this superior knowledge was what fostered the most respect for a coach among his players. Ellery said that a good coach is knowledgeable and respected and that players want to be coached by knowledgeable coaches; *“I think you have to have knowledge. I think players want to come to a coach and be sure that they know what they’re talking about in most parts of the game”* (Ellery, Interview 1 06/02/2007). Lincoln expressed exactly the same opinion about the need for and relationship between coach knowledge and respect for the coach adding that they needed to be at the ‘*cutting edge*’ of developments in coaching to stay at the top. Lincoln confirms this when he makes the following statement about knowledge:

Well I reckon you've got to be knowledgeable, you've got to know your sport, and I reckon that's a you've got to have the respect of the players, and what the players first and foremost respect is that you know your stuff. You don't have to know everything about the game, but you've got to have a handle on everything, and if you're coaching a particular area, like, that they want you to be at the cutting edge, so that's if you know your stuff, then you have the respect of the players. (Lincoln Interview 1 09/02/2007)

Elvis was less specific about knowledge but was of the opinion that his progress towards becoming a head coach had involved a period when he was an assistant coach and this required a greater depth of knowledge on technical aspects of rugby. Elvis said:

Assistant coach is more for me is more of a technical pursuit. I've done that as well so that's far more technical the way I do it anyway. They're more technically orientated and probably have a closer relationship with the players face-to-face. (Elvis, Interview 1 28/02/2007)

This implies that he feels one cannot be a good head coach without having acquired specific technical knowledge. This knowledge was seen to come from the coach's own experiences as a player and coach and from staying abreast of recent developments in coaching and in the physical and psychological preparation of players.

5.2.1.3 Display a strong work ethic, commitment and enthusiasm

Ellery, Lincoln and Elvis consistently emphasised that being enthusiastic, working hard and showing a passion for rugby union was important for both getting results and for earning the respect of players, and a major part of being a good coach. Ellery said:

I think you have to be extremely enthusiastic and with that comes a very high work ethic because, mate, this is one of the most wearying jobs in the world. You've got to be able to stick at it. (Ellery, Interview 1 06/02/2007)

He felt that coaching was difficult and the ability to be enthusiastic and work hard would allow one to get through the tough times associated with coaching. Lincoln had a similar view about the role of work ethic and passion and how they are important ingredients in being successful, when reflecting on a previous coach he admired. He said:

You know, and it's not just that he hated losing, but he just was really, really passionate about people doing well, and performing as best they can, and I reckon you know, in anything you do in life, if you're really passionate about that, particularly about being successful, doesn't matter if it's rugby or something else, then you're half way there. (Lincoln, Interview 1 09/02/2007)

These were the traits of coaches that they had respected as players and felt were important traits in a good coach. Elvis thought that a good coach needed to model certain behaviours and hard work was one of those. My observations of training sessions conducted by the coaches suggested that Ellery, Lincoln and Elvis were indeed enthusiastic and even passionate in the ways they approached their coaching. For instance, Ellery worked long hours and was extremely upbeat at the three sessions I observed. Lincoln was also animated and excited at sessions encouraging his players to seek out excellence. Elvis described his job as an "*extensive brief*" and said he had to constantly work on many "*fronts*" (Elvis, Interview 1 28/02/2007). However it was difficult to draw the same conclusion about Joseph due to his reserved style of interaction with the players and his approach to coaching that saw him take on the role of managing the coaching staff rather than rolling up his sleeves and becoming directly involved in coaching. Much like a very successful former national coach, Rod Macqueen, Joseph saw himself more as the manager of a team of coaches rather than being a 'hands on' coach.

5.2.1.4 Manage people well

All four coaches commented on the need for effective people management skills and the ability to lead by example, but this was least mentioned by Lincoln. However, Lincoln,

like the other coaches, discussed organisational and management skills as important skills in his coaching career. Elvis felt that, “*Coaching’s all people management*” and that good coaches had to be able to make hard decisions such as those on team selection that lead to being respected by the players (Elvis, Interview 1 28/02/2007). He also suggested that it is important for good coaches to lead by example in order to generate respect and that this is achieved by decisive action that may not always please all players but that should always earn respect from them by displaying the ability to make hard decisions and be consistent. He felt that this involved empowering some players by delegating them some leadership responsibility. However observations indicated that the majority of training sessions were coach driven.

Joseph emphasised effective management skills more than the others and was of the view that working with players requires an understanding of the type of person that you are working with in order to get a result. He said that a good coach needed to be aware of the different traits and personalities of players to be able to effectively manage them and get the best out of them:

I think working with the players to get a result. I think being very conscious that you are in the people business. Understanding the different traits of personalities of a person to get the best out of them. Understanding the strengths and the weaknesses of a player’s ability, so he plays within those boundaries at times. (Joseph, Interview 1 09/02/2007)

Joseph also saw good coaching as involving the business of managing people, which included making decisions and understanding personalities. Ellery emphasised the importance of knowing players’ personalities in order to effectively manage them as a team. However, Elvis’s views were very similar to Joseph’s in that he felt; “*coaching’s all people management*” (Elvis, Interview 1 28/02/2007).

Observations indicated that the coaches managed the training environment and were the principal decision makers on the field during training. They were well organised with equipment well prepared and had the ground set out in advance. The sessions were supported by detailed training plans where the roles of assistant coaches and support staff were clearly outlined. The training sessions were always preceded by team meetings where the goals of training were discussed.

5.2.2 Perceptions-appreciation: Views on What Makes Good Players

Participants were asked for their views on what made great rugby union players in order to gain some insight into their perceptions and appreciation and they identified four major characteristics. Two of these themes were consistent amongst all the coaches; three were consistent amongst the majority of coaches. These characteristics were interrelated but are discussed under separate headings in this section. Listed in order of prominence they felt that great players:

5.2.2.1 Are born with natural ability

All four coaches agreed that great players were born with certain physical characteristics such as athleticism and coordination that make them good players and set them aside from others. They shared a similar belief that the most important characteristics of great players occurred naturally rather than being learnt. Lincoln's response to a question on the characteristics of great players was consistent with views of all the coaches:

Well I think there's a sort of innate skill, like athleticism I guess, and capacity too, it doesn't have to be just in rugby, but just in sport generally, that they've just got balance, yeah, those sorts of things, I reckon it's balance, hand-eye coordination, so that you've got you've got to have those naturally, maybe not all props have got them, but I mean I think it's like succeeding in any other field of endeavour then, it's about hard work. But I think you've got to have a basis of god-given or inherited athleticism, balance, those sorts of things. (Lincoln, Interview 1 06/03/2007)

In the interviews the coaches said that these innate characteristics are prerequisites for players and, as indicated by Joseph, may be difficult to improve through coaching:

Some players you can help by always being a crutch for them, reinforces them sort of, but I don't think you can ever turn, that person will never be a great player. (Joseph, Interview 1 09/02/2007)

Expressing a similar sentiment Ellery said that some players are just "*born good*". Ellery, Lincoln and Elvis described players with a deep understanding of the game as having inherited qualities. Ellery called it instinctiveness while Elvis thought it was game sense and Lincoln said it was being in the right spot at the right time.

I think people are sometimes born with them, without a doubt, that players are instinctively born good. Such as The Ellas, and then I think you are very much a product of your environment. (Ellery, Interview 1 06/02/2007)

Ellery, Lincoln and Elvis thought that great players also have a sense of the game that includes vision, time, space and ability to read the play. Ellery described it as “*instinctiveness*.” Ellery, Lincoln and Elvis felt that it is possible to improve these qualities by establishing a training environment where practice closely replicates game conditions as made clear by Ellery: “*By manipulating the environment and putting them in situations where they start responding to patterns or start responding to cues.*” (Ellery, Interview 1 06/02/2007)

5.2.2.2 Are tough and resilient

Although the coaches thought that players have to have certain physical characteristics they also saw the need for players to have a level of physical courage and mental resilience to cope with the demands of the game and training. Joseph’s response to a question on the traits of great players illustrates this:

[They need to be] mentally tough, firstly mentally just so mentally strong and tough to stay at the other guys throat. The great players have got that and then on top of that they’ve got all the talent that god gave them, strength, speed, skills, all that stuff. (Joseph, Interview 1 09/02/2007)

He also said that mental toughness was a quality he looked for when he recruited new players. In responding to a question about the role of mental toughness in recruitment he said:

You definitely recruit the person as well as the others, so yes, that’s a factor to it. That is definitely a factor You know, you can’t have one without the other today, but you need to look at the whole picture, but you definitely need that tough focused streak, mentally. And then you need the other stuff as well. (Joseph Interview 1 09/02/2007)

Elvis thought that players needed mental toughness for them to be able to perform under pressure on a regular basis or in tight situations with the other three coaches emphasising the importance of courage and mental toughness. They all suggested that to

succeed at the elite level good players needed to be tough, resilient and have the ability to dominate opponents in tight situations. They all said that because rugby union is a violent and aggressive game good players needed to be tough enough to dominate and resilient enough to keep on top in matches no matter how hard it was. For example Ellery said that players needed *“to have a lot of physical courage because it’s a physically violent sport.”* He said that *“the good players are inherently tough, tough and skilled under pressure”* (Ellery, Interview 1 06/02/2007). Players have to be able to withstand the pressure of the contest and poised enough to execute skilfully.

5.2.2.3 Have a strong work ethic and passion

All four coaches thought that natural ability by itself was not enough and commented that hard work was an essential element for success. This quote by Ellery demonstrates the view that these coaches hold towards the role of work ethic for players:

They have to be prepared to do the extra 3%. So they always have to be able to do extra training, whether that be physical fitness or skill. They have to have a lot of physical courage because it’s a physically violent sport, and the third thing is, I think is that instinctiveness. (Ellery, Interview 1 06/02/2007)

All the coaches were emphatic about the need for players to have the natural drive and commitment to be able to do *“that little bit extra”* at training to become better players, as Ellery makes clear: *“If you don’t have work ethic, you don’t get improvement, so you’ve got to make sure that’s a non-negotiable, and you’ve got to create it”* (Ellery, Interview 1 06/02/2007). Without a good work ethic he felt it would be difficult for players to improve. Lincoln supported the need for players to work hard to succeed when he said; *“I mean I think it’s like succeeding in any other field of endeavour then, it’s about hard work”* (Lincoln, Interview 1 06/03/2007). Joseph had a similar view about the role that hard work played in improvement. When asked what was required in order for the players to improve he used an example of one player and said:

[He] wasn’t good under the high ball and now he’s worked so hard at his game to do that. He’s also worked so hard on his fitness on strength and his speed, and he’s done that. (Joseph, Interview 1 09/02/2007)

5.2.2.4 Have natural talent

Although the coaches indicated players are often born with certain qualities they were unclear about the way to develop those characteristics in players. This may be in part because the coaches believe that great players are born with certain qualities that cannot be coached. This can be seen from Joseph's response where he says "*the great players have got all the talent that God gave them, strength, speed, skills, all that stuff*" (Joseph, Interview 1 09/02/2007). Although Ellery, Lincoln and Elvis indicated that creating conditions that reflect the conditions of rugby union such as game-based pressure and the manipulation of the environment at training was an important consideration in improving the game awareness of players. Lincoln felt that the most important characteristics of great players were inherited but suggested that players could improve through traditional approaches to practice. While Ellery also felt great players were born with the right abilities he felt that ability such as *game sense* is generated through playing games at a young age, playing with good players and through good coaching. In responding to a question about whether it was possible to develop instinctive qualities in players Ellery felt that game-based training could assist:

Definitely. And some players can become, if you have to rank it from A to E, some players can become A level, but I think it's possible to develop an E level player into a D or C level player. By manipulating the environment and putting them in situations where they start responding to patterns or start responding to cues. (Ellery, Interview 1 06/02/2007)

Ellery, like Lincoln, was of the view that the players' environment is instrumental in them becoming good players. The environment predominantly meant the training environment but also included the influence of parents, school and the community where sport is a focus. Although they suggested ways of training to develop the talents great players needed their responses suggested that they felt they were, in Joseph's words, 'God given'.

5.2.3 Practical Sense of Possibilities and the Forthcoming: Attitudes to Innovations

Participants were asked their opinions on innovation in rugby union coaching to gain a sense of their practical sense of possibilities in coaching. Specifically they were asked about their attitudes towards innovation and to identify future areas of innovation. The prominent themes to emerge from their responses were:

- 1) Ambivalence toward coaching innovation
- 2) Limited views on possibilities for future areas for innovation in coaching

5.2.3.1 Ambivalence toward coaching innovation

Innovation was a difficult concept for all the coaches to talk about, suggesting some ambivalence on their parts. Ellery was of the view that coaches were not a very skilful group due to their inability to respond to the changes in the way rugby is played and develop innovative approaches:

I think generally speaking, rugby coaching has been very poor. Just generally, I don't think we're a very skilled bunch and the reason I say that, if you look at the attack skills of players in the professional area, they have not increased as much as the defence skills. And I think that's 'cause our coaching skill isn't as good as it was. (Ellery, Interview 1 06/02/2007)

Ellery said he had attempted to use technology from the Australian Institute of Sport (AIS) to improve his players' perceptions and decision making skills but had not continued because it was expensive and there was very little improvement in his players. He said that certain teams had been innovative because they were either highly organised or regulated in the case of the ACT Brumbies Super 14 team or had an instinctive and creative style and were responsive as was the case of the Christchurch Crusaders Super 14 team. He cited the fact that the Crusaders had a philosophy and history of using games-based training activities. Ellery discussed how he was changing his coaching and introducing an innovation which he called a "*flow approach*" which he thought would improve the game sense of his players:

The thing I'd like to go to is, which I haven't done yet, but I will, is what I call a flow session where you have three or four objectives in the session, you start off with the game, and the games, you always play a game, and then you just move from that game to the different objectives, but you don't have any set time parameters, you just flow with the session. (Ellery, Interview 1 06/02/2007)

Lincoln said that the effectiveness and utility of any intellectual improvements in coaching had been diminished, eroded or short-lived due to rugby's new found globalisation as a result of professionalism. That is, he felt that any innovation in coaching would immediately be picked up by opposition teams:

You know, where 10 years ago you could just outsmart them. I just think because of the globalisation of the game is that rugby intellect. I think where we were ahead was in rugby intellect and where we're no longer ahead is in rugby intellect because the game is global, every bit of information is everywhere. (Lincoln, Interview 1 06/03/2007)

Elvis was simply of the view that there was “*nothing new*” and that most teams adhered to similar practices and conventions suggesting that he did not see room for innovation in coaching:

No, I don't think there's anything dramatically new. I mean you do spot things. I think everyone's got fundamentally the same broad structures but the devils in the detail. (Elvis, Interview 1 28/02/2007)

Elvis, however, did suggest that his organisation had been innovative in introducing leadership programs for players and that other teams had followed this initiative. Joseph was of a similar view, stating that rugby coaching had “*evolved*” and that the major areas of innovation were in the preparation and organisation of training and the ability to break the game down into manageable units for analysis and instruction. In response to a question about innovation Joseph said:

Just preparation, from driving to training in Queensland in '88, doing your game plan on the wheel at the lights, to watching the team train after 10 hours of work, to spending hours preparing each session and just the organisation of training, the departmentalising the different areas of it. (Joseph, Interview 1 09/02/2007)

Joseph also commented on how innovation was much more difficult than people thought and Lincoln agreed when he said; “*Yeah, and we're trying to find where that little edge is now, is enormously difficult*” (Lincoln, Interview 1 06/03/2007).

5.2.3.2 Limited views on possibilities for future areas for innovation in coaching

The participants were asked to identify any areas where they thought innovation could have an impact. Although the coaches had difficulty in understanding what I meant by innovation and its place in rugby union they identified a number of areas which they felt would benefit from innovation. The coaches felt the areas which could best benefit from

innovation were 1) decision making and flexible playing style and 2) physical preparation.

5.2.3.2.1 Decision making and flexible playing style

Ellery and Lincoln both suggested that decision making was an area in which coaching innovation was needed. They felt that there were limits to the extent to which current coaching approaches could develop or enhance decision making. Ellery in particular was interested in developing new approaches to developing decision making and suggested that flexible playing styles also needed to be developed. With regard to a flexible playing style Ellery said:

And I think the innovation is being able to create your own distinctive style of play and then be able to present that as though it's one style of play but actually played as a number of styles of play. To me, that's being innovative in presenting the one style of play but actually being able to play different styles within. (Ellery, Interview 1 06/02/2007)

Ellery said he was frustrated at not being able to improve the decision making ability of his players. He said that previous efforts using the resources of the AIS and a skill acquisition expert had resulted in minimal improvements in players' decision making and the cost of technology was a barrier. He said that he had been working on a new approach to developing decision making that he called a "flow". This involved using a game as the central activity for training and stopped only to provide feedback to players. The development of decision making is seen as a strength of the Games Sense approach and Ellery's views on innovation in coaching identify pedagogy as an area in need of development, and suggest a real affinity with the Game Sense approach which was underlined by his opinion that good training methods saw a transfer from training to the match on the weekend. Ellery suggested that this "is the key to successful coaching, how you transfer what you do on the field, the training field, to the game" (Ellery, Interview 1 06/02/2007).

In line with his concern with coaching decision making, Lincoln felt that his team did not have the attacking capability which would be required in the future and did not make the right decisions in attack. He was looking at rugby league to improve the attacking skills of his players:

So we've got to fine tune our attack so we're certainly looking strongly at rugby league and I know that defence is different, but what can we take from rugby league attacking game, given the number of tries that are scored in rugby league now compared to what's scored in rugby union. (Lincoln, Interview 1 06/03/2007)

5.2.3.2.2 Physical preparation

Lincoln thought that a close association with the AIS would provide information on scientific developments in the area of strength and conditioning to improve the physical development of players. He felt that a number of his players lacked power and speed compared with other teams in the Super 14 competition and saw this as an important area for improvement:

We need to look at different ways of improving ourselves physically so we're looking at specific power, lower limb power generation in locks, back rowers and our backs and looking at upper body power generation for our props, so getting, trying to get more specificity in our athletic development. But a massive focus on white guys having more power below the hips. (Lincoln, Interview 1 06/03/2007)

Joseph agreed, saying that future innovation should focus on the physical preparation of players, especially in the areas of strength and speed. The role of physical development can be seen in this response to innovation when Joseph says: "*Mate, I see the big advancements in rugby at the moment is the development of the athlete. Speed and strength are the way forward*" (Joseph Interview 1 09/02/2007).

Elvis saw the introduction of GPS technology as having an impact on the physical development of his players because of the detailed data provided on player movements in a game. Elvis said:

So GPS is probably the biggest new thing that's come in recent times that gives you some bloody good information that you can work with you know. But in a way, you can get too much information so you know. So the trick is trying to work out how far to go with that. (Elvis, Interview 1 28/02/2007)

Discussion of Australia site

Beliefs-premises

In general this chapter identifies dispositions toward a coach-centred approach in which the coach holds authority and is respected for his possession of knowledge and of a range of personal characteristics valued by players such as strength, passion and a strong work ethic. The participants see a good coach as someone who is respected for his/her personal qualities, knowledge and experience. A good coach for them is someone who makes the tough decisions and takes full responsibility for them while displaying qualities that they expect their players to have. Part of being a good coach then, is acting as a model for the players. Their beliefs as to what makes a good coach illustrate more general beliefs about, and dispositions toward, coaching that, in general suggest some friction with such principles of Game Sense as empowering the players, structuring a learning environment and relying on questioning instead of telling players what to do.

Perceptions- appreciation

Coaches' views on the characteristics of good players again identify a strong work ethic and passion as important characteristics. Other than this they identify characteristics that they feel players are born with such as a sense of the game, toughness and resilience. These are seen as naturally occurring characteristics that coaches enhance through training where players' work ethic and passion is needed. There was no reference to learning by players or to coaches' ability to shape or enhance learning. Instead, coaches' work was seen to be more about organising, managing, motivating and leading by example. This seems to be linked to their experiences as players then captains leading into their early experiences of coaching as they moved from being players to coaches. In relation to how coaching habitus might shape their interpretation of Game Sense, it is interesting to note how Ellery's ideas about coaching seem to align far more with Game Sense than the other three. He identified decision making as an area of play in need of attention and suggested games-based training as a way of developing it as is clear in this quote: *"If someone was able to develop [a] coaching system that improved decision making remarkably, then that would be a massive innovation."* The others, however, focused more on physical preparation of players, management and strong leadership,

paying no attention to coaching pedagogy and little to the development of games sense, tactical knowledge and decision making.

Practical sense of objective possibilities and the forthcoming

The coaches' views reflected a cynicism about innovation in coaching with most of them identifying the physical preparation of players as the area that would benefit the most from innovation. Only Ellery talked about innovation in coaching. He identified decision making as an aspect of play in need of innovative coaching, identifying the use of games as a vehicle for this development. Indeed, he was developing his "flow" approach to achieve this. Although two of the four coaches had been teachers only Ellery made significant reference to the relationship between coaching and learning. While he did not use the specific term, he was the only one to speak about pedagogy and to actually experiment with it. The other three coaches did not speak about player learning, they did not consider how players learn or how they could, or did, shape, facilitate or enhance learning. They saw it as providing a model of what they expected of players and strongly directed training. The analysis also suggests that their ideas on coaching are underpinned by what Davis and Sumara (2003) describe as common sense assumptions about teaching (coaching) as being a process of knowledge transfer.

This part of the chapter identifies beliefs about coaching that shape coaches' perceptions and appreciation of pedagogical aspects of coaching. The habitus comprises embodied constraints that can enable possible action but, apart from Ellery, the findings suggest that the coaches had a limited view of possibilities for coaching in terms of improving player learning. They identified problem areas in need of attention and among these was decision making, an area that Ellery in particular was interested in. He was the only one to identify a place for pedagogical innovation and, indeed, had been experimenting with one such innovation.

5.3 New Zealand site

5.3.1 Beliefs-Premises: Views on Good Coaching

In analysing data on the participants' views on the characteristics of a good coach, two consistent characteristics were suggested by the coaches as being those of a good coach. They were that a good coach:

- 1) Fosters relationships with players
- 2) Has a passion for rugby

5.3.1.1 Fosters relationships with players

For these participants, there was an overarching concern with players as people and the need for coaches to build close relationships with them. This involved trying to understand players' emotions and feelings in order to foster strong bonds among players and coaching staff with the notion of care a constant theme. There was a concern to see the players as whole people with a life outside rugby and a need for coaches to build strong, close relationships with them. As Paul suggests:

I think one of the biggest things is probably even more so than it was even 5 years ago is and I'm not saying I've got it either is empathy, seeing the world through the young guys' eyes I think is a really powerful trait to have. (Paul, Interview 1 05/09/2007)

Paul felt that being empathetic was an important goal for his future development as a coach and he said that it was the best way to get results because players felt they had a stake in the team's performance:

Because that's the best, and I've always known it's the best way to get the results out of the players and the buy-in and the commitment from your players. (Paul, Interview 1 05/09/2007)

He felt that it was no longer important to be a highly technical coach because the needs for good coaching were changing: "*And a lot of it's moving away from just purely being really highly skilled technically and tactically to being a manager of people and environment*" (Paul, Interview 1 05/09/2007). Arnold said it was important to establish a personal relationship with his players and he felt he had to understand them because the players came from a different generation and had different needs. He said:

The other thing about it also the different generations of players that we've got. So I'm 54 and if I had a conservative nature and it wasn't accepting of change and able to embrace it and use it then, I think the players would probably you wouldn't be able to relate to them. So if you like you've got to have a young mind. (Arnold, Interview 1 04/09/2007)

Rodney had a similar view about the traits of a good coach. He felt that caring for players was an imperative if you wanted them to learn:

Well firstly, caring is the first prerequisite. If you don't care then you got no show 'cause people generally don't care what you know and how much you've got to offer until they know how much you care. (Rodney, Interview 1 06/09/2007)

He followed this up by saying that it was important to develop a relationship with his players and other staff so he could develop self awareness in order to better identify the individual needs of players and self:

...To actually connect with your people but also probably the most important skill is to be able to identify or build an awareness of what the need is. An awareness within yourself and awareness within your people. Because if they don't recognise that there is a need then you've got some challenges. (Rodney, Interview 1 06/09/2007)

Field notes taken from my introductory conversations with Paul, Walter and Rodney and outside the interviews, they regularly commented on the value of caring and regularly used this expression to describe how caring was important; "*Players don't care what you know unless they know you care about them*" (Rodney, Interview 1 06/09/2007).

5.3.1.2 Has a passion for rugby

All the coaches said that having a passion or love for rugby union was important in becoming a successful coach. Walter, whose views were representative of the coaches, said that passion and a love of the game were critical if one wanted to be successful at the elite level of rugby union. He also felt that passion and love of the game were linked to work ethic:

For me anyway, I think love of the game's pretty critical. I don't think I'd do it if I didn't have that. And I think work ethic. You know, you've got to put the hours in if you want to be successful as a professional coach anyway. (Walter, Interview 1 19/10/2007)

Observations of Paul, Rodney and Arnold showed that they were enthusiastic at training sessions. At the three training sessions at which I observed Paul he was excited when the players arrived for training and was quick to engage with them on a personal level. His passion for rugby union was also reflected in the way he spoke to players about the team's upcoming matches and the need to be successful. When I observed Rodney's training he was more reserved but he was visibly interested in the players and expressed a desire for them to do well. He also spoke to players in a way that was passionate, often using words such as "*commitment*" and a "*desire for growth*" (Rodney, Interview 1 06/09/2007). Arnold showed at his training sessions that he was prepared to spend additional time with players at the end of the sessions to discuss issues with them. All the coaches worked long hours and were keen to demonstrate their commitment to a range of people by always making themselves available. It was not uncommon to receive email replies from them late in the evening or early in the morning which confirmed that they worked long hours.

5.3.2 Perceptions-appreciation: Views on What Makes Good Players

The four coaches identified four major characteristics of great rugby players. Two of these themes were consistent across all of the coaches; three were consistent across the majority of coaches. Listed in order of prominence they felt that great players:

- 1) Have game understanding and intelligence
- 2) Are motivated and resilient
- 3) Have athletic ability
- 4) Have humanistic qualities

These characteristics were interrelated but are discussed under separate headings in this section.

5.3.2.1 Have game understanding and intelligence

All four coaches agreed that players need to have an understanding of rugby that allows them to make good decisions, to respond and react appropriately during a game. Their ability in this regard sets them aside from other players. Paul felt that this ability to make decisions and respond was being instinctive:

I'm not sure if this is a cognitive thing but be instinctive, be reactive to what they see and instinctive and being really sharp. They need to have a sound skill set which most athletes that are smart do possess a good skill set. (Paul, Interview 1 05/09/2007)

Furthermore he felt that this instinctive ability was entwined with other skills and produced a particular type of intelligence. Walter also saw decision making and the ability to respond as a type of intelligence that allowed players to perform well in rugby. Walter felt that not all players had this type of intelligence and that it was not to be confused with academic intelligence; rather it was a type of rugby intelligence:

You've got to be rugby bright to make it. I think you've got to have a certain level of intelligence and understanding and that's not to be mixed up with being academic but yeah. (Walter, Interview 1 19/10/2007)

Arnold had a similar view about players who had game understanding and that this was reflected in players' ability to make decisions in competitive situations, "*and really making decisions under pressure is probably as much as important as those other things*" (Arnold, Interview 1 04/09/2007). He felt that players needed to be able to make decisions and execute skills when the pressure was applied in a game. However, he was unsure whether decision making could be learned by players, as he had spoken to many sports scientists about how to improve decision making and had not been given any direction. Rodney was aware that the ability of players to respond and make decisions in the game was an important attribute when he said: "*you've got your mental needs in terms of understanding, so technical and tactical*" (Rodney, Interview 1 06/09/2007). He also made the link between the skills of rugby union and the ability of players to respond as a type of intelligence.

5.3.2.2 Are motivated and resilient

All the coaches agreed that motivation and resilience were required to succeed, especially with the demands of rugby union, the requirements of the training and in some cases the pressure of dealing with injuries and expectations of performance. Paul felt that great players are motivated by a strong drive to be successful:

Yeah I think finally and which is equally as critical is that they have to have a desire to succeed and win. They have to be passionate and love what they do and want to succeed. (Paul, Interview 1 05/09/2007)

Walter also felt that great players are self motivated and that they need to take responsibility for their actions and be accountable. He thought that motivation came from self awareness:

Yeah, my view is that [players] own a huge responsibility for their performance, I think that's critical. I think a player that sits there and wants you to motivate them, they're never successful so I think responsibility for their performance and great self awareness. (Walter, Interview 1 19/10/2007)

Arnold thought that this self motivation reflected a type of resilience to keep going when confronted with problems or mistakes. Arnold offered this response when asked a question about the skills of great players:

Mentally you've got to be strong. You've got to have an ability that when things don't go quite right for you, that you've got an innate calm. But that comes from self-belief which usually comes from practising so that you know you can keep executing, even though you made a mistake. (Arnold, Interview 1 04/09/2007)

Like Arnold, Rodney felt that players needed to be able to cope with whatever is thrown at them: *"and also your ability to cope when things don't go the way you'd like"* (Rodney, Interview 1 06/09/2007).

5.3.2.3 Have athletic ability

Paul, Arnold and Rodney said that players had innate abilities like athleticism and game understanding that led to them becoming great rugby players. In fact, Paul and Arnold

felt that great players had qualities that could not be coached. Paul and Arnold thought that being natural athletes and having the physical requirements for the position they played were the most important traits of great players. Paul had a strong view about the contribution of a player's athleticism and talent towards creating the nucleus of a successful team. He expressed a view that great players had qualities that could not be coached. Paul made this comment when asked about the attributes of great players:

First of all they have to be athletes, the great ones are all unique athletes and freakish athletes. And they possess stuff you can't really coach, you can harness but you can't really coach. So the identification of those athletes is, if you can identify those you're half way to creating a player or a team built around those types of players. (Paul, Interview 1 05/09/2007)

He also felt it was the coach's job to identify athletically talented players. Paul reflected on his years of experience coaching children. He used the example of coaching his son's team and was convinced that people are born with differing levels of ability. Paul used speed as an example to explain how players are born with natural ability: "*You can't make a slow man quick, you can make a slow man faster, but you can't make him quick*" (Paul, Interview 1 05/09/2007). He went on to say that as a coach you can only work on what players already have and try to improve it, "*You can only enhance what they've got*". Arnold supported Paul's view of athleticism but took it a step further by pointing out that certain positions require different types of athleticism. In a response to a question on the characteristics of great players he said:

So you know, you've got to have physical abilities in for your position for a start. You've got to have the group physical abilities for your position. That's number one. (Arnold, Interview 1 04/09/2007)

Arnold also expressed a level of frustration about the inability to improve or coach the decision making abilities of his players and that it was a quality that players were born with.

I'm not quite so sure how well you can teach people decision making under pressure. I have to be frank. I've coached Andrew Moss, I've coached Dan Cavanagh. Both of them when they first came into first class rugby, I was their coach, and I don't think I taught either of them anything. They had that ability. (Arnold, Interview 1 04/09/2007)

Rodney was less emphatic about the contribution of physical abilities towards the makeup of great players but it was still an important consideration for him. His view was that each player needed to have a number of attributes to make them great and that these were, *“you know, there’s physical ... you’ve got your physiological needs,”* (Rodney, Interview 1 06/09/2007).

5.3.2.4 Have humanistic qualities

Paul, Walter and Rodney all had similar views about the importance of a player-centred approach to coaching the development of skills and abilities in players. However, this extended beyond coaching skills of tactical knowledge to include concerns with the players as people. Paul commented that he had known most of his players prior to them moving into senior rugby union and saw himself as a “father” figure having an influence on their lives. Walter and Rodney have strong views on how to develop self awareness and social independence in players and how important they are in developing the player as a person. They also felt that these attributes were important in developing intelligent performers. They felt their roles were to inspire players and help them achieve a balance in their lives. In response to a question about developing players Walter suggests:

You know and I think that’s one of our primary functions as a coach is to create that awareness. Help the responsibility and inspire people to feel what they’re doing’s significant and you know, important but they’ve got to own that and then help create self awareness. I think they’re two really important things for players. (Walter, Interview 1 19/10/2007)

Concerns with players’ lives outside the team and rugby were a common theme of all four coaches. Rodney felt that social skills and life outside of rugby union were important in developing the whole player and such external factors produced better players:

Very important. Balance. So things are in perspective ‘cause they help with all of the former. Obtaining a balance in life is having connections and meaning beyond the arena and those are you know, family and obviously immediate family in terms of partner, and just the ability to keep things in perspective. (Rodney, Interview 1 06/09/2007)

Rodney, like Walter, felt that by supporting players and creating an environment that encouraged self awareness players would identify and develop their own needs:

Just support them. They'll develop them. You just try and create the context where they have the best chance of achieving it. You need to be able to provide them with the learning that they seek. So, you know, if you just cut to each area that the conditioning support, so build an awareness of what their capabilities are at any given point in time and what their needs are as a consequence and part of that's pure periodisation and so forth and getting that balance right through work and play because you can't just work, work, work. You go into decline. Technically it's similar. But ultimately they'll make the shift. If it's always your ideas, you simply help them to get to a place of realisation, a place of awareness; 'cause then they'll ... if they're not motivated to pursue it, if it's you telling them, you're just going to be the law of the diminishing returns. (Rodney, Interview 1 06/09/2007)

5.3.3 Practical sense of possibilities and the forthcoming: Attitudes to Innovations

Two themes emerged from the analysis of the coaches' views towards innovation in coaching. The coaches felt that a) there was a need to be innovative because it was central to improvement as changes occurred in rugby and b) any innovations needed to have the acceptance of players, have meaning and excite players.

5.3.3.1 Innovation was central to improvement because of changes in the game

All the coaches felt that rugby and coaching had changed in recent years. Walter's response to a question about innovation represents a common view amongst the coaches of the changes that have occurred in rugby: *"Huge. You know, I've learnt more in four years than in 40 years. Well I'm not going to tell you what they are though"* (Walter, Interview 1 19/10/2007).

While Walter's response was guarded with regard to the specifics of innovation, the coaches discussed how innovation is accepted and implemented. For instance Paul was aware of the need to establish a different relationship with his players. This is evident in a response to a question about experimentation when he said:

Certainly moving much more towards as you hopefully can see today, collaborative much more player-driven environment, so that fundamentally they're masters of their

own destiny. They take ownership and control for what's happening and we just plan everything around hopefully driving that end. So although that's not innovative, that's the way it should be done. (Paul, Interview 1 05/09/2007)

He also said that they had used a sports psychologist and an approach to reviewing each other's work to ensure they develop better relationships with players. "*More about getting the growth out of the management group so therefore we're much better at interacting with the players*" (Paul, Interview 1 05/09/2007). He described how he was looking at doing things differently all the time but there had been a significant shift in the relationship between him and the players:

Yeah, I mean the most obvious, to give you a really obvious shift and it's happened in the last 10 years is it's gone from being prescriptive to being more about empowerment. So it's gone from telling to asking. (Rodney, Interview 1 06/09/2007)

Walter had similar views about the importance of developing players with self awareness. He saw the introduction of a global methodology (games-based training) in his coaching as innovative and was critical of traditional approaches to coaching as they did not develop self awareness amongst players. He introduced a Game Sense approach to coaching but his early use of this approach required a change in attitude by those around him:

No I think just rugby people in general who had a stereotype view of what a coach should be. You know, where you had to be demanding, highly motivational, instructional, know all the answers, you know and I felt I knew all the answers but I didn't think there was any point telling people anything if they were going to forget it in five minutes, you know what I mean? (Walter, Interview 1 19/10/2007)

He also discussed how important it was to use observations and a questioning approach with players to help them develop understanding and awareness. Arnold on the other hand had a different approach to innovation; although he saw that the game is changing all the time he said there is no real innovation. In a response to identifying innovation he said:

Oh, not really, only some technical things are a little bit different, some teams from others but when you've been around as long as I have, there's usually just another part

of the circle going back to the same, 'cause it's, you know, nothing particularly new.
(Arnold, Interview 1 04/09/2007)

However he viewed the future introduction of a leadership consultant to work with players as a way to improve responsibility and accountability by players on and off the field.

5.3.3.2 Innovation needs to be accepted by and have meaning and excitement for players

All the coaches said that the uptake of any innovation needed to have meaning for players, provide motivation for them and be accepted by them. Paul said he felt it was necessary to work with the players when implementing innovation and that it required acceptance by the players before it was used:

...the response of the players. Everything has got to be geared to how they respond. It may be that sometimes there's some pain before some gain so the response of the players and it may be that they're responding negatively but given some conversations you could see the light coming on. So innovations have to be done hand in hand with the guys that are doing the work out in the middle. You know the guys that are doing battle have to be accepting of any innovations. (Paul, Interview 1 05/09/2007)

Walter had similar views about the reasons for taking up an innovative approach but thought that such innovation needed to be functional and be capable of exciting the players. Walter thought that because his role meant being there for his players, if an innovation was introduced it had to create enthusiasm and the players should love it. He also stated how important it was for him to love what he does and how he sees his relationship with the players determined his introduction of innovations or changes. In response to a question about innovations in coaching Walter said:

What's functional. You know, you're there for the players really and you're there for you know the love of the game and the love of the players. I think and the two things are combined and you want them to have a spark, don't you. You want them to be enthusiastic, to love what they're doing and so I think it governs what you innovate with, you know if they were inspired by something and you'd get feedback that this would be good or that changes need to be made, you make those changes, you know. And I think it covers a lot of your innovation being functional, working, knowing that it's going to work and the players are excited by it. (Walter, Interview 1 19/10/2007)

Rodney said that innovation has to be effective and “*needs to have meaning for the players*” (Rodney, Interview 1 06/09/2007). Arnold was not as emphatic about the role of players in the process of accepting innovation but he was aware that the introduction of innovation required an understanding of the players’ culture, ages and level of expertise. He saw innovation as having its greatest impact on mental preparation:

If we come across some innovative way of having our guys mentally prepared for games consistently, I’d be really interested in that for this team, you know. (Arnold, Interview 1 04/09/2007)

Discussion of New Zealand site

Beliefs-premises

In general this chapter identifies dispositions toward an athlete-centred approach where the participants’ views of what makes a good coach reflect a humanistic view of coaching and credence is placed on developing relationships with players. The coaches indicated that they are moving from an emphasis on displaying superior technical knowledge towards a situation where there was a greater importance placed on the relationships they had with players and how this shaped learning. This is reflected in the importance given to caring for players and showing empathy for their circumstances and its contribution to improving performance and learning and developing self awareness in players. These were viewed as important traits for coaches. Such attitudes and beliefs about what is good coaching are more likely to predispose the coaches to be more accepting of Game Sense in their coaching practice.

Perceptions- appreciation

In the view of the participants the characteristics of good players include game understanding and intelligence, being motivated and resilient and having athletic ability. Other than this they consider that having humanistic qualities contributed to the development of players both as people and as rugby players, which is consistent with a humanistic approach to coaching (Kidman, 2005; Lombardi, 1999). They often commented that “*better people make better players*”. Paul, Walter and Rodney felt that this was achieved by working with players on a personal level. The coaches felt that

players would learn by creating an environment where players could identify their own needs. Game Sense has at its core the desire for players to identify their needs, and through the coach structuring the learning environment and encouraging questioning players are able to improve.

Practical sense of possibilities and the forthcoming.

The coaches' views on innovation suggested that they were aware that the game of rugby union and coaching rugby union are subject to constant change and that they had changed as coaches in response to these developments. The changes that they had made were centred on the relationships they had with players and a desire to establish a player driven environment. These changes required the coaches to collaborate with players in such a way as to empower them. The coaches' views on innovation reflect a positive disposition toward an athlete-centred approach and toward the possibilities this offers for innovation. Central to their views on innovation and change was the belief that players had to be supportive and included in decisions about innovation and that any innovation should provide interest and excitement for players. These ideas are in alignment with the goals of Game Sense activities which, when structured correctly, offer opportunities for motivation and excitement and establish a learning environment where players can develop independence, perception and decision making (Brooker & Abbott, 2001; den Duyn, 1997; Light, 2004a).

5.4 Conclusion

The conclusion compares and contrasts the characteristics of the individual coaching habitus of the Australian and New Zealand coaches within the three analytic categories used in the section. It concludes with an outline of the implications this has for the study.

Beliefs

With some variation amongst them, the Australian participants displayed dispositions toward hierarchical power relationships between coach and players which corresponded with their views on coaching as being a process of knowledge transmission. This implicitly works against the uptake of Game Sense at the Australian site because it

reinforces monologue rather than dialogue (Light & Fawns, 2003). The habitus of the participants at the Australian site structures the ways in which they take a technocratic approach and value knowledge, technical expertise and the ability to manage (Tinning, 1996). Predisposed toward a coach-directed approach, they see their role as being one of transferring information to players. This is at odds with the player-centred approach of Game Sense and means that they are less likely to espouse it. On the other hand, the habitus of the participants at the New Zealand site indicates that they have, or are moving towards, a focus on establishing and maintaining relationships with players that are more humanistic. They tend to feel that caring and having empathy for a player or players is more important than possessing technical knowledge. The habitus of the participants at the Australian site reflected a valuing of their ability to manage the environment and display those personal characteristics seen as being important in generating respect from players. This is different from the relationships that the New Zealand participants valued with their players. The contrast in habitus between the two sites demonstrates different relationships and therefore sets up differences in the potential for the participants to adopt Game Sense as part of their coaching practices.

Perceptions and appreciation

The habitus of participants at the New Zealand site places value on establishing relationships with players and this resonates strongly with the humanistic intentions of Game Sense. Kidman (2001, 2005, 2007) argues that athlete-centred coaching activities can be interchanged with humanistic coaching and the use of Game Sense facilitates this approach. Furthermore, Jones (2009) outlines how caring for athletes promotes empowerment and encourages athletes to explore situations and to find solutions to problems. This humanistic approach as outlined by Kidman (2001, 2005) is a central feature in the successful implementation of Game Sense. The co-production of new knowledge is seen as a partnership between the coach and players and rests upon a relationship that is more equitable or democratic (Light & Fawns 2003). By taking a humanistic position it embraces activities that encourage athletes to be independent. Kidman (2005) makes the point that humanistic coaching is athlete-centred and the use of Game Sense in coaching supports these ideals. Furthermore the use of Game Sense produces better players and the use of questions encourages players to take responsibility for their own learning (Kidman, 2005). Lombardo (1999) suggests that the humanistic model addresses the whole person and encourages athletes to reflect

upon their subjective experience of sport. The Game Sense approach allows this, whereas the more traditional directive coach-centred approaches do not.

Practical sense of possibilities and the forthcoming

Butler (2005) makes the point that implementing any change in teaching (and by implication, coaching) requires a belief in innovation and an environment that challenges current practices. Game Sense provides motivation and excitement for players by placing learning in games and by empowering them (Brooker & Abbott, 2001; Kidman, 2001; 2005; 2005 Light, 2004a) but apart from Ellery, the coaches at the Australian site had a limited or cynical view about the practical sense of possibilities expressed through their views on innovation. Ellery was the only Australian participant who discussed the role of games as a coaching innovation. He particularly noted the importance of games when he was learning about sport in his developing years and had a teacher who used games as a basis for coaching rugby union. The planned introduction of the "flow" approach as an innovation in his coaching comes after long experience as a player and coach and suggests that while he appreciates the benefits of a games-based approach, the expectations of coaching have thwarted its earlier introduction. This resonates with Sirna, Tinning and Rossi's (2009) view that the culture of the environment contributes to pedagogical decisions. Elvis's point, that all coaches adhered to "*similar practices*" in their approaches to coaching, points to an environment of "fitting in" as part of being socialised into the practice of coaching rugby. This has been sustained over a long period of time and suggests a specific coaching habitus (Light, 2008b; Sirna et al., 2009).

Implications

The successful implementation of Game Sense requires a significant shift for coaches who have been accustomed to using a directive approach (Light, 2004). Game Sense requires the coach to take a step back from being explicitly in charge and involved in transmitting knowledge, and to place the players and their requirements at the centre of learning. The structuring of the coaching activity in Game Sense is less concerned with the transfer of technical information and more concerned with shaping the learning environment where collaboration between coach and players and reflection on experience can bring about new understandings. The collaboration between the coach

and players also requires that power be more equitable and redistributed to embrace players' views. The habitus identified at both sites suggests that the New Zealand coaches would be significantly more inclined to take on the pedagogy of Game Sense than the Australians.

The views and inclinations expressed in the habitus of the participants at the New Zealand site suggest that they are more disposed to embrace innovation and more inclined to see advantages and use Game Sense in their approach to coaching. Paul, Walter and Rodney specifically expressed a view that coaching should be athlete-centred and empower players; these are central features of Game Sense coaching. It may also suggest a specific collective coaching habitus in New Zealand. Research reported by Cassidy and Kidman, (in press) points to a national coach education system in New Zealand that has undergone a paradigmatic shift which involves embracing innovations that are concerned with the quality of coaching. At the heart of this change is an emphasis on a philosophy that coaching practices are athlete-centred. These are now embedded in the New Zealand Coaching Strategy and the Coach Development Framework (Cassidy & Kidman, in press; Kidman, 2007).

It is the acceptance of the need for humanistic qualities in players and how they should be developed that marks the difference between the habitus of the participants at both sites. The habitus of the coaches at the New Zealand site suggests that a belief in the needs of the player is essential to developing the holistic player. They view their role as one of assisting players to identify their own needs so that players develop a sense of self awareness and in doing so become better players. This humanistic approach as outlined by Kidman (2001, 2005) is a central feature in the successful implementation of Game Sense. The co-production of new knowledge is seen as a partnership between the coach and the players and rests upon a relationship that is more equitable or democratic. This type of approach is consistent with a more recent view of pedagogy in coaching that embraces and values learning (Cassidy et al., 2004; Kidman, 2007; Kirk, 2009). The habitus of the coaches at the Australian site suggests that they hold beliefs about coaching that predispose them toward a coach-centred approach where they can use knowledge and technical expertise in the process of transmitting information. These values do not correspond with the Game Sense approach where the emphasis is on designing a learning environment that encourages a dialogue and interaction with and between players and moves the coach off centre stage. In addition, the habitus of the

participants at the New Zealand site predisposes them to more readily take up games-based training and Game Sense pedagogy, because they view coaching as a changing practice that needs to adapt to the changing characteristics of play and a changing culture while adopting athlete-centred pedagogies.

Chapter Six: Construction of a coaching habitus

6.1 Introduction

Bourdieu (1990) used the term “le sens pratique” to describe how skilful individuals negotiate their environment effortlessly and how their adroitness is embedded in their habitus. This habitus relates directly to their immersion and socialisation (Kirk, 2009). Habitus is what orients our intentions and considers what might be possible from our past experiences and this influences how we shape future action. Merleau-Ponty (1962) described this as the silent springs of social behaviour that impact on the way future action is shaped. Bourdieu argued that these embodied dispositions result from how society becomes deposited in the person as lasting dispositions (Wacquant, 2006). According to Mauss (1973) the techniques of the body are culture-specific and embodied over time through being in a particular cultural context. This suggests that perhaps the acquisition of techniques of coaching occurs differently across cultures and social groups. Mauss describes how the rhythm to which soldiers march is embedded deep in the body and how French soldiers could not march to an English beat. Likewise, the values, attitudes and beliefs of coaches are deeply embedded over time in culturally specific settings. Mauss, Bourdieu and others refer to this embodied structure as the habitus.

As a coaching habitus exists it is important to examine ways in which it is constructed. This section identifies a number of factors that contribute to the construction of a coaching habitus and shows how this structures or orients the actions of participants at both sites. It attempts to identify how experiences, practice and social interaction within particular settings contributed toward the construction of the participants’ coaching habitus identified in the previous section. An examination of their backgrounds identifies three common areas that most contributed toward shaping the development of a coaching habitus. These areas are: 1) their sporting background from childhood before commencing as a professional coach; 2) influence of significant people and; 3) their pathways into elite coaching.

6.2 The Australian site

6.2.1 Sporting background from childhood before commencing as a professional coach

There were three main factors that shaped the participants' coaching habitus from their first experiences of sport as children through to, and including, their transition into coaching:

- 1) Positive experience of sport
- 2) Long engagement, early specialisation and elite participation in rugby
- 3) Early coaching experience

6.2.1.1 Positive experiences of sport

All the Australian coaches described their early experience in sport as being about fun and the supportive social environment established by family and friends. Joseph explained how his early involvement in sport had been for the love of it and how he had never seen it as a possible career. He played a range of sports while growing up including rugby union, rugby league and cricket and specialised in rugby union when a local team did not have enough players. When asked to recall his early involvement in sport Joseph said:

For me sport would have been entertainment, the passion, the enjoyment, but you had to work, so never at any stage did you think you were going to make a living out of it. (Joseph, Interview 1 09/02/2007)

In discussions about his early involvement in sport Lincoln said that it involved playing many sports and although he had not excelled in any one sport his enjoyment had been facilitated by strong family interests in sport. Ellery viewed his early involvement in sport as being enjoyable, he said:

Oh, I think my whole childhood was either rugby union or rugby league or cricket. So it was, you know the thing that I enjoyed the most, there was just one season rolling on to the next and I think one of the lucky things I had as a kid was that I played so much, played sports so much. And I think that's in direct comparison to what happens a lot now. (Ellery, Interview 1 06/02/2007)

Ellery also saw playing games as the main way in which he learned to play sport. He expressed a view of contemporary coaching as now being more organised and structured suggesting that this did not necessarily produce players or athletes with the game knowledge needed to become expert players. Elvis started out playing soccer but as he matured he felt that his body shape changed and this suited him for rowing and rugby. He said the power sports of rowing and rugby union suited his ability to generate force.

6.2.1.2 Long engagement, early specialisation and elite participation in rugby union

Ellery took up rugby union at high school due to the school's decision to specialise in rugby. Lincoln followed in his father's and brother's footsteps and focused on rugby union in high school because of the family's inclination towards rugby union coupled with a private school education where rugby union was the main winter sport. Elvis eventually settled on rugby union due to his high school's rugby union program, the enjoyment of international travel at high school and the realisation that he could not play other sports. Joseph, like the others, moved into rugby union during his high school years. Lincoln's response to a question regarding his background in sport and involvement in it produced this response, which represents the place that rugby union holds in the lives of the participants:

I mean I've never not had an involvement in the game (rugby) since I was six years old, so either in its a playing or a coaching or a spectating capacity. (Lincoln, Interview 1 06/03/2007)

All the coaches had a long engagement in rugby union as players with an average of 16 years playing experience between them prior to taking up coaching after which they established lengthy coaching careers. During their long involvement in rugby union they all had participated in elite level rugby union programs. Ellery, Lincoln and Joseph had participated in provincial rugby union programs while Elvis had represented Australia.

6.2.1.3 Early coaching experience

Ellery, Lincoln and Joseph experienced some coaching as players toward the end of their careers. Ellery came into contact with coaching while still active as a player and at the encouragement of his coach accepted an opportunity to coach the team in which he played. In responding to a question on when he considered becoming a coach Ellery reflected on his first coaching experience in 1993 and said:

Then second part [of the year] I had Kevin Bacon as coach and he made me captain and gave me a sort of a coaching role and that was the only time I ever thought about coaching and really enjoyed it. (Ellery, Interview 1 06/02/2007)

Ellery felt that his experience of coaching while still a player acted as a catalyst for him to take up coaching when he finished playing. Lincoln was first exposed to coaching a little earlier than the others during his time as a high school student when he had the opportunity to coach the school's junior teams:

Mate, I had you know, younger brothers about 10 years younger, and when I was in high school, I coached their team, in under seven's, under eight's, you know, when I was 16, 17, that sort of thing, so I sort of dabbled in coaching. (Lincoln, Interview 1 06/03/2007)

Later, as Lincoln approached the end of his playing career, he was exposed to coaching again. This involved coaching the team he played in, as the regular coach had moved due to work commitments, for six months when he was the captain coach of the team. He pointed out that he had intended to take up coaching after he finished playing and did so in 1993. Joseph moved interstate for the last two years of his playing career and captain-coached the team he played for during that period, before returning to his original club to continue his coaching career. Although Elvis did not have the same level of coaching experience as a player he felt the analytical skills he developed while playing had been the major reason he moved quickly into coaching after finishing his playing career.

6.2.2 Influence of significant people (coaches, teachers and parents) from childhood

The analysis of the coaches' discussions about the influence of teachers and coaches upon their coaching beliefs suggests that particular people had a significant influence upon them at different stages of their development.

Ellery identified one physical education teacher in particular who had also been his coach at high school who had influenced him significantly. The coach had used games as the basis of coaching sessions for rugby union training and this had a significant impact on Ellery's ideas on coaching. Ellery felt that this was how his skills were acquired, which suggested that they were developed through deliberate play rather than deliberate practice which were highly organised and structured.

Lincoln spoke fondly of a teacher he had at high school. His respect for this person influenced his decision to become a teacher. Lincoln said that this teacher was an accomplished sports person and a good bloke. Lincoln identified prominent coaches who he observed during his time as a player and coach as people who influenced him. One coach had a significant impact on his coaching as he was one of the first coaches to individualise feedback to players, provide detailed structure for training sessions and was passionate about coaching. Lincoln said that he gained information on high performance coaching which relied on core skills and an emphasis on skill acquisition approaches when he worked at the AIS. Lincoln's response below demonstrates his support for this approach to coaching:

I mean I reckon anyone would tell you that even at the top level coaching now, the primary building block is just core skills and basics, and any sort of coaching's is about you know, that's close-skilled, or semi to open-skilled. (Lincoln, Interview 1 09/02/2007)

Elvis remembers all his coaches from his time at school and has kept in contact with them. He also indicated that the parents who were associated with his early participation in school rugby union had a significant impact upon his development as a coach. He said that they were enthusiastic and worked hard to improve rugby union opportunities for the players in his club. The parents provided opportunities for the discussion of issues related to rugby union and were often mentors to players such as Elvis. He remembered the impact of personalised tuition from two former international players and this had motivated him to pursue rugby union as a possible career. Elvis said that the personal interest shown in him as a young player inspired him to continue playing and he placed value on the instruction he received from players who were experts in their position and who he suggested acted as role models.

Joseph said he had learned from his involvement with teachers that relationships with players were important. He spoke of one teacher in particular whom he thought was a “bully” and had intimidated his fellow students. His use of the word “bully” meant that the teacher was overbearing, intimidating and gave little opportunity for players to express their opinions. He said that other teachers had shown him what he thought was the right balance between discipline and strong leadership, and working with players on a personal level. He identified a famous Australian coach who had a big impact upon the way he thought about coaching. This coach broke the game down to manageable units for teaching.

6.2.3 Pathways into elite coaching

There were two main factors that shaped the coaches’ pathway into coaching and their beliefs about it. They are:

- 1) Playing experience
- 2) The role of rugby union clubs

6.2.3.1 Playing experience

Ellery played rugby union for 14 years as an adult before coaching at the club where he played in 1994. Lincoln played for 17 years as an adult before coaching at the club where he played. He was the captain of his team towards the end of his playing career. Elvis played rugby union for 15 years as an adult with limited experience as a coach before he worked briefly in his profession for six months. He then commenced professional coaching. Joseph played rugby for 18 years before coaching at a club that did not have a coach. Their long association as players created an attachment that is evident in Elvis’s reasons for taking up coaching:

I probably missed the game, really after a season out of it I kept an involvement but I just missed it and I couldn’t contribute as a player any longer but I still had that strategic and that sort of felt it was an input I could still have there. You know the chance to go back and coach all be it in an environment with people I was very comfortable with. (Elvis, Interview 1 28/02/2007)

Coaching offers opportunities for players to extend their involvement with rugby union after finishing their playing careers. Joseph's reasons for coaching are illustrated by this point: *"I coached because it was just the next extension of getting older and not playing and staying involved in the game"* (Joseph, Interview 1 09/02/2007). Lincoln's response conveys a similar element of attachment:

Oh well, I finished playing, and I was actually just going to take a year off, and then the bloke who was club president at the university said mate, you can't just not do anything for the club, you've been playing here for 17 years, and all of a sudden you're not going to do anything, so mate, you're coaching, there you go. (Lincoln, Interview 1 06/03/2007)

All four coaches felt that playing experience was a necessary prerequisite for coaching. Elvis makes this response to the role his playing experience had on his ability to coach: *"I don't know if I hadn't been a player of the game I don't think I would've ever been a coach. I think it's you know, one has led to the other definitely"* (Elvis, Interview 1 28/02/2007). Lincoln's response to the contribution playing experience has in the transition to coaching supports Elvis's view when he says: *"I reckon there is, yeah like particularly if you've been in the game for a long period of time, I think it's an easy transition as well"* (Lincoln, Interview 1 06/03/2007). Lincoln said that he continued playing in order to gain more expert knowledge that he could use at a later date in his coaching career:

I knew that I wanted to coach, and I didn't know that I wanted to coach straight away when I'd finished, but it was great staying involved in the rep teams, because you knew whether it was Hitchie that was coaching, or whether you'd get Alec Evans down or Bobby Dwyer down, the majority of my time I actually spent at those sessions, was trying to pick up things not so much to put on the park next week, you pick up things for you know, down the track. (Lincoln, Interview 1 06/03/2007)

6.2.3.2 The role of rugby union clubs

The club structure in rugby provided these coaches with an environment in which they developed as players and facilitated movement into coaching. It provided them with knowledge of the game, of the culture of rugby and with an introduction into coaching. Ellery, Lincoln and Joseph pointed out that the opportunity to coach was a direct result of their association with the clubs for which they played. Their movement into coaching

was encouraged and facilitated by coaches or long-time stalwarts who were influential people in their clubs. Ellery was introduced to coaching when he was captain of his team towards the end of his playing career. His coach at the club encouraged him to coach while still playing. This had a significant impact on his desire to coach as can be seen in his response to a question on the benefits of the coaching experience.

Definitely, from my perspective, I wouldn't have coached if I didn't done that, (coaching) if I never had that opportunity to do it, I would've never thought I wanted to coach, and only 'cause I did that as a player, I thought then I really wanted to coach. (Ellery, Interview 1 06/02/2007)

After a short period of coaching as an amateur Ellery went on to coach professionally overseas in 1996 when rugby union became a professional sport. In Lincoln's case he was the captain of his team towards the end of his playing career and took up coaching at the insistence of a long time club stalwart who said he needed to put something back into the club after a long period as a player, although he had fully intended to take up coaching. After coaching as an amateur for seven years he was appointed to his professional coaching position in 2000. Elvis worked briefly in his profession for six months at the end of his playing career, however an associate from his club offered him an opportunity to coach which he accepted and, with a limited background as a coach, he commenced professional coaching 1998. Joseph began coaching when he travelled interstate with work and took up a position as a captain coach at a club without a coach. Joseph eventually returned to his original club and coached for five years before entering into elite level coaching. He took up his first professional appointment in 1996. Lincoln and Ellery said they enjoyed the experience of coaching while still playing and Lincoln thought his initial experience of coaching was reflected in his ability to mould a competitive team.

Ellery, Lincoln and Joseph experienced leadership roles as captains during their playing careers in the clubs for which they played. This seems to have contributed to the development of their beliefs and dispositions about coaching, in particular, their adoption of the traditional view of the coach who takes charge and directs training. Observations of all the coaches showed that they are very much in control of training. For example they are the people who give instructions, manage the training environment and give feedback to players. Joseph's situation is slightly different in that

he does not undertake any on-field coaching but rather manages the coaching environment, working in close collaboration with assistant coaches and support staff.

Discussion of Australia site

The participants' experiences of sport and their participation in its practices profoundly shaped their desire to coach and their beliefs about and views on coaching identified in the previous section. They entered the field of sport as young 'newcomers' where their enjoyment in participation and the social experiences involved in playing rugby union meant that they established long lasting attachments to sport, and rugby union in particular, and to the people with whom they interacted. In their formative years they began to specialise in rugby union, which can be seen as a sub field of sport. Over this extended period of engagement in the practices and discourses of sport, and rugby union in particular, the logic of the sub field of rugby union came to be embedded in their habitus and shaped and structured their beliefs about coaching and about how rugby union players learn to become, or develop. The data generated from the interviews, observations and field notes used in this section suggest a particular set of dispositions, inclinations and beliefs about coaching and the contribution that their sporting background, early specialisation in rugby union and their pathways into elite coaching made toward its construction. As Bourdieu (1990) argues, the habitus does not determine what the individual will do or what action he/she will take; it structures action and this is what this section of the study suggests.

Tightening the examination of the contexts within which a coaching habitus was constructed to consider Communities of Practice (COP) provides a closer focus. The clubs which they entered as newcomers and in which they moved towards becoming fully established mature masters as players and captains operated as COP. Their opportunity to move into coaching was facilitated by membership, connections and networks through the rugby union clubs. The COP of a rugby union club over time created social connections and created a desire in each participant to maintain involvement in rugby union as their playing careers ended. Their experiences of playing introduced them to the practice of coaching and this could be considered as their entry into the apprenticeship of coaching. Their prior leadership experience as captains and experience of coaching as players form part of the apprenticeship trajectory of coaching. This type of apprenticeship involves learning the culture and reproducing approaches to

coaching. This can be seen in the way coaches value the same or similar traits in players as they do in successful coaches

The participants not only developed their knowledge and ideas about coaching, but also sets of dispositions toward it from significant people through their involvement in rugby union. For the participants in this study this primarily involved teachers and coaches, with the participants often nominating exemplar coaches from whom they not only gleaned information about the practice of coaching but also philosophies about coaching and a broader perspective on the culture of coaching rugby. The participants viewed these people as masters of their practice and adopted similar approaches or ideals in their own practice. The values of being passionate, the ability to organise and manage people and the ways they coach are reproduced from an association with teachers and coaches whose practices they respect.

All the coaches had experience in leadership positions as captains within the context of the clubs for which they played. This context and their long experience as players contributed to the development of certain beliefs or inclinations about coaching. Their role as leaders and their desire to be passionate, resilient and hardworking reflect the traits that they admire in good coaches and the traits of those people who have been influential in their development. Ellery's decision to introduce a games approach as a recent innovation to his coaching even though it was a successful activity from his past that he thought produced skilful players demonstrates how influential the context of rugby clubs is on shaping the decisions coaches make in their day-to-day work. In a broader context, Elvis's view that all coaches adhere to similar practices and conventions suggests that a collective habitus operates and the discourse associated with it shapes the way coaches make decisions about their coaching.

All the coaches had successful professional careers as teachers, town planners or managers. The introduction of professionalism in rugby union provided opportunities for rugby union coaches to have financially sound careers. The field of employment and its effect on the way coaches' coach demonstrates the importance participants place on management in their roles as coaches.

6.3 New Zealand site

6.3.1 Sporting background from childhood before commencing as a professional coach

There were three main factors that shaped the participants' coaching habitus from their first experiences of sport as children through to and including their transition into coaching.

- 1) Early introduction to and importance of rugby
- 2) The importance of competition to learning
- 3) Early coaching and leadership experience

6.3.1.1 Early introduction and importance of rugby union

All the coaches commented that they played and enjoyed a range of sports growing up but they were adamant about the important role of rugby union in their lives from a very early age. Although Walter had played tennis and participated in athletics during the summer months his main interest was rugby union. Rugby union for Walter as for many New Zealand young men and boys was the major sporting focus in his life. The sport of rugby union had close ties to families and communities (Pringle, 2008; Ryan, 2008). In a response to a question about his background in sport and movement into rugby union he said:

I grew up on rugby, you know, you couldn't play soccer or anything like that. It was like reading the Bible in Afghanistan; playing soccer you know, it was frowned upon at best. So rugby was the only winter option for me. Dad used to coach me. I can remember even as a five year old when I wasn't allowed to play, I'd just run up and down the sideline, racing the kids that were playing, you know. It was just part of the community, the rugby. (Walter, Interview 1 19/10/2007)

Walter grew up in a small country town where he suggests that rugby union was the focal point of the community. Rodney also came from a rural background where rugby had strong links with the community and he has similar views to Walter about his early access to, and love of, rugby union when he said:

I mean I've been involved in rugby I guess from when I was first introduced to a ball which was pretty early. I played under five stone seven first and then the first 15-a-side team was an under 11 side and from there yeah played rugby, not exclusively but predominantly it's been my preferred winter code from day dot. (Rodney, 1 Interview 1 06/09/2007)

Paul had vivid memories of his participation in all sports growing up but he also expressed a love of, and strong desire to play, rugby union from an early age. He said:

Like just passionate about rugby from a very young age and cricket and played them both up until I was about 21 when I had ... to senior level and then rugby was my first love so it took off so I dumped cricket. (Paul, Interview 1 05/09/2007)

Arnold's introduction to rugby union was slightly different from that of the others as he discussed his involvement in and enjoyment of many sports growing up including swimming, gymnastics, cricket, Australian Rules football and cross country. However with regard to the place rugby union held for him he said: *"It was actually compulsory to play rugby and we only had 19 teams. But I would have played whether it was compulsory or not. I just loved it"* (Arnold, Interview 1 04/09/2007).

The participants' early attachment to rugby union is framed by the place that rugby union has within the culture of New Zealand and the strong community support it enjoys throughout the country (Ryan, 2008). All had been active in rugby union from their primary school days as players through to their current roles as coaches.

6.3.1.2 The importance of competition for learning

While all the coaches described their early involvement in sport as enjoyable, their attention quickly turned to rugby union. Their earliest memories of rugby union were associated with the competitive nature of the game and how important it was to compete and learn about the game. Walter discussed how he had been exposed to playing in an environment where he had to play against older people. He felt that this was an important process in his learning about sport. The following response about his background in sport illustrates this: *"We played a lot with older people in those days and I think it helped us sort of understanding the game and the decision making type parts of the game"* (Walter, Interview 1 19/10/2007). Paul shared a similar view about

the role of competition with accomplished, more experienced players and its contribution to making him a better player. He also felt that winning was an important part of competing with more mature performers:

I was always being stretched in terms of my abilities, which I really enjoyed. I loved the challenge of competing against better and bigger people, more mature individuals. And it was a large degree about winning, I really enjoyed winning. (Paul, Interview 1 05/09/2007)

Rodney felt that gaining access to meaningful competition at a young age exposed him to opportunities to learn about rugby union and how he could develop strategies within the team environment:

Just gaining access to meaningful competition, essentially. Being picked in your first club side and then from there making a rep side so that sense of playing against, or being extended against a higher calibre player. So you couldn't be certain of being able to run around or you know, then you had to start to work with your team mates to achieve and yeah, I mean that sense of progression. (Rodney, Interview 1 06/09/2007)

Arnold thought that his progress in rugby was in part due to his size and that he was destined to play in the forwards. However he saw this as an opportunity to compete and improve in a quest to make the first 15 team at his school. He said:

I just really enjoyed the competitive nature of the game and the physical nature of the game and but sport, to me, I enjoyed the competitive aspect and learning things and learning how to do things better. And I remember when I first got in the First 15 and we started getting proper coaching really, that I enjoyed learning the cause and effect of things. (Arnold, Interview 1 04/09/2007)

6.3.1.3 Early coaching and leadership experience

All the participants experienced some level of coaching as players. Walter and Arnold had been captains of the teams they had played in. Paul and Rodney felt they too had experienced similar leadership opportunities through coaching. Paul and Rodney felt that their playing experience and participation at elite level provided them with opportunities to coach because of their playing status. Paul had coached from early in his adult life and had enjoyed the experience. Walter felt that the position he played

required decision making in rugby union and the fact that he was a trained physical education teacher meant that he was in a position to coach from a very early age:

I was a geography teacher but my second major was phys. ed. which had first led to some coaching.... some of the early coaches I had in my senior rugby and my early All Black coaches were normally forwards and they were coaching by themselves and you take the backs away and you'd go away and do 20 minutes and you'd come back and you'd take the team run. So you were sort of coaching as a player. You know, even a young player, you tended to because you were the first five, you tended to be given that responsibility. (Walter, Interview 1 19/10/2007)

Paul had coached from early in his playing career and had coached junior rugby union teams in his local area. He also felt that as a mature player he had been involved in coaching the teams he had played in. He said:

I was always coaching kids for sports teams when I was playing for senior club or into Canterbury, I was always coaching like an Under 10s team or associated with one. And then I was in my latter years as a player at club level, I was, had a large degree or say on how the team was functioning and playing at that time as well. (Paul, Interview 1 05/09/2007)

Later in Paul's career he moved on to work for a provincial rugby union where he had similar experiences and was involved in a leadership capacity and coaching. His involvement in leadership is obvious when he elaborates on his experiences:

So I took on the CEOs role up in Waterford and I had that for three years. I also played a couple of years there as well and again a lot of say around how we played in terms of the coaching and so forth. (Paul, Interview 1 05/09/2007)

Rodney's first experience of coaching occurred when he returned from playing representative rugby union and was asked to coach at his local club, which he said was important as it gave an understanding of the difficulties of the coaching process. He said *he enjoyed being involved with coaching and was determined to find more meaningful ways of coaching:*

You realise that you didn't actually have what you needed to impart the knowledge that you had and it was then that it dawned on me that there was a lot more to it than to just ... to just to me owning the knowledge, I need to learn ways of transferring that knowledge

and helping build that knowledge and those abilities in other people. (Rodney, Interview 1 06/09/2007)

Arnold was travelling abroad when he first experienced coaching as a player. In responding to a question about his coaching background he said: *“I coached when I played rugby in England for a while and I coached while I was playing there. And that was when I was about 28 or 29 I think”* (Arnold Interview 1 04/09/2007).

6.3.2 Influence of significant people (coaches, teachers and parents) from childhood

The analysis of the participants' discussion on the influence of teachers and coaches shows that it was common for certain people to have a significant influence on them at different stages of their development. All had vivid memories of the coaches and teachers they had when growing up. Walter, Paul and Rodney saw humanistic qualities in these teachers and coaches, as well their ability to teach them about rugby union.

Walter was able to remember all his teachers and coaches back to when his father was his first coach. At high school a former international player was his coach and Walter played the same position as the teacher. This teacher taught him about the specific requirements of this position. However as a young player at high school the person who had the greatest impact on him was his maths teacher:

But the most influential teacher I had was my maths teacher actually who spent time with me at lunch times. You know every lunch time he'd come out and he'd teach me how to kick with my left foot. He'd fetch the balls and you know he spent time with me. (Walter, Interview 1 19/10/2007)

Walter valued the personal interest this teacher showed in his development. As an international player he said all his coaches had contributed to his understanding of the positional requirements of a five eighth and the various strategies on how to play rugby union at the elite level. Then during his 16 years as a coach Walter had the support of a person he referred to as “a coaching mentor”. He admired the fact that his mentor was passionate about rugby union and one of the first people in New Zealand to be involved in coach education. Walter *“learnt a hell of a lot”* from this person (Walter, Interview 1 19/10/2007). He also said that his early coaching experience in Italy working with French coach Pierre Villepreux had exposed him to a global methodology (game-based

training) instead of the technical approach which was favoured in New Zealand at the time.

Whereas over there [Italy] it was very much basically Pierre Villepreux throw the ball there and play. And your coming from here, how you going to score there when you come from here. So you've got to organise yourselves and so it was all about movement and understanding the game. So totally different and it gave me a new perspective. (Walter, Interview 1 19/10/2007)

Paul spoke fondly of his experiences with teachers who were his rugby union coaches at primary and high school. He felt one of his early coaches understood and was able to mould players in a positive way. On reflection about this particular coach he said that:

He had a really good way with the boys, young boys. Although very disciplined he also had the social nous to be able to manipulate us, in a positive way, and steer us in the right directions to get the best out of us. (Paul, Interview 1 05/09/2007)

In his first year of high school he had two coaches who were able to enhance his willingness and desire to learn about rugby union. Not only were these coaches good communicators but they also had a sense of humour and were "*worldly*". Paul also felt that they were a good coaching team as: "*they interacted and bounced off each other really well*" (Paul, Interview 1 05/09/2007). Furthermore he respected them and was aware of their ability to give of themselves, he said:

they were just a great team and they really liked each other as well and they were ... they just gave us a lot of themselves I think was a good part of what happened there. (Paul, Interview 1 05/09/2007)

Rodney remembered all his teachers and coaches. Some because of their training methods, but mainly because they tried to offer something of value, suggesting that he saw there was more to learning to play rugby union and coaching than merely passing on technique, saying that it was "*not so much the skill development in that era, but they were all trying to or we, it dawned on us over time that they were all trying to offer us something of value*" (Rodney, Interview 1 06/09/2007). When asked what were the important traits of these coaches, he said, "*the fact that they cared, essentially*" and that "*It's probably the most important ingredient [in coaches.]*"

6.3.3 Pathways into Coaching

Analysis of the data indicated that there were two main factors that shaped the coaches' pathway into coaching and shaped their beliefs about it. They are:

- 1) Playing and coaching experience
- 2) The role of rugby union clubs and associates

6.3.3.1 Playing and coaching experience

Paul played rugby union for 14 years as an adult before coaching at the club where he had played in 1998; he had already established a coaching background which began in 1986 coaching junior rugby union teams. Walter played rugby union for 14 years as an adult before moving overseas in 1986 where he captain-coached a team professionally for three years. He returned and coached for his province for seven years. Rodney played rugby union for 19 years as an adult and took up coaching during this period in 1991. Arnold played for 15 years as an adult before he moved into coaching at the club where he played. Their long association with playing created an attachment to rugby union that is evident in Walter's reasons for taking up coaching:

Primarily because I enjoyed the contest and I couldn't play anymore but I still wanted to be part of playing the game and being part of a team and so I started with the NPC here and you know I didn't look at it as a career option or anything. I just loved being with guys I'd played with as an early coach. [I] enjoyed the camaraderie and the whole satisfaction involved with, you know, playing well on the Saturday when you've prepared for it well. (Walter, Interview 1 19/10/2007)

Paul, Rodney and Arnold felt that playing experience was a factor in their exposure to coaching. Paul said: "*I always wanted to coach, always, I loved coaching, that's why I was doing it when I was playing*" (Paul, Interview 1 05/09/2007). Playing experience was something that was respected by others and he had an apprenticeship from playing into coaching. Paul felt that his playing had served him well and that it played a large part in his transition into coaching. He also felt that his playing experience and rugby union-related work experience had prepared him for a move into a coaching career:

Yeah I was bloody lucky that I was working in an environment where I was able to transition relatively smoothly from a full time employment role as an academy manager dealing with all the rugby stuff and coaching for sort of four or five months as the assistant coach. (Paul, Interview 1 05/09/2007)

Rodney felt that his movement into coaching was a natural transition from playing. He also said that much of his motivation for becoming a coach was to repay a debt he felt he owed to the game, its culture and the people involved in it. He wanted to “*give back*” something and that “*it was something he enjoyed*” (Rodney, Interview 1 06/09/2007). However, it was his playing experience that had prepared him implicitly for coaching:

As a player, I was acquiring coaching skills without realising it because I was often going back to club level as a player who'd been exposed to a higher level. I'd take back ideas and enthusiasms if you like and then try and impact on the people around me at club level. And I started to derive a sense of satisfaction from seeing that ... the growth of people and, most importantly, the team. So, discovered I actually yes, quite enjoyed that so when I could ... ultimately retired from playing, it just sort of evolved really, it was an easy step when I was approached to coach to just keep going. (Rodney, Interview 1 06/09/2007)

The transition into coaching for Arnold was something that just occurred and was not even a conscious decision: “*I never really thought about doing it, I just went along to help in 1986 and then I've been coaching ever since, really. It wasn't no real conscious [decision]*” (Arnold, Interview 1 04/09/2007). He also felt that his playing experience was the reason he started coaching while he was overseas. Walter had also accumulated coaching experience as a player but thought that his opportunity to coach and play in Europe provided a stimulus to continue:

So that's basically why I got into it and I think being a player/coach really stimulated me. It was great to start off that way because you could still have your fun on the weekend you know and play the game and you could contribute during the week to playing it better. So I really enjoyed that and that probably because it was a positive experience, it probably helped me decide I wanted to keep going. (Walter, Interview 1 19/10/2007)

6.3.3.2 The role of clubs and associates.

The club and provincial structure and the strong cultural ties of rugby union in New Zealand provided these coaches with an environment in which they developed as players and moved into coaching. All the coaches pointed out that the opportunity to

coach was a direct result of their association with the clubs with which they had played or the friendships they had made while playing. Their movement into coaching was encouraged and facilitated by coaches or long-time stalwarts of clubs or friends who were influential people in rugby union.

Paul had already established a coaching career with youth age players but his introduction to coaching at a senior level came about as a result of the influence people associated with the club where he had played rugby union:

I always wanted to coach, always, I loved coaching, that's why I was doing it when I was playing. I was bloody fortunate at the end of my playing career people saw in me something that they thought I could offer and got presented with (coaching) opportunities. (Paul, Interview 1 05/09/2007)

Paul felt that his experience as a player and leader had contributed to his identification as a coaching talent. Walter's transition into coaching occurred at the end of his playing career although he continued playing while taking up his new appointment as a coach. His opportunity to coach came through friendships he had established as a player. Rodney started his coaching experience as a player returning from elite level representation and was often asked to coach while a player. However he eventually took up coaching immediately after retiring from first class rugby union when approached by a former coach:

I got a phone call from a bloke who wanted a hand (laughter). And I'd retired from first class rugby at the time and I had a little bit of time on my hands and he was a bloke who I had encountered, he was a coach I had encountered through my playing career and I had a sense of wanting to give back. (Rodney, Interview 1 06/09/2007)

Arnold's first opportunity to coach in New Zealand occurred when he was approached by a friend who was coaching and needed someone to help so Arnold took up the offer, *"What happened was I coached with Stan as assistant, '86, '87, '88, I coached Southland Colts"* (Arnold, Interview 1 04/09/2007).

Discussion of New Zealand site

The participants generally had positive experiences of playing a variety of sports, however they engaged in and specialised in rugby union from their primary school years. Participation in rugby union is to a large degree an unquestioned community expectation of boys and young men in New Zealand. Rugby union is a powerful dynamic in the formation of identity for New Zealand boys and men and it has a dominant position in cultural and social practice in New Zealand society (Pringle, 2008). The participants had positive experience of sport and they entered the sub field of rugby union as newcomers with affirmations of a deep love and affection for the game which developed into a lifelong attachment to the sport. The sport of rugby union is a dominant influence in their lives and all the coaches indicated that they began to specialise in rugby union from the moment that they were introduced to the sport. This influence is common among males in New Zealand and sets it apart from other rugby union playing countries including Australia (Pringle, 2008; Ryan, 2008). The sub field of rugby union with its own discourse, practice and logic became embedded in their bodies from an early age in a process through which their habitus was constructed over time. The data generated from the interviews, observations and field notes suggest that the participants developed a set of dispositions associated with their early introduction to, and the importance placed on, rugby union, the importance of competition and learning and their earlier experiences of coaching and leadership through their immersion in its practice and discourse. This is not to say that their habitus determined what and how they coached because, as Bourdieu (1990) argues, the habitus does not determine what the individual will do or what action he/she will take. Instead, it structures it as the previous section suggests.

The ways in which this section suggests the habitus of the coaches was constructed does not claim that identification of how any one experience or sets of experiences automatically constructed a particular aspect of the habitus. There is however evidence here of general sets of experiences in similar broad socio-cultural settings that produced similar habitus. Of the four coaches, Arnold seems to have a slightly different habitus and this section suggests that this may have arisen from his different experiences. Importantly, while we can see a collective coaching habitus we can also see variations between individual habitus and the ways in which they have been constructed. Much of this difference is more visible when the focus is reduced from looking at a field or sub

field to focussing on COP. As Light (2008) and others (see for example Mutch, 2003) suggest, COP offers a tighter focus for examining habitus. The context in which the habitus is constructed suggests the influence of a number of COP, including primary school, secondary school and provincial rugby union clubs. The participants' movement through rugby union involving progression from primary to secondary schools and on to clubs as established mature players within the greater community of rugby union in New Zealand.

All the participants recognised certain personal traits in the teachers or coaches with whom they had come into contact. From their experiences Paul, Walter and Rodney derived an understanding that humanistic qualities were important characteristics of good coaching. The participants acquired knowledge about coaching from significant people they encountered. However dispositions such as personal attention and caring for players were paramount in helping players to learn, develop and reach their potential.

Narrowing the focus of the examination of contexts within which a coaching habitus was constructed to consider Communities of Practice (COP) provides a clearer view. First their schools then their rugby union clubs operated as COP that they entered as newcomers and moved towards becoming fully established mature masters as senior players and captains. The opportunity and movement into coaching was facilitated by membership, connections and networks through rugby union clubs and provincial rugby union systems. The COP of a rugby union club or province over time created social connections and a desire in the participants to maintain involvement in rugby union as they approached the end of their playing career or after they ceased playing. Their experiences of playing introduced them to the practice of coaching and this could be considered as their entry into the apprenticeship phase. Their prior leadership experience as captains and experience of coaching as players forms part of the apprenticeship trajectory of coaching. This type of apprenticeship involves learning the culture and reproducing approaches to coaching. This can be seen in the way coaches value the same or similar traits in players as they do in coaches.

6.4 Conclusion

Similarities

The similarities associated with their sporting background from childhood before they became professional coaches indicates that participants at both sites had generally positive experiences of participation in sport and specialised in rugby union from an early age. This in turn ensured that participants established a long engagement with, and attachment to, rugby union as both players and coaches. Similarly, participants at both sites were exposed to coaching and leadership positions while they were still playing. As with Wacquant's (1995a, 1995b) boxers, the immersion of these coaches in the sub-field of rugby union and their participation in practice and discourse within particular socio-cultural settings embedded the logic of the field in their habitus. As part of this immersion the participants at both sites were influenced by significant people in their lives, mainly teachers and coaches. The participants at both sites shared similar pathways into elite coaching with clubs and people associated with rugby union being instrumental in obtaining positions for them as coaches and learning the culture of rugby union and rugby union coaching. The tighter focus on the construction of the habitus through participation in COP provided a more detailed view of how the habitus was constructed and was more able to explain the small variations between the habitus of the four coaches at either site. The COP of clubs or provinces provided opportunities for participants to move from being newcomers to mature expert players over time implicitly adopting along the way the values, beliefs and sets of dispositions that constitute their habitus.

Differences

There were very significant differences identified between the habitus of the Australian and New Zealand coaches but fewer differences in the ways in which the habitus was constructed. This does, however, identify the specific aspects of experience, practice and discourse at the two sites and how they shaped the construction of the habitus. Participants at the New Zealand site placed value on the importance of competition and the learning associated with competition as part of their early participation in rugby union. In addition there appeared to be a stronger connection to families and communities with rugby union in New Zealand. The specialisation in rugby union of participants from the New Zealand site occurred at an earlier age at the primary school level, mainly due to the place of rugby union in the sporting profile of New Zealand compared with its position in Australia (Pringle, 2008; Ryan, 2008). The New Zealand participants (apart from Arnold) viewed their elite participation in rugby union as a

form of cultural capital that was valued by others as a desirable quality in coaches. Indeed, there was a much broader, holistic view of experience and of the value of learning how to play and coach rugby union among the New Zealand coaches than among the Australian coaches. The New Zealand participants picked up on the humanistic qualities associated with their experience with teachers and coaches whereas the participants at the Australian site adopted behaviourist attributes as educators and a more managerial approach to coaching with an emphasis on being objective and keeping a distance from players.

Implications

The habitus of the participants has been constructed as a result of their life histories and experiences of sport, especially rugby union. The participants' beliefs, values and practices about coaching have been developed through their experiences of playing rugby union and by interacting with coaches over their period of engagement with the sport. The experience gained from playing is seen as an important attribute and type of capital that prepares the participants for a career in coaching (Cushion, 2001a; Cushion & Jones, 2006). Playing experience also provides the participants with an opportunity to learn from coaches how to coach (Cassidy et al., 2004; Gould, Giannini, Krane, & Hodge, 1990; Occhino et al., 2009). Narrowing the focus on how the habitus is constructed through the concept of a COP provides for a closely focused approach that can provide a more detailed way of looking at how coaches learn and become the coaches that they do. The experience of the participants as players and their transition into coaching as a result of the connections established within clubs and provinces can be viewed as being consistent with Lave and Wenger's (1991) notion of legitimate peripheral participation and can help explain the development of a coaching habitus in more detail than by simply using Bourdieu's concept of field. In this way playing experience and all the other involvement in clubs, schools or provincial organisations can be seen as ways in which the participants moved towards mature participation and skilfulness which can be viewed as part of the apprenticeship of coaching.

Kirk (2009) suggests that highly trained individuals such as coaches have a habitus that relates directly to their immersion and socialisation. Furthermore, citing the work of Mauss (1973) an activity such as coaching can be practised skilfully yet differently in two separate locations or nations and this difference can be explained through the

concept of the habitus. The habitus is the embodiment of a person's unique personal life history and trajectories through different fields. This section usefully identifies how the habitus was constructed while also identifying the ways in which some specific experience and participation in COP may be linked to the distinct differences identified between the habitus of coaches in Australia and New Zealand.

Chapter Seven: Views on learning and relationships

7.1 Introduction

Light (2008a) argues that the pedagogy physical education teachers adopt is influenced by their sets of unarticulated and unquestioned assumptions about learning. If it is accepted that learning is an interpretive process shaped by past experience and sets of embodied dispositions it can be implied that coaches' responses to innovation or change in coaching is also shaped by assumptions about learning that are largely unquestioned and unarticulated. Following the identification of a coaching habitus and of the ways in which it has been constructed, this section identifies the coaches' views about coaching and learning, relationships with players and the role of games in training as part of narrowing the study's focus on coach development and how it might influence the interpretation and use of Game Sense.

The data used was generated through interviews, observations and field notes that inquired into the coaches' 1) Beliefs and assumptions about learning, 2) Views on the role of games in the learning process and 3) Views on relationships with players.

7.2 Australian site

7.2.1 Coaches' beliefs and assumptions about learning

Four interrelated themes emerged from the analysis. These are listed below in order of importance, with coaches believing that:

- 1) Learning is a process of internalising knowledge as an object
- 2) Players have a learning style or preference
- 3) Players learn best when motivated and through hard work
- 4) Players learn from their peers

7.2.1.1 Learning is a process of internalising knowledge as an object.

All coaches expressed an objectivist view of learning as being a process of internalising knowledge with Elvis suggesting that learning was a process of 'absorbing' information:

But I think yeah they're going to hear it, see it or do it, pretty much. So it's going to be one of those three or a combination of those three. So it's absorbing information that way. (Elvis, Interview 2 18/07/2007)

They all saw knowledge as an object that was absorbed, injected or digested. Three of the coaches mentioned that as the game of rugby union was a professional sport, coaches were required to transmit a larger volume of information than previously, which players were required to absorb and process. This is a common view of learning where the recipients are seen as empty vessels waiting to be filled with knowledge:

So you know I think as the professional game's allowed us to inject a large quantity of information in terms of analysis and some people are better at digesting it than others so I think initially it's by doing it. (Elvis, Interview 2 18/07/2007)

7.2.1.2 Players have a learning style or preference.

Ellery, Lincoln and Elvis felt that players have a particular learning style and this should form the basis for determining how to organise information and training for players. Ellery felt the learning style can be tested and used as the basis for developing training programs. He felt that many players had a dominant learning preference which was mainly kinaesthetic or visual. In a response to a question on how players learn Ellery said:

Well I think with players, you have to firstly find out their sensory preference of how they best learn and particularly in professional rugby now, we're getting guys coming through, the greater percentage of players are kinaesthetic and visual. And that increasingly a lower percentage of players who read and write, learn. We've just done some testing on them. So for each of those players, then you have to find out what their main medium is. (Ellery, Interview 2 19/04/2007)

Lincoln said it was important to find out how players learned; he felt that players had a learning style and that there were a number of styles that players could access or to which they could be exposed. He said that coaches had to:

Try and find out, get a feel for how the guys like to learn, and some guys get very little out of what's on a bit of paper or what's on video, but they need to get out there and do it, but if there's five or six different learning styles, like you're exposed to all of them. (Lincoln, Interview 2 20/04/2007)

Lincoln also felt that it was important for players to understand their own learning style in order to learn: *“what the player’s got to do is understand his own learning style”* (Lincoln, Interview 2 20/04/2007). Elvis thought that players needed to learn by watching and listening because of rugby union’s reliance on the use of video recordings in coaching. He discussed how he used learning styles or preferences in his approach to coaching. He said that players learn:

By knowing what their best [learning preference], knowing how they absorb information for a start and then obviously trying to give them the information or tutoring in that context. (Elvis, Interview 2 18/07/2007)

Ellery, Lincoln and Elvis felt that their approaches to training reflected their understanding of learning styles and that the coaching they implemented took into account the learning styles of players. Lincoln pointed out that he and his coaching staff, *“try and use as many stimuli as we can”* to ensure players get the information. He also mentioned that it was important not to rely on just one particular learning style for training.

I’m not about the people who just say oh, no, fuck it, I’ll learn just by doing, you know? And we’ll have a crack at learn by watching, learn by listening as well, and we’ll add to that. (Lincoln, Interview 2 20/04/2007)

These observations indicated that these coaches primarily use verbal descriptions and demonstrations of skills to educate and inform the players they work with. This suggests that while the coaches saw the need to use a range of stimuli in their sessions it was not reflected in their practice.

7.2.1.3 Players learn best when motivated and through hard work

Each Australian coach felt that hard work and motivation were necessary in order for players to improve at the elite level of rugby union. By this they meant that players needed to be intrinsically motivated to improve, and learn best when involved in training that was physically and emotionally demanding. They tended to express a belief in the need for players to sacrifice and suffer a little at training to prepare them for the rigours of matches and that they needed the self motivation to do so. They suggest that they had to be motivated enough to succeed at and profit from this ‘hard work’. This is

suggested by Ellery in the following response when asked what was required for players to learn: *“it’s just hard work in simulated games situations”* (Ellery, Interview 2 19/04/2007).

Of the four Australian coaches Ellery was most convinced of the value of games as an important part of training for elite level players yet he also stressed the importance of hard work for players learning:

If you don’t have work ethic, you don’t get improvement, so you’ve got to make sure that’s a non-negotiable, and you’ve got to create it. (Ellery, Interview 2 19/04/2007)

Lincoln stressed the role of motivation in players’ learning but, like Ellery, emphasised the need for hours of hard work through hours of practice for players to improve:

The quality of your learning requires motivation, so if you’re not really motivated, you aren’t learning. It’s about doing. It’s about making mistakes, well that’s just you know, the hours of practice that are required. (Lincoln, Interview 2 20/04/2007)

Joseph expressed a similar view about the contribution of hard work to the improvement of players but used the term ‘repetition’ to describe hard work. He made this response when asked about how players learn: *“By mainly repetition on the [training] field. But most of the learning is done on the [training] field”* (Joseph, Interview 2 18/12/2007).

7.2.1.4 Players learning from their peers.

Ellery, Lincoln and Elvis regularly expressed a belief that learning to play elite level rugby union involved players learning from each other. In fact, Ellery went as far as to suggest that players were the *“best teachers”* and the coach’s role was to facilitate this interaction when creating the training environment. Reflecting upon his own experience as a player he gave the following response to a question about the role that he felt players should take to help each other learn:

Generally the best teachers are the best players, and I think players learn best from other players, and we again, our coaching role is to create an environment so that

can happen, and at the same time, ensure the standards doesn't drop. (Ellery, Interview 2 19/04/2007)

Apart from actually discussing specific issues and interacting during training Ellery suggested that more informal interaction was also an important way in which players learned from each other. He lamented the reduction in opportunities to do so in contemporary rugby union:

When we played, we used to go down the pub after a game and talk about it. That was a great learning experience. They don't do that anymore, because that's not society anymore, so they don't do it. So they get changed, they go to a nightclub and they don't talk. (Ellery, Interview 2 19/04/2007)

Lincoln felt that his organisation had been successful in creating an environment where players learn from each other. He was particularly concerned that players should learn from senior players cultural elements and how to do things associated with the practice of being a professional rugby union player. These included their approach to training and the quality of their training. While Lincoln acknowledged the individual positional knowledge and 'feel for the game' of senior players he still maintained a broad perspective that informed players. Lincoln made the following comments in response to a question about the capacity of players to learn from each other:

I reckon players learn not so much about the intricacies of the game, but they learn a lot about how to train from their peers, and that's one of the major focuses with our younger players, particularly your academists [academy players] with it's not so much what you do, it's how you do it, learning to train, learning to be professional. And good senior players, they've also got a great feeling for the game as well, but they don't have that broad perspective that coaches do, that they're far more positional, but I think they learn about being professional players, about being and what it takes off their peers. (Lincoln, Interview 2 20/04/2007)

Elvis also felt that players learned more from each other than they did from coaches about certain aspects of technique and how to play. Elvis acknowledged that certain players in his team knew more about their position than he did. When asked about the capacity of players to teach each other he cited the example of one of his players who is a teacher:

Des Taylor for me is one of our best coaches because he's one of the world class players and I say to my second rowers all the time, the best way for you to improve is to play with Des Taylor. I can tell you all I know about lineouts but playing with Des Taylor you'll learn more than I'll ever be able to tell you or show you or whatever because he'll be in your ear the whole time. He's holding on to you and your scrummaging and he'll be able to do it better and you'll be able to watch him too, you can do all those things, you can hear it, see it and do it. (Elvis, Interview 2 18/07/2007)

7.2.2 The role of games in the learning process.

When the coaches were asked about the place of games-based training three strong themes emerged. They were that a) training games create similar pressure to the actual game and test players equally, b) games are important for the development of spatial awareness and decision making, and c) there was a need for skills to be developed *before* games are used. The following section will address each.

7.2.2.1 Pressure and tests for players

Ellery, Lincoln and Elvis felt that games were an opportunity for players to be tested under similar pressure to that experienced in a game. Ellery said that games were an important part of his approach to training and that they created similar conditions to those in a match which meant that players' skills were tested in match-like conditions. Ellery made the following comment in response to a question about the role of games in the learning process for players:

They're the test, they're the most important thing for them, because that's where they've got to execute everything under the conditions, and they're undoubtedly the best learning format. (Ellery, Interview 2 19/04/2007)

Lincoln felt that games provided an opportunity to create pressure that was similar to that in the actual game although it was not possible to replicate a game exactly. However, games meant that players had to execute moves under pressure because there was an opposition which was part of the contest: "*It is the pressure of a result, and the pressure of opposition.*" (Lincoln, Interview 2 20/04/2007). Elvis felt that the contextual nature of training games was similar to the competitive game and if the design of the

game met certain spatial criteria then players would feel the pressure. In a response to a question about the contribution of games to learning, Elvis said:

I think if it's spatially right and it's a microcosm of the game you can see if they're getting the message, be it a skill message or a tactical one, yeah you can see it. Seeing it gives it relevance. This is how it fits in. They're not going to say it to you but you can see it in their eyes, I understand. So when they play the game they'll feel that environment. (Elvis, Interview 2 18/07/2007)

While Ellery placed more emphasis on using games to develop decision making and tactical knowledge, games were seen by the other three coaches as a means of testing skills, game plays and tactics under match-like conditions rather than as media for learning skills, tactics and decision making.

7.2.2.2 Spatial awareness and decision making.

Ellery, Lincoln and Elvis felt that training games provided an opportunity for players to understand the spatial requirements of rugby union and to improve their decision making ability. Lincoln made this comment in response to a question about what type of learning takes place during games:

It's about vision, spatial awareness, decision making, all those things you do with ball in hand, as the game is played, so they're what we're trying to get out of our games. (Lincoln, Interview 2 20/04/2007)

However Lincoln felt that the benefits of using games for improving spatial awareness and decision making were contingent upon the development of skills prior to the use of a game:

What you might be able to get out of the game in terms of spatial awareness and decision making is solely limited by their [the player's] lack of capacity to execute the skill. So I say got to get them to a certain skill level, and then you can grow the player, and if you can't get them to that skill level, see you later mate. (Lincoln, Interview 2 20/04/2007)

Of the four Australian coaches Ellery was the strongest proponent of using games in training and felt that playing games improved the game sense or game understanding of players. He supported the idea of players participating in games so that they could

improve their game sense. Indeed, he firmly believed that exposure to unstructured games during childhood was where game sense was developed, lamenting the decreased exposure of young players to such informal games:

I think we train too much to play, you know, kids have got to play, and that's why I suppose we've had such good game sense, because our players used to play so much. Now we don't have good game sense. (Ellery, Interview 2 19/04/2007)

Elvis felt that training games provided an opportunity for decision making and problem solving. Scrummaging is an area that is typically seen as being very technical but Elvis was aware of the learning that emerges from actual match play and from simulated match conditions in training. While convinced of the central importance of technical work in scrummaging he also outlined the need for problem solving ability and experience in matches or match-like environments for training:

What I learn in the game is about, I learn about my opponent and about how I can generate pressure and relieve pressure and that. In training if I'm doing a technical session it mightn't actually have anything to do with that opponent, it might be a general thing about maybe how we're going to engage our hips and things like that. So it's different and you've got time to talk about that why. Whereas on the field I'm just actually dealing with that problem, I'm dealing with that situation. Might be familiar with my opponent I might never have played against him. So I've actually got to come up with solutions, so you know that's probably quite a specific example but that's how I look at it you know. (Elvis, Interview 2 18/07/2007)

Joseph used games for warm ups and saw some role for them in training but was not convinced of their importance in training. However, like Ellery, he recognised the important implicit learning that arises from playing games. He felt that games such as touch football were responsible for players in Australia being more skilful than their counterparts who did not have the same climatic conditions for playing such games:

Australians have always seemed to have great skills and I'm sure that's not because the skill work they do. It's because since they've grown up, they've always played touch [touch football]. Before training, after training, they've played touch. (Joseph, Interview 2 18/12/2007)

7.2.2.3 Skills before games

All four coaches saw benefit in using training games to different degrees but they also felt that skills had to be developed/learnt before playing any training games. Ellery and Lincoln both indicated that there were advantages in using games but were of the opinion that skills have to be developed to a certain level before a game can be used in training. Ellery valued the use of games as part of a training regime for developing skills but was equally clear in his conviction that skills had to be adequate before playing the game:

When you want to improve your skills, got to lead to using it in the game, so I think the continuous skill practices you do, technique, skill, no pressure, skill under pressure, and then skill in the game, and you rotate through that continuum, and you jump. Sometimes you start with a skill in the game, go back to technique, go to skill with no pressure, and you keep moving through that, and that's the way to make the learning permanent. 'Cause what we're after is not performance at training, we're after learning at training, you know, it's a ... it's a big thing. Like our training today, the last part was more about performance to get a bit of confidence. (Ellery Interview 2 19/04/2007)

As part of a process of learning technique Ellery used a progression to develop skills in which skill execution in games was the last step and gradually developed it in increasingly complex environments accompanied by increasing pressure. Lincoln held similar views about the development of skills and their use in games. Lincoln held strong views about the role of games in training and was concerned that skills be developed in a sequential manner before the introduction of games. Lincoln made this response when asked about how to improve his players' skills: "*Well my general theory is you need a baseline of core skill, so that I'm a strong believer in doing closed skill primers, and then moving into a more open environment.*" Lincoln felt some players by not having the required skill levels can interfere with the training and learning of more experienced and skilful players:

I believe if you don't have the skill in the open environment, then all you're doing is getting in fucking other peoples' way, and fucking up the learning experience for other people. (Lincoln, Interview 2 20/04/2007)

7.2.3 Relationships with players

Relationships between coaches and players when using a Game Sense approach are very different from relationships when using directive 'traditional' approaches due to the use of dialogue instead of monologue (for example see Light, 2004a; Light & Fawns, 2003). Therefore, this research inquired into the coaches' views on their relationships with players. Two interrelated themes emerged from this:

- 1) Coaches sought to establish and maintain a business relationship with players.
- 2) The coaches sought to foster respect and honesty from players.

7.2.3.1 Coaches sought to establish and maintain a business relationship with players

Ellery, Lincoln and Elvis felt that it was important to establish a working relationship that focused on the business of rugby union. They also felt that it was difficult to maintain close social relationships with players and do their jobs properly. Ellery felt that having a professional relationship that involved mutual respect between him and the players meant he was in a much better position to improve them as players. He made this comment in response to a question about his relationship with players:

One of the things that I probably learned early was that it's very important to have a professional relationship with the players. They're never your friends and you can't treat them like your friends. You must treat them like players. So you need to have a professional relationship. That doesn't mean you can't like the players but at the end of the day I think yeah the coach is there to improve the players. So I think the most important aspect of that relationship is respect. (Ellery, Interview 2 19/04/2007)

Lincoln, like Ellery, was conscious of establishing relationships with players that were focused on the business of coaching rugby union. Lincoln maintained a relationship with players that distanced him from them and players were not part of his social group. He felt he needed to have this type of relationship in order to be honest with players. Lincoln felt strongly that players should see him as approachable and that he cared about them and their development. Lincoln was measured in his response to his relationship with the players when he said:

Well I try and maintain it as a business relationship, so certainly friendly with them, but not matey with them. So they're certainly not part of my social group. But the key thing is to be approachable and for them to genuinely believe that you care and that you want them to be the best they can be without having to be matey-matey, that it is a business so you can tell them, you can be absolutely honest with them which is the key for it. (Lincoln, Interview 2 20/04/2007)

Elvis was aware that, as he had made the transition into coaching immediately after finishing his playing career, he was coaching players with whom he had played. Therefore he felt it was important to establish a new relationship that distanced him from the players so that his role as a coach was clear. Elvis made this comment in response to a question about his relationship with players:

I actually drew a line in the sand and said okay I'm the coach now, so I went from the back of the bus to the front of the bus, didn't drink with the blokes. I made it very clear that now I'm coaching so I didn't socialise with the players hardly at all, so I made a very clear line in the sand. (Elvis, Interview 2 18/07/2007)

7.2.3.2 The coaches sought to foster respect and honesty from players.

All the coaches valued being respected by their players for demonstrating the same values that the coaches expected to see in their players. Ellery, Lincoln and Elvis felt that respect and honesty were central to their relationships with players. Ellery thought that his role was to improve players and that this meant that players should respect his knowledge and this knowledge formed the basis of improving player performance:

The coach is there to improve the players. So I think the most important aspect of that relationship is respect. Yeah, well I think that there is mutual respect, I respect the player, respect his individuality. That I respect their individuality and they respect my knowledge and hopefully what I bring to the table in terms of helping to improve them as players because a coach's main job is to improve players. (Ellery, Interview 3 12/07/2007)

Lincoln's relationship with players reflected his desire that the organisation reached its potential to be the best. Lincoln wanted people to see him as honest and approachable and his intentions as genuine. Lincoln felt that in order for everybody to improve he needed to be honest. In response to a question about his relationship with the players he said:

So hopefully they all find me approachable, hopefully they all find me honest, and hopefully they understand if I say something, I mean it. And that I want them and the organisation to be as good as it can be. If we all believe that, then that's fine.
(Lincoln, Interview 3 09/08/2007)

Elvis, like Ellery, viewed respect as an important part of his relationship with players. He felt that it was much easier to be liked but harder to be respected. Respect required the coach to be consistent with his decisions and being honest and fair on a regular basis:

Yeah respect. I think it's easier to generate an environment where everyone likes you can easily go and you know shout everyone drinks and do things like that and everyone likes you, but I think it's respect. Respect comes from consistency of decision making, fairness, honesty. So that's how I see the difference. (Elvis, Interview 2 18/07/2007)

Joseph saw his relationship with the players slightly differently from the others. He felt that it was important to work closely with the players, however he made it clear that the coaching staff was in control and that players expected the coaching staff to be in control: "*my relationship as I said is working with the players to get a result. But there's no doubt that we're running the show and I think players want that direction*" (Joseph Interview 2 18/12/2007).

Discussion of Australia site.

The coaches' views on learning, the place of games in training and relationships with players reflect their coaching habitus and suggest the extent to which they might be disposed toward the use of Game Sense pedagogy in their training. The specific focus on their beliefs, views of using games in training and on the relationships they prefer to maintain with players reveals much about the extent to which they might take up Game Sense pedagogy.

Beliefs about learning.

Although there was significant variation in the coaches' views on how players learn they all seem to be guided by common sense assumptions about learning that dominate

Western cultures; that it is a process of transmitting knowledge as an object (Davis & Sumara, 1997; Light, 2008a). The coaches held traditional views about learning. That is, they see knowledge as something that is fixed and objective which can be transferred by the coach and internalised by receptive players by adopting one of the learning preferences or modes for the delivery of information. While they recognised the utility of learning styles, their view of knowledge as fixed and objective means they do not see learning as a complex, whole-person process. As Davis and Sumara (2003) argue, this is an artificial separation of modes of learning into specific designated 'styles' whereas learning involves a range of senses that are always interacting. Recent writing and research on Game Sense (and TGfU) suggests that it rests upon views of learning and knowledge that are very different (Light, 2008a). Socio-cultural constructivist and complex perspectives on learning that have been used to understand learning in and through TGfU and Game Sense see it as a process of interpretation through which the learner constructs new knowledge specific to his/her existing knowledge and inclinations.

That coaches' stress the need for hard work to achieve improvements and a good work ethic to develop as a player is not necessarily at odds with a Game Sense approach to coaching but does suggest a valuing of socio-moral aspects of players over intellectual aspects which was rarely mentioned by the coaches. On the other hand, recognition of the importance of players learning from each other suggests an openness to the idea of learning through social interaction and some degree of recognition that all knowledge does not have to come from the coaching staff.

The place of games in training.

The coaches had positive views about the role of games in their coaching sessions but saw their utility in a way that was different from their use in the Game Sense approach. They all valued games and Ellery in particular saw them as being a very important medium for learning but not in the same way that a coach who used Game Sense might. The prime difference was the view of developing skills through games in which all coaches saw the need for skills to come first. They suggest that skill levels needed to be good enough to enable one to play the game. This reflected a view of skills as being separate from tactical knowledge, decision making and other aspects of game play. Basically the coaches saw the role of games as providing a means for testing skills and

tactics (to a lesser extent) under pressure. Even though he highly valued games as a training medium Ellery outlined a process which involved learning the technique then gradually developing the skills in increasingly complex physical contexts. Games were also used to develop spatial awareness and decision making in players but still with the proviso that skills were developed *before* the game and not *during* the game.

The coaches' approach to teaching and learning predominantly involved a traditional skill acquisition approach. They used language such as "closed" and "open" skill to discuss the structured and progressive nature of how techniques are improved in their coaching sessions. Although the coaches had positive attitudes towards the use of games, their use was contingent upon skill development prior to their use in games. They did not see the use of games as developing player skills. There is a misfit between their views about learning and the epistemology of Game Sense. Game Sense rests upon different principles than those articulated by the coaches. It sees learning as player-centred and focused on the context where the environment is important in the process of learning. Players need to be able to reflect and discuss their experiences within the context of the training environment. Game Sense is built upon assumptions about learning different from those held by the coaches. Game Sense requires discussion between players and coaches in the development of new knowledge. Lincoln in particular did not see value in discussion by or with the players in training sessions but rather viewed it as detrimental to the coaching process.

Relationships with players

Research suggests that Game Sense and TGfU require different relationships between coaches/teachers and players/students (Kidman, 2005; Light & Fawns, 2003). Game Sense is based upon dialogue instead of the monologue of directive coaching thus requiring more equal relationships between coach and players. A directive coach instructs through a monologue, telling players what to do and reinforcing a hierarchical relationship with distance between the coach and the players (Gore, 1997; Light & Fawns, 2003). The coaches all said that they wanted to establish distance between themselves and their players. They wanted to "draw the line between" coach and players. This suggests the need for a hierarchy where there is a distinct difference in the distribution of power between coach and players. The coach-centred approach sees the coaches as possessing the knowledge and the players as recipients. The Game Sense

approach embraces a more equitable distribution of power and players are seen as making a contribution to the development of new knowledge and can even extend to coaches being co-learners with the players. The coaches also wanted to earn respect from their players for displaying qualities and characteristics they felt were valued by all involved in elite level rugby union. The coaches wanted to be respected for making the hard decisions, being strong and fair and taking responsibility for their actions and decisions. They wanted respect for displaying the qualities that they felt were necessary for players to succeed in elite level rugby union.

This insight into the coaches' views and values suggests some alignment between their views on, and inclinations toward, coaching and the ideas and principles underpinning the Game Sense approach. In general, however, it suggests tension is likely between existing attitudes and inclinations and the principles underpinning Game Sense.

7.3 New Zealand site

7.3.1 Coaches' beliefs and assumptions about learning

Three themes emerged when the New Zealand coaches' views about how players learn were analysed. These are listed below in order of importance:

- 1) Players learn when empowered, they have ownership and a sense of belonging
- 2) Players have a learning style or preference
- 3) Players learn from their peers

7.3.1.1 Players learn when empowered, they have ownership and a sense of belonging

Paul, Walter and Rodney outlined a player-centred approach to teaching the players they worked with. Paul viewed his players as people and the need for them to take ownership and control of their training environment:

A little bit about the need to ensure the athletes are in a position where they can control what they do. I think that well my view is that they perform their best when they have a semblance of ownership and control. (Paul, Interview 2 07/09/2007)

Walter felt that players needed to be responsible for their own learning and they would then rise to their own challenges through self awareness rather than through the coach's awareness. Self awareness was achieved not by instruction but by questioning and through the ongoing experience of coaching. This led to players performing at an optimal level at training and in competition games. According to Walter coaching is:

...about teaching responsibilities, creating responsibility in athletes and self awareness, and comes from the belief that you know people will rise to a challenge but they won't necessarily rise to your challenge or my challenge. They've got to rise to their own challenges. And so to get that, they need to be responsible for their learning and you've got to create self awareness through not from instructions, from through a questioning approach and through experiencing what you're trying to teach. (Walter, Interview 2 11/02/2008)

Walter also felt that his experience as a player had been responsible for him establishing the principle about players being responsible about their own learning:

I got into coaching as a player coach and believing that players are the ones that have to do it and therefore you've got to be responsible for your own learning and responsible for developing your own game. (Walter, Interview 2 11/02/2008)

Rodney felt that it was important that the practice of coaching maximised learning by creating an environment that recognized and valued people, and that the training environment was inclusive and created a sense of belonging. He made this comment when responding to a question on how players learn:

I've always been around the motivation of inclusion, of involvement, of believing in the people that I include, otherwise it's counterproductive, you know. So the motivation is for them to, I guess enjoy, maximise not only what they've achieved through their time, but also the enjoyment that they derive from their time, and part of that is being part of something that's bigger than themselves, so that's that sense of belonging if you like. (Rodney, Interview 2 07/09/2007)

A sense of belonging is a strong element for both Paul and Rodney. Paul said that without a sense of belonging players would not be able to constantly participate in the physical confrontations of rugby union. Rodney felt that belonging was a critical element for players and fostered a desire to stay and be involved in such a way as to constantly improve: *"Well there's no doubt, if you don't have a sense of belonging, then*

you won't seek to stay where you are for long, so you won't seek to grow the experience you're having" (Rodney, Interview 2 07/09/2007). Rodney said he achieved this by taking an interest in players and caring for them which in turn led to better outcomes: *"By taking interest in players. Well caring for a start, and then trying to find ways of transferring that care into outcomes"* (Rodney, Interview 2 07/09/2007). Empowerment was in Rodney's view not a matter of giving up power but rather of giving ownership to players who need it the most. This meant that his role as a coach was to be a reference point for players:

But people mistake that with divesting power, by giving all the choices and decisions to the players, and essentially letting go, you're not letting go, you're actually giving the ownership of, I mean you're still a reference point, but you're giving the ownership, more ownership, greater piece of the ownership to those that need to own it. (Rodney, Interview 2 07/09/2007)

Furthermore, by empowering players the coach is able to concentrate on other issues that will give the team an advantage, *"So that allows you, as a coach, to concentrate on the point of difference"* (Rodney, Interview 2 07/09/2007). Rodney felt that when players were empowered and their views were valued this created a sense of belonging for them:

They recognise that you believe in them, they recognise that you want them to own the answers, it gives them a sense of value, that you value their opinion, gives them a sense of belonging, 'cause they've got a greater piece of ownership of it, but it empowers them. (Rodney, Interview 2 07/09/2007)

Finally Rodney was of the opinion that he would make decisions based on the views and aspirations of players: *"So if it comes to whether you run with their idea or your idea, always run with theirs"* (Rodney, Interview 2 07/09/2007).

7.3.1.2 Players have a learning style or preference.

With regard to how players learn, all the New Zealand coaches were of the opinion that players have a preferred learning style that allows them to learn. Learning style preference testing of players was undertaken by all the coaches with the teams they worked with. They also felt that when coaching they used all the stimuli possible to ensure that the sensory preferences of players are addressed. While Walter supported

the use of sensory preference for learning he also recognized that players were multi-modal and learnt in a number of ways and that questioning was also an important element in players developing understanding:

Well, it depends on the individuals I think. I mean they do those VARK tests or whatever to find out learning styles. But I generally believe people are multi-modal in their learning and you've got to cover all those modes. So it might be doing obviously. I think a lot of our players learn by doing. Some aurally, so you know you learn a certain amount by listening. Some been asked questions, some visual. And I think you know if I'm teaching something I try and use all those different modes to teach somebody to learn and try and cover them all. I think if you're teaching an individual, it's probably wise to find out what sense they learn best with and to load your information in that area. (Walter, Interview 2 11/02/2008)

Paul also felt that players had a learning preference and that he attempted to cover them all when coaching. He accommodated for this by writing, talking and demonstrating the information he wanted to convey to his players:

Well the literature will tell you you've got the visuals, the auditory, the kinaesthetics, so ... and the read-writes. So within that spectrum you're hopefully covering all your bases. So something that I learned pretty young or a long time ago when I was sort of first interacting with people was the chalk it, talk it and walk it philosophy. So write it down so people can ... the visuals and the read-writes get a bit of an opportunity to see what you're trying to do; talk it through so the auditory learners get an opportunity to experience what they need; and then go out on the track and walk through it so the kinesthetics get an opportunity. So that's what the books say. (Rodney, Interview 2 07/09/2007)

However Paul, like Walter, felt that players could learn using all the learning preferences and that they were multi-modal. Paul proposed that players needed to be receptive in order to take advantage of their preferences so that they could learn:

I think that everyone's capable of learning in all those mediums, and it's just a matter of the old mind being like the parachute, you know, it works a lot better when it's open and if the person receiving the information, no matter what mode you're working in, is receptive, the information will get through and then it's a matter of repetitiveness of the outcomes of what you want or to get the desired outcome. (Paul, Interview 2 07/09/2007)

Rodney also identified the role of learning preferences for players and, like the other coaches, said that he catered for this in his coaching. Rodney was aware that players learn differently and at different rates. Rodney made this comment when asked how players learn:

Oh, there's many different ways, I mean you could refer to the VARK stuff. In terms of learning preferences, we're all different, we all have tendencies or learnings, if you like. From a coaching perspective, I try and cater for all of those preferences, knowing that some will acquire at different times and at different rates, according to what you're exposing them to. You just try to cater for their needs, the best you can. (Rodney, Interview 2 07/09/2007)

In recognising the difficulties involved in coaching and learning Rodney also commented that learning required that the coach investigate difficulties when progress or growth was slow. This required reflection and assessment of the methods he used to determine if there were barriers to learning:

First and foremost, I'd look at myself, you know, that's part of my plan in this, you know? Is it the way I'm going about it? And then I'd look at it from the other side, you know, why are we not getting the growth from the other side, you know? I'd rather be comfortable that I've tried every which way to achieve a shift, and then I look at the other side, and try and determine why we're not getting that growth, and there's always a reason, you've just got to find it. (Paul, Interview 2 07/09/2007)

7.3.1.3 Players learn from their peers.

All the coaches felt that players learned from each other on a daily basis. Paul was emphatic in his response to the capacity of players to learn from each other when he said: "*Absolutely. That's probably where the biggest learnings come from*" (Paul, Interview 2 07/09/2007). He went on to use this analogy to explain his thoughts on how players work closely together to find solutions:

...the way the front row, for example, work together. One of the tight heads might be saying this is what he needs, I'll be saying well this is what I need. So to achieve both outcomes, they've got to work closely together and educate each other without, and no two hits in the scrum are ever the same, you know, because the opposition are doing something different, or the engagement's called slightly different. So they just need to

work through a process really calmly and have it well thought out of how they're going to achieve different outcomes. (Paul, Interview 2 07/09/2007)

Walter felt players learn by both teaching and being taught by other players. This was an approach to coaching that had been part of his own experience as a player and he felt that players should teach themselves. Walter commented that to achieve this then you need to create an environment where peer teaching becomes part of the team's practice:

Definitely. You know if you take my initial view that when we were playing we were coaching ourselves to a certain extent. Then and I found that to be the way to go. And yeah you've got to create an energy I think within your team to peer coach you know because some athletes will be strong in one area and are able to help others. Athletes that are weak in an area, it's helpful for them to then have to go and coach others so that they can develop that area. So then it's two-fold, that you can help them to become better by having to teach something that they're having to learn, having also helped others to become better by someone who's good at something teaching them. (Walter, Interview 2 11/02/2008)

Walter felt that he facilitated peer teaching by establishing a selection policy and a team environment where sharing is fundamental. He saw this as opportunity to derive positive outcomes from the competitive environment amongst the players and this resulted in innovation through players teaching each other:

You know, if I show you something that I'm good at and teach you, then I've got to go away and develop something else to stay ahead of you. I think it's quite a healthy learning environment if you're sharing because it forces you to innovate and to become better at other areas. (Walter, Interview 2 11/02/2008)

Rodney was also of the opinion that players can learn from each other which offered an opportunity for the personal growth of players:

I mean in terms of learning, teaching is a good way for players to learn, so put them in the context where they have to transfer, you're giving them the opportunity to lead, so to speak, and they grow from that. (Rodney, Interview 2 07/09/2007)

Rodney felt players learned quicker when they had to teach each other: "*Absolutely, it's the fastest way to learn, is having to teach something*" (Rodney, Interview 2 07/09/2007). The capacity for players to teach each other also leads to more creativity

and innovation: *“so they come up with great ideas, they’re a great source of innovation and creativity”* (Rodney, Interview 2 07/09/2007). Furthermore Rodney felt that the players should determine their own processes. When asked the best way to achieve this he said:

Give them the rope to determine how they want to review what they do. They can come up with their own templates, their own ideas, and then because it’s theirs, they’re much more likely to be committed to it, and excited about it. (Rodney, Interview 2 07/09/2007)

Arnold also felt that players learn from each other on a daily basis in the general interaction through the range of activities that are involved with coaching. He suggests that the learning occurs at a non-conscious level through the ebb and flow of daily activities to which the players are exposed. Arnold made this comment when responding to a question about how he encouraged this type of learning with his players:

I think it’s more probably by osmosis than anything, really. That we do things that you know, in your questioning which you do in groups they learn and we show film of different things and ask for suggestions and they learn like that and they see each other when we show guys doing things well without the guys saying like look at what I do (laughter) you know. We show film of them doing things correctly and incorrectly and things like that. So it’s probably not a conscious thing but it’s something that happens anyway just because you’re doing all those things that if they don’t learn I’d be surprised. (Arnold, Interview 2 16/10/2007)

7.3.2 The role of games in the learning process

Three interrelated themes emerged from the analysis of the role games had for learning. These are outlined below:

- 1) The use of games provides opportunities for understanding and decision making
- 2) Games replicate and simulate the actual game
- 3) Game are fun, provide excitement and competition

7.3.2.1 The use of games provides opportunities for understanding and decision making

The use of games involved many of the skills necessary in rugby union. Paul, Walter and Rodney viewed games as a way of providing a training environment that reflected the demands of competition. This meant that skills were contextualised allowing players to generate understanding that was more authentic than that gained through the use of skills and drills. Paul felt that games created an environment that was open and where many skills in rugby union could be utilised simultaneously and this led to better decision making: *“The more open the environment to run, catch, pass, kick, and having all those options available at any given moment, the better the decision making becomes”* (Paul Interview 2 07/09/2007). Walter viewed games as having the ability to create competition pressure where players have to make decisions based on their understanding and what they see:

So games give the opportunity to be able to do simple techniques under pressure, to be able to start understanding the game and making decisions based on what you understand and what you see. (Walter, Interview 2 11/02/2008)

Rodney felt that rather than teach isolated technical skills the use of games provided the ideal format because they offer a context that is close to the actual or real application of skills in a game and this has meaning for players:

Yes, they do, because it's most obvious again, the advantages of the preferred, or ideal way of doing things, are most evident in a game. You can drill a skill in isolation, but as soon as you put it in the context of a game, it's got meaning. (Rodney, Interview 2 07/09/2007)

He felt that drilling limited the understanding of players: *“Skilling and drilling, gives you the ability to do things, but doesn't give you the ability to know when to do them.”* (Rodney, Interview 2 07/09/2007). He felt that games developed a deeper understanding and he used this analogy to explain the difference between a technical approach and the use of games in training. *“it's like getting your bullets basically, you've got some ammo, you can fire, but if all you ever do is skills in isolation, you don't know when to fire or what you're firing at”* (Rodney, Interview 2 07/09/2007). He also commented that games involved teamwork and this was also a factor in developing understanding and decision making:

The distinction about the game is you're working with enough other people, which is what ultimately the game is about, a team game. So then you'll know when to flag

your leg speed, according to what's happening around you. (Rodney, Interview 2 07/09/2007)

Walter rejected the notion that players needed to acquire a level of skill development or expertise before participating in games. He argued that playing games offered an opportunity for learning and assisted in producing skilful performers: *“people would say lack of skill, lack of ability to do tasks, but I still think games are a valid way to create skill”* (Walter, Interview 2 11/02/2008). Arnold felt that players learn through the four learning styles or preferences but also felt that games provided a unique learning opportunity because of the pressure that is created and its contribution to improving decision making. Arnold said that depending on the type of skill to be learnt there were a number of ways to teach skills and this included using both open and closed instruction to achieve his aims:

Oh, using all those four basic (learning styles) – oh I think (pause) the Game Sense type thing where you're actually doing it in game situations where you put them under pressure. Depends what they're trying to learn, I mean it may be that you do repetition of a skill if you just want them to learn to kick. That's a closed skill and that's fine. But when you've got decision making involved, I think you need to put them in situations where they're going to have to make those decisions. (Arnold, Interview 2 16/10/2007)

7.3.2.2 Games replicate and simulate the actual game

Paul, Walter and Arnold valued the capacity for training games to replicate the game situation and to enable learning to take place within a context that was similar to match environments. Paul, in responding to a question about how coaches can help players to learn, said that games provided a context for learning. He was keen to use games more often and encouraged the use of games for learning. The traditional skill development approach did not create specific game-like elements required for players to develop the intuitive understanding and decision making that was required in order for players to grow and improve. One of the advantages of games over technical approaches was that the contextual nature of games created a competitive situation which is not evident in skill based activities. Games have an element of motivation that assists the coach to improve development in certain areas. Games also provide an opportunity for players to use their existing skills in a competitive context:

I think the easy thing is to pull people in and develop grids and drills that allow the player to do things in a semi-contextual sense, but don't have the invasiveness or the special awareness aspects that games do and the intuitive development and the reaction development that you need to have to get the player's growth. And for a coach, you know, you're always trying to be innovative in the drills and the activities that you do 'cause you're trying to stimulate your players through those activities. But the reality is if there's a degree of competition, this is what I found anyway. If there's a degree of competition, 'cause normally players at our level are competitive beasts anyway. So they love to have some form of challenge, competition. And if it's specific enough to allow them to have your skills displayed, then you can achieve both things, you can have stimulated, motivated players, but you can also get the development in a whole lot of areas that you need. (Paul, Interview 2 07/09/2007)

Paul saw the need for training to replicate the conditions experienced in competition. Paul called this a contextual feel for the game. Games offered a level of specificity with regard to pressure, intensity and competitiveness that was not possible in drills or other modes of training:

That it's extremely important to get the contextual feel for what you're trying to achieve in the heat of battle. Though probably the only way in which you can actually replicate that feel and that pressure and that intensity and that competitiveness that all the players get is in games, more so than when they're doing the drills or other closed skill activities. (Rodney, Interview 2 07/09/2007)

Walter said he thought games accelerated the learning experiences of players because of the ability games had to create pressure that was specific to the competition. The week-to-week experience of competition was not enough to improve the development of players and training games were the closest to a competition game. These training games created mental, physical and spatial pressure which was not evident in drilling.

They [games] give you an opportunity to simulate some of the pressures that you come across in the game both mental, physical, spatial. And it's I think it's the closest way to a game that you can actually work on experiencing. And we're in the business of accelerating people's experiences quickly and you can't just rely on a game to do that so you need to put them into game-like situations to ensure that they're stacking up all those experiences and able to apply them on a Saturday. (Walter, Interview 2 11/02/2008)

7.3.2.3 Games are fun, provide excitement and competition

In comparing the use of a technical approach to games approach, Paul felt that the latter offered an atmosphere where players were excited. Paul felt that games matched the competitive natures of elite level rugby union players and if it were possible to measure the energy levels it would be seen in the excitement generated by participating in games:

If you put an adrenalin meter on a player and said we're going to do drills, and then you said right, we're going to play this game that involves this, this and this. And you go back to do the drill again or you go back to do the game again, there'd be a much higher level of excitement and energy based around the game activity as opposed to the drill. (Paul, Interview 2 07/09/2007)

Walter saw the use of games as an opportunity to replicate the conditions of a real game and thus create competition amongst players and that by doing this there was greater transfer to competition matches: *"But to get real transfer, it's got to feel like it's real. And you can never get anything quite as real as when everything's on the line in a game"* (Walter, Interview 2 11/02/2008). Arnold felt that doing drills did not meet all his objectives as a coach, however games offered fun and excitement for his players and these led to learning:

In the first place 'cause they find it fun and enjoy it and that's a quite a strong tenet in any team that I'm involved in is that enjoyment factor. Now I think that's what games does. And when you're enjoying things, you generally learn. Whereas just doing drills, people don't really enjoy those that much. (Arnold, Interview 2 16/10/2007)

Later in the interview Arnold supported his view of fun and learning with the use of games by saying: *"There's a fun aspect to it which a game will give, that enhances the learning"* (Arnold, Interview 2 16/10/2007).

7.3.3 Relationships with Players

This section analysed the coaches' views on their relationships with players. Two interrelated themes emerged from the data, suggesting that coaches take a humanistic and player-centred approach to their interactions with players. These relationships are characterised by respect and trust as an important ongoing requirement. A third theme

indicated that coaches learn from players. The three themes are discussed below in order of importance:

- 1) Relationships are humanistic and player-centred
- 2) Respect and trust
- 3) Coaches learn from players

7.3.3.1 Relationships are humanistic and player-centred

Paul, Walter and Rodney expressed strong player-centred views. They wanted to establish positive relationships with players and saw players as having a significant influence on decisions that occur within the team environment. Each supported the idea that players should be responsible for making the final decision about activities associated with team culture, leadership and team building. On the other hand Arnold felt that the coaching staff should lead and then the players take responsibility: *“So the players have got to have buy-in but the whole thing in the first place I think if it's not driven by your coach then you're in trouble”* (Arnold, Interview 2 16/10/2007). Paul was uncomfortable with the traditional view of the coach being detached and disengaged with players. He said he had a humanistic relationship with his players: *“Had a sort of a maybe socials the wrong term but humanistic relationship prior to the actual work relationship”* (Paul, Interview 2 07/09/2007). He felt that the closer he got to players the better they would perform. Paul favoured a relationship that was more interactive where he could take a personal interest in the players:

You read material that says you can't be too close to your players. But I think the pendulum's swinging for the generation Y. I think the more individual and the more interactive you can be at a personal level, the more you can get out of them in the field. (Paul, Interview 2 07/09/2007)

His relationship was centred on maintaining the self esteem of players without diminishing his own credibility and integrity.

Walter had learned from his recent coaching experiences that the most important principle in his relationships with players was that they come first: *“It's something I've had to learn over the last probably five years, got to learn that the player comes first in all engagements”* (Walter, Interview 2 11/02/2008). He believed that if a player made

the effort to come and talk to him he had to ensure he was committed to resolving their issues or problems in a sensitive but fair manner. Walter felt that there needed to be some social distance between him and the players but in reality this often became “*blurred*” resulting in strong bonds with players which led to long lasting friendships. Walter also felt that his relationship with the players involved helping the players to become “*better people*” and in turn they would be “*better players*”.

Rodney made the connection between caring and respect for his players. Rodney felt that caring meant helping players identify their own needs and providing them with an enjoyable training environment where they thrived and that by taking this approach it may lead to him gaining the players’ respect. In response to a question about his relationship with players he said:

I guess, the respect from their end is their choice, but from my perspective I simply try to be motivated by trying to cater for their needs so that they hopefully not only have a good experience but thrive in their environment and if they identify with the way I go about my work, first and foremost I care, probably I might be luckily enough to earn some respect as well back. (Rodney, Interview 2 07/09/2007)

The optimum relationship for Rodney involved him helping the players identify their own needs by asking questions:

Well, the optimum would be for me to assist them to find the solutions that they need as fast as is possible. I mean that’s two-way effort obviously. It’s not a matter of me telling, and to do that it’s probably as much about asking as it is about telling. (Rodney, Interview 2 06/01/2008)

7.3.3.2 Respect and trust

All the coaches valued being respected and trusted by the players they coached. Paul saw his role as attending to the business of coaching which meant doing everything in his capacity to prepare a winning team. However when asked to describe his relationship with the players he coached he reflected on the fact that he knew most of his players when they were growing up and felt he was a “*father figure*”. He recognised that coaching often meant making difficult decisions but he was confident because he had the trust and respect of the players:

You want to be a sort of a father really. You want to be able to have their respect first and foremost. They're not necessarily going to like everything that you tell them but they're going to respect you for telling them and that they're really willing to do everything they can to be part of the group that you're trying to work with together. (Paul, Interview 2 07/09/2007)

Walter needed to continually ensure that his actions gained the trust and respect of the players. When asked about his relationship with his players he said: *"I'd come back to respect. I think it's really important, I think trust is a huge thing you know, the sort of thing that you've got to earn and you can lose it bloody quickly"* (Walter, Interview 2 11/02/2008). Walter asserted that leading by example was critical to maintaining the trust and respect of players. Walter used this quote by Ralph Waldo Emerson as analogy for the importance of his actions with players: *"what you do shouts so loudly in my ears that I can't hear what you say"* (Walter, Interview 3 26/03/2008). Rodney also felt that the relationship he had with players was built on trust and respect. He was also keen to point out that the relationship needed to be a working one where the respect was mutual: *"I mean, I aim for a working relationship and by a working relationship I mean one of mutual respect probably sums it up"* (Rodney, Interview 2 07/09/2007). Arnold felt that the players should respect the coach and that without respect a coach would not survive as a long term professional. Arnold felt that the nature of coaching involved making decisions about selection, making it difficult to maintain friendships with players and this meant coaches had to engender an environment of respect:

Unless there's a reasonable amount of respect you don't really have longevity with a team. I don't think you last very long if you strive to have buddy buddy relationships with all your players, it's too tough. (Arnold, Interview 2 16/10/2007)

Arnold felt team selection was the main reason for players not being happy: *"they won't all respect you because players get affected by non-selection"* and it can often affect players' self esteem. Arnold felt that it was not possible to make all the players in a squad happy: *"You can't make them [players] all happy all the time"* (Arnold, Interview 2 16/10/2007).

7.3.3.3 Coaches learn from players.

All the coaches said that they learn from the players they coach and that this learning occurs on a daily basis. This type of learning was imperative for keeping information current, for the coach's development and in Rodney's case in creating a genuine environment to foster empowerment. Paul valued the currency of the knowledge he got from players and felt this helped him to be a better coach:

I think symbiotic is the term, unless you're able to feed off each other and learn from each other, then you're not getting the full benefit of being a coach, because the players do have a wealth of understanding and knowledge. And as a coach, the ability to tap into that and draw that out so that the next generation of players are getting that information via the horse's mouth as opposed to third party, as the coach generally is, the stronger you'll be. (Paul, Interview 2 07/09/2007)

Walter expressed the view that coaches who think they know everything are doing a disservice to the players they coach. Players had knowledge and coaches could benefit from the players' understanding. He felt one of the best characteristics of a good coach was to be open to learning which meant being open to the players' interpretations as they were the ones experiencing training and competition:

Yeah I think the coaches don't know it all and if they think they do then they're doing their players a disservice. You know, I think the ability to think and the openness to learning are two of the biggest, best characteristics of the coach. And that the players who are out in the heat of the battle and doing it, often have a lot to teach you. (Walter, Interview 2 11/02/2008)

Rodney saw the ability to learn from players was based on the belief that questioning was the way to gather information from players. He viewed questioning and a desire to maintain a player-centred approach to coaching as a part of his relationships with players. Questioning was a strategy that created motivation and enthusiasm in players which led to creativity and innovation on their part. Rodney made this point when asked if he learned from the players he coached:

Huge, yeah, 'cause they've got the greatest motivation to actually to do well, so they're going to have the greatest, hopefully, the greatest enthusiasm to actually get better at what they do, and to find the solutions before the crisis, so they'll drive a lot of innovative and creative and constructive thinking. (Rodney, Interview 2 07/09/2007)

Arnold, like the others, recognised the importance of learning from players. At a practical level he was able to cite recent examples of adjusting his training and implementing strategies for games, based on the feedback from players: *“You got to learn, like just even in the tactical sense, for instance this week, two of the changes we have made to our tactics have come from one of our players”* (Arnold, Interview 2 16/10/2007).

Discussion of New Zealand site.

This chapter suggests that the views on learning, the use of games and relationships with players expressed by the coaches at the New Zealand site predisposes them toward an athlete centred approach such as Game Sense.

Beliefs about learning

The coaches' views on human learning reflect a general underpinning belief of knowledge as an object that is transmitted from coach to player(s) yet their views also suggest that, to different degrees, they have been influenced by a view of learning as being a whole-person process. Learning is something that varies from person to person and involves some active participation in the process. Certainly at a pedagogical level the coaches supported a view of the athlete/player as a whole person and not simply either a mind or a body. They clearly also espoused the advantages of athlete-centred coaching and a holistic approach to coaching that considered the life of the player outside rugby union, his emotions and social connections. They were familiar with what they called query theory, the use of questioning, as a way to enhance learning through self awareness (Hadfield, 2005). The participants supported the view that players need to be empowered, have ownership, and have a sense of belonging to ensure that learning occurs. They said that learning styles or preferences were a factor in athlete learning but indicated that these were secondary to the humanistic requirements and they were also aware that players were multi-modal. Paul, Walter and Rodney appeared to understand the range of pedagogical and socio pedagogical considerations discussed by researchers that were important if coaching was to be considered a learning endeavour (see Kirk, 2009; Tinning, 2008).

The use of games

All four coaches valued games as a central medium for learning and had clear pedagogical approaches to using them for player improvement. My observations of the coaches suggested that they used games scenarios and questioning to guide player understanding on a regular basis and that this was central to their coaching approach. Their understanding that games are a way for players to learn about rugby union and develop contextualised skills is a central theme or aspect of Game Sense. They felt that the use of games provided a level of intrinsic motivation and fun and created opportunities for implicit learning, which are aspects of games-based coaching highlighted in research (Hadfield, 2009; Kidman, 2005; Light, 2004a, 2004b). This is achieved because games simulate the actual game of rugby union. They saw the use of games as a means of replicating match conditions and training in a context similar to what they would expect to encounter in a match. One of the barriers retarding the uptake of Game Sense and TGfU in school based physical education and sport is the widely held belief that games cannot be played until the appropriate skills have been developed (Bunker & Thorpe, 1982). That is to say, skills must be developed out of context of the game *before* playing the game. However, these coaches tended to think that skills should be developed *within* the context of games, even criticising the notion that skills could be developed out of context, then expected to work in the match.

Relationships with players

Perhaps the most striking aspect of this chapter is the importance placed upon relationships with players and of developing a holistic understanding of players from a humanistic perspective. The coaches valued receiving respect and trust from players but emphasised developing humanistic relations with them as being necessary for coaching, using the term 'humanistic' to support their views. This is more than simply a preference for an athlete-centred approach to coaching. Two coaches clearly said that humanistic relationships needed to be built before any professional ones. They also stressed that coaches needed to be open to learning from players on a daily basis, hinting at a view of coaches and players as co-learners. Such relationships are difficult to establish without a reasonably equitable power relationship between coach and players and are necessary for the implementation of Game Sense coaching (Light, 2006d). They all spoke about empowering players to make decisions in training and in matches and as part of the personal growth of players. They felt players should have significant input into all the decisions made about the team and often placed their own

views secondary to those of the players. Placing athletes and their learning at the centre of activities is an essential attribute when implementing a Game Sense approach.

7.4 Conclusion

Similarities

The participants at both sites shared some similar beliefs and assumptions about learning. They felt that players learn by accessing information through one of a number of learning styles or preferences. These were visual, auditory, reading or kinaesthetic mediums. The participants expressed support for players learning from each other. Participants at both sites believed that their work involved teaching and that coaching was essentially teaching. There was also a belief at both sites that coaching should involve players in problem solving and that this was achieved by taking an enquiry-based approach to learning that was facilitated by questioning. Participants at both sites viewed games as an opportunity to construct training which simulated a real game which can facilitate decision making and understanding of the spatial requirements of rugby union.

Differences

Participants from the Australian site felt that players needed to be motivated and to work hard to achieve improvements. The key differences between the two sites are the primacy that the New Zealand participants attach to players being empowered, having ownership and a sense of belonging in order to learn and achieve improvements. Although the participants at the Australian site viewed problem solving and enquiry-based learning as forming a relationship between teaching and learning they still took a traditional view about skill development. That is, learning is internalising an external object and skills are developed in a linear fashion and based on an information processing model. Participants from the New Zealand site used guided discovery and questioning as part of their coaching practice. They used games and game scenarios as a platform or activity for learning. The fun, excitement and competition generated by games were viewed as contributing to the learning that takes place at training. The Australian participants viewed games as a way to test the skills already learned and

honed in technical sessions with an emphasis on hard work and the need to meet standards.

When coach-player relationships are considered, the Australian participants felt that players should respect them and their knowledge of rugby union and how this knowledge could improve them as players. The New Zealand participants saw the need for respect but indicated that trust complemented respect. They felt that respect was something they needed to continually earn from the players as an ongoing function of their work as coaches.

Implications

The view that learning is the absorption of information from an authoritative source such as a coach does not do justice to the complex nature of learning (Davis, Sumara, & Luce-Kapler, 2000; Light, 2008a). This is not the case with Game Sense where its successful implementation requires the coaches to have beliefs about learning where their role creates a learning environment which uses problem solving activities to enhance player skill development. The previous knowledge and experience of players is recognised and valued (Dewey, 1916/97).

While not explicitly discussing pedagogy Paul, Walter and Rodney from the New Zealand site seem to have grasped the idea of pedagogy in their approach to coaching as advocated by Jones (2006a, 2007) and set out by Kirk (2009) and Tinning (2008). As is inferred, these coaches identified this as an important consideration to improve their coaching outcomes in the future. Learning is seen as an active generative activity rather than passive absorption of objective information. As a result the participants from New Zealand more easily identify with the use of Game Sense as a learning platform for coaching. Discussion between, and with, players and coaches is essential to learning and the co-production of new knowledge. A view of learning as a process of internalising knowledge as an object is expressed by the participants at the Australian site. This sees knowledge as the privilege of the coach and sets up a monologue instead of the dialogue which is required to fully implement a Game Sense approach (Light & Fawns, 2003).

Game Sense with its basis in situated learning and constructivism, views learning as an adaptive process where the environment has a generative effect on the learner. The

content and context of the learning are important pedagogical decisions for coaches (Cassidy et al., 2004; Jones, 2007; Kirk, 2009). This sits in opposition to the information-processing model and skill acquisition approaches where learning is viewed as a linear process. The respondent is seen as controlled and passively absorbing information presented to them via de-contextualised skills and drills. In Australia, information processing and skill acquisition approaches have dominated much of coach education in sport including the subfield of rugby union. These views of learning create a dissonance with the underpinning pedagogy of Game Sense. Apart from Ellery, the remainder of the participants at the Australian site did not see the use of games as a learning platform. They preferred to see skills learned, developed and honed to an expert level prior to the introduction of a game which tested this learning. Recent research which takes a constraints perspective suggests that one cannot separate the individual, the task and the environment when learning skills (Chow et al., 2007; Davids, Chow, & Shuttleworth, 2005). This is also reinforced by Kirk's (2009) view about the role of pedagogy in sports coaching.

The difference of opinion between the two sites regarding relationships again highlights the humanistic values taken up by the coaches at the New Zealand site compared with the directive coach-centred approach of those at the Australian site. Certainly during the field work component I felt welcomed into the fold of the coaches I observed at the New Zealand site. Conversely, even though I was well known to a number of the Australian participants I did not receive the same attention at the Australian site and it felt more like a clinical business environment. Further insight can be gleaned in Foucault's work on power and knowledge and has implications on two levels for the differences found at the two sites (Foucault, 1979; Foucault & Gordon, 1980). The emphasis on the hierarchical relationships of traditional forms of coaching at the Australian site, where hard work, self discipline and an adherence to standards is required, may implicitly create a sense of surveillance which works against the type of relationships found in the successful use of Game Sense. Coaches may also be reluctant to implement innovations such as Game Sense as they too may well feel a sense of being under surveillance and may thus prefer to adhere to well established methods.

Observations at both sites indicated that the participants in New Zealand provided opportunities for discussion and questioning during training whereas in Australia the emphasis was on highly organised sessions that followed a schedule with little or no

time for discussion. The Australian participants gave detailed feedback and direction to players on the run throughout the sessions. This left limited opportunities for the type of learning that emerges from discussion between players and with coaches; essential to a constructivist approach (Andriessen, 2006). This again sets up differences in how Game Sense is accepted and taken up as part of the coaching approach at both sites.

Chapter Eight: Interpretation and use of Game Sense

8.1 Introduction

The data used was generated through interviews, observations and field notes that inquired into the coaches' interpretation and knowledge of Game Sense and how they use it in their coaching. It does this by exploring three themes:

- 1) Exposure to Game Sense
- 2) Their understanding and interpretation of Game Sense
- 3) How they use Game Sense in their coaching practices and what they see as the benefits and limitations to its application

In this section I differentiate between Game Sense with its unique pedagogy and the use of the term game sense to refer a player's sense of the game by using the title Game Sense to refer to the coaching approach/pedagogical approach and game sense to a sense of the game.

8.2 Australian Site

8.2.1 Exposure to Game Sense

All the coaches had heard of the term Game Sense but Ellery was the only coach to have participated in formal training and to have read books on Game Sense. Ellery made this comment when asked how he became aware of the term Game Sense:

Well probably the best book I've read has been that Alan Launder one, Play Practice and I went down to a seminar down at the AIS I think in 2004 or 2003 on Games Sense. (Ellery, Interview 3 12/07/2007)

Lincoln came into contact with Game Sense while working at the AIS when a Game Sense video was prepared for the Australian Coaching Council: *"I have seen a video... the coaching council made a Game Sense video about 10 years ago"* (Lincoln, Interview 3 09/08/2007). Lincoln also felt that his experience as a teacher provided him with an insight into and knowledge of Game Sense. Lincoln said that children have a

preference for participating in games rather than in the sequential skill practice necessary to be elite performers and he saw this as Game Sense:

Maybe we didn't call it Game Sense in teaching, but as a teacher, I felt the kids to learn skills, like kids don't want structured activity, to learn some skills while they're having fun, and they're more inclined if you can get into a little bit of a game, and they'll actually enjoy themselves and then pick up some skills later.
(Lincoln, Interview 3 09/08/2007)

Elvis had only recently heard of the term through his team's recent association with the army and through his desire to employ Pierre Villepreux (former French national coach) who had a reputation in Europe for coaching using a game-centred approach to develop a global understanding in players. Elvis made this reference to Pierre Villepreux and his philosophy about coaching which is consistent with Game Sense:

I've read some of his stuff I've seen some of his presentations. In fact I actually, funny you mention his name, I actually approached him to be an assistant coach here this year and couldn't get him on. (Elvis, Interview 1 28/02/2007)

During the interview Elvis expressed a desire to know more about Game Sense. Joseph had heard of the term but was not sure where he had heard it and later in the interview said that he was not sure what it meant.

8.2.2 Understanding of Game Sense

Analysis of the data relating to the coaches' interpretation of Game Sense revealed two closely interrelated themes. Coaches thought that 1) Game Sense was a personal trait or quality of players and, 2) that Game Sense was the use of minor or small-sided games in training programs to improve game sense in reference to a coaching approach.

8.2.2.1 Game Sense as a practical sense of the game

Ellery, Lincoln and Elvis felt that Game Sense was a quality or personal trait in players. Ellery when asked for his interpretation of Game Sense he simply stated: "*The ability of players to make correct decisions in a game*" (Ellery, Interview 3 12/07/2007). Ellery took the opportunity to explain his understanding by acknowledging the Canterbury

Crusaders as a team that had players with an elevated game sense compared with other players in the Super 14 competition and that this was achieved by playing games or by being exposed to game-like situations at training:

Canterbury players probably have the greatest average of game sense and that's a direct product of a very good coaching and training environment where they get to understand the games of rugby. They practise the games in simulated situations. They practise games so they develop. Even the poorest players develop reasonable game sense. (Ellery, Interview 3 12/07/2007)

Ellery called this game sense "*instinctiveness*" and said that it could be improved by creating a training environment that exposed players to game situations where they were required to make decisions and recognise patterns and cues. He said that this was achieved by "*manipulating the environment and putting [players] in game situations where they start responding to patterns or start responding to cues*" (Ellery, Interview 3 12/07/2007). Lincoln felt that Game Sense was a personal quality that gave players the ability to read the game in preference to following a predetermined pattern or set of instructions. Elvis felt that Game Sense was an intrinsic or subtle quality that some players have: "*I call them subtleties of the game. I don't know if it's the same thing but there's plenty of people that can play the game but there's only so many who can play the game well*" (Elvis, Interview 3 08/08/2007). Elvis felt that the prescriptive nature of coaching in recent times had resulted in producing players who did not have game sense and the ability to make the most of the opportunities that occur in a competitive game. According to Elvis the ability to make decisions lies at the heart of this intrinsic quality:

And there's inherent decision making in rugby in particular where there's opportunities to play and we've actually coached a fairly prescribed football program for the last 10 years and we actually haven't got players who have got what you'd call natural game sense, some have. (Elvis, Interview 3 08/08/2007)

In qualifying his ideas about Game Sense as a trait in players, Elvis commented that it was the merging of tactical and technical aspects of rugby union: "*there's a tactical element in there and you combine that with the technical and that's the game sense comes out of that*" (Elvis, Interview 3 08/08/2007).

8.2.2.2 Game Sense as the use of minor or small-sided training games

Ellery, Lincoln and Elvis thought Game Sense meant the use of minor or small-sided games in their training sessions. Ellery felt that the playing of games represented a Game Sense activity. He also felt that game sense was improved by playing small side games. Reflecting on his own experience Ellery felt that players who did not participate in games or did not have *“deliberate play”* when they were young did not develop game sense: *“but what they don't have is the play and because of that they don't learn game knowledge or develop game instincts”* (Ellery, Interview 3 12/07/2007). When describing his ideas about Game Sense Ellery drew on his observations of current players and those from his past suggesting the need for players to play more games to improve their game sense:

Now, I think we train too much to play. You know, kids have got to play, and that's why I suppose we've had such good game sense, because our players used to play so much. Now we don't have good game sense. (Ellery, Interview 3 12/07/2007)

Lincoln thought that Game Sense could be developed through the organisation of an activity or game that created the conditions where spatial awareness and decision making were required of the player. He made the distinction between the use of small sided games and instructional approaches that involved breaking the skill down into separate sequential elements. Games were important activities for players to learn to recognise cues and patterns rather than follow a predetermined path. He saw them as:

Your minor games or activities that are involved in creating spatial awareness, and people making decisions based on what they see, as opposed to pre-programmed things that they'll do in sequence. (Lincoln, Interview 3 09/08/2007)

Joseph was unsure what Game Sense was and offered a number of possible answers. These included the ability to read the game, the opposition and the various factors that influence a game:

Is that playing what's in front of you, Game Sense, is that the same?... in a game you play so many things. You play the opposition, you play the weather conditions, you play the clock, you play a number of issues. Is that game sense? To me, that's

a Game Sense. Or is Game Sense having the ability to read a situation all the time, and the ability to carry it out? (Joseph, Interview 2 18/12/2007)

8.2.3 Application of Game Sense to training

Six prominent themes emerged from the analysis of the data regarding the application of Game Sense by the participants in their approach to coaching. These are set out below and discussed separately.

- 1) The place of games in training
- 2) Specificity and replication of game conditions
- 3) Practising the unstructured aspects of matches
- 4) Pre-season
- 5) Testing skills
- 6) Views on limitations of games-based training

8.2.3.1 The place of games in training

Joseph saw little place for games in his training beyond using them in warm ups. Ellery, Lincoln and Elvis viewed games as making a significant contribution to their coaching but only Ellery saw them as forming a central medium for player development. He thought he used a continuum of methods which included coaching technique and games and that he needed to move between the methods to get results. However he said games were important and made up a large proportion of his training:

Yeah, that's probably the basis of our sessions. I believe there's a spectrum of coaching, that you go from technique based to game based there. Okay, and what you try to do, we try to move throughout that, but have a concentration in this area (games). (Ellery, Interview 3 12/07/2007)

Ellery said that he had made a conscious choice in recent times to embrace games as part of the methods he used in his coaching and felt that previous approaches had limited the development of players: "*Yeah, probably since 2005, mate, I've moved right down that track (games) 'cause I found, I think we got to limiting what we could do in rugby*" (Ellery, Interview 3 12/07/2007). Lincoln said that he used games in his training

sessions but also stated that technical or structured work needed to be completed prior to using a game:

We do, and you would have seen just a small snippet of that today. We played a you know, quite demanding five or six minute little block there, trying to get them to communicate under fatigue, and trying to get them to get bodies in motion under fatigue, so where we've done all our structured work at the start. (Lincoln, Interview 3 09/08/2007)

Elvis and Lincoln also used games in their coaching but saw them as only one part of their coaching strategy. Elvis said that games contributed to the activities that he used in the coaching environment with his players and said that it made up to 40% of training: *“A fair bit, percentage wise oh maybe thirty to forty percent”* (Elvis, Interview 3 08/08/2007). Joseph thought that games were useful for the warm up and other segments of training but did not see them as a learning tool. All the coaches indicated that training games had a future in the way rugby union could be coached. Lincoln made this comment in response to the role that games might have in the future, which was representative of the opinion of all the coaches:

Oh, there's a massive future, yeah, absolutely. I mean we've got you know, in our heads and down on paper like a whole list of games. You've got to look at the parameters of the game, and then you could make up a seemingly endless list of little games, whether they're small-sided games, or bigger-sided games, to address that component of the game. You know the only thing you're challenged by is your training time (Lincoln, Interview 3 09/08/2007).

Elvis supported Lincoln's view but was also of the opinion that it would not replace other methods as the major approach to training: *“Yeah I don't think it will be all the training but I think there's every year I think we find more ways and we find more reliable ways of using games or what I'd call games”* (Elvis, Interview 3 08/08/2007).

8.2.3.2 Specificity and replication of game conditions

Ellery, Lincoln and Elvis thought that the advantage of games was their ability to replicate or mirror the demands of a competitive rugby union game for developing both skill, tactical knowledge and match-specific fitness. Ellery felt that games offered an opportunity to replicate what happens in a competitive game at training: *“It's about*

finding, trying to replicate what happens on a game at training” (Ellery, Interview 3 12/07/2007). Lincoln saw that games offered an opportunity to meet the demands of the game at training. This included exerting a level of pressure that resulted in players having to execute skills, communicate and make decisions in a game situation while fatigued:

For approximating more the demands of the game, and then I think they're great for trying to execute skill under fatigue, to make the decisions under fatigue, to communicate under fatigue, so all those things that help you take opportunities as they present. (Lincoln, Interview 3 09/08/2007)

Lincoln saw games as providing a way of developing match-specific fitness. He said that it was important to get a level of fatigue in training games because that was what would be experienced in a real match and that games offered an opportunity to generate fatigue:

... too often, a lot of our training is done not under fatigue, whereas probably 90% of your game is played under fatigue in a game-like situation, as much as you can get it. So in the development of training through the week you want to try and get to that. (Lincoln, Interview 3 09/08/2007)

Elvis valued the use of games in his training because they were able to replicate the spatial requirements, time and pressures of a rugby union match. Elvis saw the need to have training conditions which would be as close as possible to those that would be experienced in a competitive match and games were ideal for this. In response to the value of games in training Elvis said:

I mean time and space is very important for me. I mean I don't think everything's got to be done under extreme pressure but I think part of the training's got to be under in a game like situation, as much as you can get it. So in the development of training through the week you want to try and get to that. (Elvis, Interview 3 08/08/2007)

Joseph thought that using games offered an opportunity to replicate the conditions of a game for practice purposes. He said: *“Yeah. You do. You recreate the situation that's going to happen in a game and you run through it”* (Joseph, Interview 2 18/12/2007).

He was reluctant to elaborate any further preferring to discuss the issues and pressures required to prepare the team for the competition period.

8.2.3.3 Practising the unstructured aspects of matches

Ellery, Lincoln and Elvis felt that training games were particularly useful for practising those elements of rugby union which were unstructured. These elements were referred to as *phase attack*, and occur after the set pieces have been completed and the game opens up. This is sometimes referred to as the ability of players to be instinctive or react. It is where players respond to the changing nature of the game. Ellery felt that the use of games met these requirements when he said: “*Definitely phase attack defence, is all about game based training*” (Ellery, Interview 3 12/07/2007). Lincoln was similarly disposed to use games for practising the unstructured parts of the game. He felt that games were used to address the decision making and communication that is required when the game unfolds and becomes fluid and these were important characteristics in the unstructured part of the game. In addition he said there was a need for players to move the ball to best possible location on the field when opportunities arose to attack. Lincoln made this response when asked about the advantages of games in his approach to training the unstructured part of rugby union:

Decision making and communication so we want to use our games to improve that communication and get the ball to the hot spot exactly when it needs to get there.
(Lincoln, Interview 3 09/08/2007)

Furthermore Lincoln felt that games were crucial in developing vision, communication and reacting in the unstructured part of the game:

You've got to see opportunities, you've got to communicate opportunities, then you've got to act on opportunities, so it's just that's what we've got to do in games.
(Lincoln, Interview 3 09/08/2007)

Elvis felt that there was a decision or selection to be made about the method of training for both the structured and instinctive components of rugby union. He felt that if the parameters of the training game were right then it was possible to use games for the unstructured or instinctive part of rugby union:

Well I think that the philosophy of the games has always been the debate about structure versus instinctive play and I think the games-based approach if you can get the parameters right, you can actually practise the instinctive part of the game as opposed to just practising a move which is just out of a play book, but you actually have to be able to design the drills to get them both. (Elvis, Interview 3 08/08/2007)

According to Elvis the parameters meant making sure that the training games provided the cues for players to recognise elements of attack and defence:

And you can actually have in that area so yes there would be [games] there but in the attack defence particularly attack defence if you run a system you can run that you just have your key cues but in attack as I say you have to look for the depth of defence and whether you're actually having impact on the defence. (Elvis, Interview 3 08/08/2007)

8.2.3.4 Pre-season

Ellery, Lincoln and Elvis felt that training games were of greatest use in the pre-season period because as the season approaches the demands on coaches to attend to technical matters and to prepare teams for competition reduces the time available for the use of games. Ellery for instance said that he and his coaching staff used more games in the summer: *"But in the summer months we were playing a lot of 10 and 10, 12 verse 12, 8 verse 8, with various scenarios in it"* (Ellery, Interview 3 12/07/2007). He also said that the use of games at that time of the year was important as a conditioning tool and that it was an ideal time to improve the fitness level of players. Lincoln felt that the preseason period during summer provided an opportunity to work on communication skills, decision making skills and physical conditioning through the use of games. This was the period of time where the greatest gains or improvements could be more easily achieved before the start of the season; they were less likely to be achieved during the competitive part of the season. Lincoln made this response when asked how he used training games in his program:

We do much more of that in our summer program, where we're playing a lot of games, fatigue-based games, communication-based games, decision making-based games, as a way of trying to improve our game. (Lincoln, Interview 3 09/08/2007)

Lincoln, like Ellery, also thought that use of games in the pre-season provided an ideal opportunity to improve the fitness levels of players using a method that was more palatable than normal conditioning practices. Elvis was conscious of the time it took to design new games and felt that the best time to do this was in the pre-season period. The competitive part of the season was not the time to experiment so the pre-season period was used to trial the games to determine their reliability, so that the players can use them with confidence at intervals throughout the competition period:

You know I think we use the pre-season to develop the games and we try and develop reliable games so we can actually toss them in in-season. The impairment to games is sometimes in rugby we feel obliged to keep it exciting and new and so that means a new game and a new game takes time. (Elvis, Interview 3 08/08/2007)

8.2.3.5 Testing skills

The Game Sense approach does not separate skills from understanding. It encourages the development of skills within the context of games while understanding and decision making also develop simultaneously (Light, 2004). The development of technical and tactical elements is integrated. The coaches in this study used games differently. They tended to use games to test the players' skills under game conditions. This reflects a view of skills as a discrete component in rugby union rather than integrated with understanding. Ellery, Lincoln and Elvis saw games as testing a player's skill under game-like pressure. Ellery valued the use of games in his training program because they tested the players' ability "*under game-like pressure*" (Ellery, Interview 3 12/07/2007). When asked whether games tested a player's skill or developed the skills in a player, Lincoln said:

I think they expose a lack of skill and lack of decision making, more so than developing it. So I reckon the game exposes your deficiencies, and then you go away, work on your deficiencies, sometimes in a closed environment, sometimes in a game environment, and then you come back to that. (Lincoln, Interview 3 09/08/2007)

Lincoln saw the need to remove a player and refine the skill in another way outside the game before returning to the game and to use the skill in the way it was originally intended. Elvis held similar views about the role of games in testing the ability of

players especially in the areas of catching and passing. When asked whether games tested a player's skill or developed the skills in a player, Elvis said:

I think it tests the base skills, catch, pass those sorts of things. In a way it does develop it but I think it develops more the spatial awareness and the opportunity skills, seeing opportunity and positioning defence and things like that, you know creating opportunities and practising calling and stuff like that. So anything you do is going to help develop it because it's repetition, like hitting golf balls or something like that but assuming you don't do it in a bad way. (Elvis, Interview 3 08/08/2007)

Elvis's comments reflect views similar to those of Lincoln but he does see a role for games to be used to improve or develop other areas such as spatial awareness and the ability to recognise opportunities in a game. However he sees the primacy of games to test skills and that the value of games is to provide a level of repetition that will increase development so long as the skill is correctly performed.

8.2.3.6 Views on limitations of games-based training

Rugby union is a game that is considered to be highly technical and is characterised by segments that are referred to as set pieces and which cannot normally be coached using a games approach because of the safety requirements (ARU, 2004). The game is also highly combative and there is a need to consider safety elements when using games for training. Joseph said that he would not use games in situations such as team runs that involved full contact of the whole team. He made this response asked when he would not use games in his training programs:

Full on contact, you know, team runs that's full on. I mean you can control the scrums the line-outs and the mauls and that can be full on contact, because it's controlling. What I wouldn't do is pull on a contact with team runs. (Joseph, Interview 2 18/12/2007)

All the coaches expressed a positive view that there were only a few barriers to the effective use of games, however they felt that certain technical areas of rugby union were more effectively coached using a directive instructional approach. Ellery said that areas such as the scrum were difficult to coach using games and that they were best coached through the use of traditional drilling methods. He questioned the ability of

games to meet the coaching needs of line-outs, saying that he had moved throughout the spectrum of coaching including the use of games to train this aspect. Ellery also said that he had included set pieces such as scrums and line-outs in games-based training as part of his approach to training. He also said that much depended on how his players learned best as this determined which method he used:

It's very hard to use Game Sense with scrummaging. And that's one where I think scrummaging's about drilling. It's a bit like rowing. You have to drill scrummaging and whilst you then need to put scrummaging in game-based situations, ie, plays off it, I think scrummaging would be one area I think where you really, the old traditional approach is probably the best, then you just add a new layer of game-base at the end of it. Line outs I've got a big question mark on at the moment. So over the last four years, I've varied between extreme game-based training and line-outs and very traditional, and I think again you have to move through the spectrum, to get it right. A lot depends on the group of players. I don't think there's anything right. A lot depends on your group of players and how they learn best. (Ellery, Interview 3 12/07/2007)

Lincoln when asked about the limitations of using games-based training he said it was not possible to have games for scrums: "*like you're not getting there and sort of have scrum games*" (Lincoln, Interview 3 09/08/2007). However Lincoln felt that all the set pieces of rugby union could be included within games or used as a starting point for game specific training:

I think you can incorporate, like your set piece stuff into the game-based training. You can involve activities as a starting point or a mid-point or an end point as we do, and we'll start with a we'll appear to be reasonably closed skill line-out to drive the box-kick, and then we play unstructured, and then we might say well, we're playing two minutes, or we might start off with a closed-skill activity of clean out to present, clean out to present five times, bang, kick the ball, and let's play. (Lincoln, Interview 3 09/08/2007)

Elvis said that it was difficult to use games to practise scrums and line-outs but it was possible to include scrums and line-outs in games: "*You see you can have a game that's got scrums and line-outs*" (Elvis, Interview 3 08/08/2007). He felt there were few barriers to using games in training programs but there were technical aspects of the game which needed to be practised using traditional technical methods: "*There are technical parts of the game where you've got to practise technique*" (Elvis, Interview 3

08/08/2007). Apart from the application of technical practice Elvis said that the only limitation to the use of games was the ability of the coach to design appropriate activities: *“it’s just a question of how good you are at designing stuff”* (Elvis, Interview 3 08/08/2007).

Observations indicated that all the coaches used games-based activities in their coaching programs. Ellery used games at all the sessions I observed. At the first session he used a game as the major part of the warm up. The team then rehearsed plays that would be used in the upcoming game. These were then included in a game that included the whole squad. In the second observation Ellery again used a game in the warm up and continued using games for the remainder of the session. He only stopped using a game when the team broke into units and the group he supervised practised scrum engagements on a scrum machine. In the third session I observed what is commonly referred to as a captain’s run, the last training session prior to the match; Ellery assumed an overseeing role as the players took control and ran the session. It began with a game of touch football and then the squad broke into units and rehearsed plays for the match.

Lincoln used games at all the sessions I observed and as discussed in the interview he completed all the structured technical work at the beginning of the session leaving a period of time towards the end of training to use the techniques practised by the players in a game. Ellery and Lincoln both placed themselves in a position to observe the players as they participated in the games and provided feedback to the players on a regular basis. Elvis used games in his training programs but left the supervision and feedback to an assistant coach preferring to use the time to collaborate and discuss with other coaches. Joseph took a similar approach to that of Elvis and his sessions were characterised by the use of games. At all three sessions where I had observed him he had established a practice as a manager of coaches and he did not take an active role in on-field coaching. He left this to his assistant coaches and used the time to discuss and collaborate with the coaches who were not involved in training.

Discussion of Australia site

The participants’ knowledge about Game Sense was gleaned from their experience as players and coaches and activities associated with sport and teaching. Only Ellery had participated in formal training in Game Sense. Their understanding of Game Sense on

one level involved the use of small side games or game-based scenarios in practice sessions which are consistent with the use of Game Sense. However the participants also saw Game Sense as a personal quality or trait or as a practical sense of the game. This view of Game Sense as a personal trait has been a recent development and has entered the popular discourse of rugby union and coaching (Brooker & Abbott, 2001). It is a term commonly used in the media to describe the qualities of players or teams in performances (Harris, 2009; Tucker, 2009). While some of their views on the practice of Game Sense as a coaching approach or a pedagogical approach are consistent with aspects of Game Sense there was little awareness or consideration of pedagogy or of the pedagogy underpinning Game Sense as has been suggested in previous research on rugby union coaches' use of this coaching approach (Light & Evans, 2010). As pointed out by Thomas (1996) there exists a perception by some coaches that the inclusion of any game constitutes a Game Sense approach. In reality the implementation of Game Sense requires a much deeper and complex understanding than just including games when designing appropriate activities (Chandler, 1996; Thorpe & Bunker, 2008).

While the participants valued the contribution games made in their approaches to coaching they did not see games as a way for players to develop or learn the skills necessary to play rugby union. The participants also favoured a coach-centred approach where the skills required to play rugby union are developed through direct instruction in isolation from the game. In addition, the participants felt that games were an important strategy for testing players' ability to perform skills they had learnt in structured and sequential sessions.

These linear views about learning and Game Sense are in opposition to the player-centred intentions of this coaching approach which sees the use of games as a teaching platform that allows players to learn how to play. This is further accentuated by the coaches' views of the use of games as being limited to the practice of the unstructured or instinctive parts of rugby union. The ability of games to be used to assist players to learn the more structured elements of rugby union is not part of the repertoire of strategies used by the coaches. Only Ellery used games as the basis of coaching sessions, which suggests he has an inclination towards using games as a way for players to learn. The other coaches felt that games were more applicable in the pre-season rather than in the competitive period and did not see them as a core medium for player development. This suggests the player-centred pedagogy of Game Sense has had far less

impact than its emphasis on the use of modified games and is consistent with research reported by Evans (2006b) and Light and Evans (2010).

8.3 New Zealand site

8.3.1 Exposure to Game Sense

All the New Zealand coaches were familiar with the term Game Sense but Paul was the only coach to have participated in formal training. He attended a program run by Rod Thorpe in Christchurch. Paul had also seen a video on Game Sense shown by representatives of Sport and Recreation New Zealand (SPARC) at a conference. Paul said that the emphasis of the course was the use of games as a coaching approach and that there was a need to use questioning as part of the feedback with players: *“letting the players work through the remedial activity that they need to do to get the outcome you’re after and questioning”* (Paul, Interview 3 12/02/2008). He pointed out that he had regular contact in recent years with a coach educator and was aware of books written on athlete-centred learning. These books had been influential in his goal to be more athlete-centred in his coaching. Walter was also aware of Rod Thorpe’s work on TGfU but credited his understanding of Game Sense to his experience of playing and coaching rugby union in Italy. During this period he was influenced by Pierre Villepreux and Andre Buonomo who introduced him to a global approach to coaching which focused on the use of games rather than the practice of isolated skills to teach rugby union:

Now Game Sense to me was what I came across in Italy in 1986. That to me is the first experience of Game Sense I had. They didn’t call it that, they called it global rugby but it was chuck the ball up and play but with little rules. I was exposed to that in ’86 and the Rob Thorpe phenomenon it came at a later date and it gave it a name and the questioning approach became a more espoused sort of theory but it’s something that I’d credit Villepreux and Bonomo, those sorts of people with back in my late ‘80s. (Walter, Interview 1 19/10/2007)

Rodney, like Walter, had acquired his knowledge of Game Sense from experience as a player and felt that games were used to improve the skills of players because of the limited amount of time available for training in the amateur era of rugby union. It was

only recently that people involved in coach education and academics had given it a name:

But we were probably already using it [Game Sense] 'cause as an amateur player, you have limited time to make headway to get the incremental gains and improve players' skill sets. No, it's only been in recent times where I've seen presenters present on this topic. Where blokes like yourself have put it into words (laughter). (Rodney, Interview 3 06/01/2008)

Arnold was not sure how he had learned about Game Sense. He did say that he had read about it and heard people, mainly other coaches, discussing the term: "*I don't know. I read about it and [heard] people talking about it and stuff like that*" (Arnold, Interview 3 26/03/2008).

8.3.2 Understanding of Game Sense

One prominent theme emerged in the participants' responses and this is discussed below.

8.3.2.1 Game Sense as the use of minor or small-sided training games

All the coaches felt that Game Sense was the use of minor or small-sided games in their training programs. Paul said that using games at training created an environment or context which was similar to that of a competitive game. Paul felt that this meant using game-like activities to create opportunities to learn visual and physical skills while at the same time players developed an understanding and a level of communication that would be used in a competitive game:

My understanding of Game Sense activities is probably referring back to what I was talking about before in terms of contextual environments. Having activities that are game like that allow the player to perform their activities in an unthreatening way but in a way in which allows them to grow, possess, and develop a set of skills both visual, physical skill wise. Understanding, communication, all those bits and pieces that in the heat of battle need to be performed at a high level. (Paul, Interview 3 12/02/2008)

Walter, like Paul, felt that Games Sense was the use of games or game-like situations in training that are competitive and require decision making. As result players develop

their game understanding and skills at the same time in an environment that has an element of competitive pressure. In response to a question about his interpretation of Game Sense Walter said:

Well Game Sense is probably what I've been talking about in many ways and it's creating competitive situations based on parts of the game that you want to develop that are decision laden and put players under competitive pressures and as a consequence of that they develop their game understanding and their skills at the same time. (Walter, Interview 3 26/03/2008)

Rodney felt Game Sense was creating a training context using games which resembled the actual event, in preparation for it. By using games at training Rodney thought that players experienced similar conditions and that this prepared players for the actual match. This included the type of thinking and decision making required in a competitive match. In response to a question about his understanding of Game Sense Rodney said: *"it's creating a context that's similar to the event in preparation for the event"* (Rodney, Interview 2 06/01/2008). Arnold was less certain about what he thought Game Sense was but viewed it as an opportunity to use games with similar decision making requirements to a competitive match: *"We're using other games with a similar decision making to rugby and, or that's my understanding of it"* (Arnold, Interview 3 26/03/2008).

8.3.3 Application of Game Sense to training

Four prominent themes emerged from the analysis of the data regarding the application of Game Sense by the participants in their approach to coaching. These are set out below and discussed separately.

- 1) The place of games in training
- 2) Creating specificity and replicating match conditions
- 3) Exciting, motivating and inspiring players
- 4) Views on limitations and challenges of game-based training

8.3.3.1 The place of games in training

All the coaches said they used games in their training programs and that they were a part of the way they would coach in the future. Paul said that he was interested in adopting more games-based training in his future approaches to coaching as it developed improvements in players and created advantages:

I'm certainly an advocate for pushing most of our training that way. I think though down the road that more of our training's going to be within games as we try to look for a little bit of an edge. (Paul, Interview 3 12/02/2008)

However Paul, although keen to use game-based training, was aware of the pressures of coaching and the need to be pragmatic about the methods he used. Time was a factor for him and he recognised that the questioning, which was associated with the use of the Game Sense approach required time for discussion and collaboration. Paul felt that there were times when he needed to strike a balance and push on with training in a more directed fashion because there were areas that needed to be covered in order to prepare for competition. He also thought that not all players learn through Game Sense and he needed to cater for this. When asked about the contribution of Game Sense in his training sessions Paul said:

But I think it's a great approach (Game Sense) but I think it's like anything, from a coaching perspective I think there's real balance between having the time to do that sort of activity and questioning approach to the practicalities of it all and some people learn better in different ways. (Paul, Interview 3 12/02/2008)

Walter said that games made a significant contribution to the way he coached. He said that games were used at every field session as either part of the warm up or as a way to improve the skills of players. When asked how he used games he said: "*We use them as part of our warm ups; we use them as part of our unit skills*" (Walter, Interview 3 26/03/2008).

Rodney held views similar to Walter about the place of games in training programs. In the discussion about the uptake of games they both held beliefs that it was second nature and commonplace to use them. When I prompted Rodney that not all coaches have taken up the use of games as a teaching platform in coaching he replied: "*Which is a bit scary really*" (Rodney, Interview 3 06/01/2008). Arnold said he used games regularly as part of his approach to coaching and that it met the kinaesthetic learning style

requirements of many players especially those from a Polynesian background. Arnold said that some players preferred to play games as they were kinaesthetic learners: *“because at the end of the day, most young men, particularly our Polynesian players, are much better kinaesthetic learners than they are anything else”* (Arnold, Interview 3 26/03/2008).

8.3.3.2 Creating specificity and replicating match conditions

All the coaches viewed games as having the ability to replicate the requirements of a competitive match in training. Paul saw rugby union as an *“invasion”* sport and the best way to train for it was to use an approach that was similar to the actual game. This included using certain activities which are specific to rugby union and simulated a rugby union game. These included the ability to recognise space and cues and react accordingly by moving the ball to where it is needed. Paul said that games were able to simulate the competitive nature of a rugby union game:

There’s just nothing like it [games] to simulate where the potential space is and getting people to read the cues and understand how to get the ball into that space as quickly as possible whether you’re running it, kicking it, passing it. (Paul, Interview 3 12/02/2008)

Walter felt that the use of games simulated and was specific to the demands of a competitive match: *“It’s simulation of what you’re going to come across on Saturday”*. He also thought that *specificity is hugely important and it’s logical to the players”* (Walter, Interview 3 26/03/2008). He used modified games to simulate or replicate those parts of the game that he wanted to work on in preparation for a match. When asked how he used games in his training sessions Walter said: *“we play a lot of modified sort of touch games that replicate the sort of game we want to play”* (Walter, Interview 3 26/03/2008). Furthermore he said that using this approach encouraged players to make decisions in competitive situations which involve using simple skills in complex settings. He attempts to replicate a competitive game by introducing noise, decision making and the level of competitiveness that would be present in a match, making these comments on how he achieved these goals in modified games:

I create a lot of noise at training so try and get guys making decisions while other things are happening around them. So change the situations all the time, having other

people in the way, just trying to load the activities up with decisions, competitiveness and getting them to use quite simple tasks but in complex situations. (Walter, Interview 3 26/03/2008)

Rodney used games to create a training environment that replicated the conditions of a competitive match. He felt games were the activity that most closely mimicked the thinking and decision making that players would encounter in competition. When asked how he used games in training Rodney said:

So you're training in an environment in a context that's giving them as close a replication of some of the thinking or some of the decisions they're going to have to make in a game in training. (Rodney, Interview 3 06/01/2008)

Rodney argued that the use of games was the perfect preparation in advance of the competition because it was possible to foresee competition conditions and mirror them in a game at training. Players would be able to experience these conditions and this enabled players to be familiar with similar events or circumstances in a game when they arose. This led to players having more time to make decisions because they have seen it before in training:

So you're giving them the perfect preparation in advance of the [competition] game so that when they get to the game they have a sense of having been there before and hopefully they're not confronted with things and decisions and choices that they haven't made in preparation. And they have a greater sense of time because through their preparation you have contemplated or experienced all of the circumstances they're likely to experience in the game. (Rodney, Interview 3 06/01/2008)

8.3.3.3 Exciting, motivating and inspiring players

All the coaches said that games provided excitement at training. They helped motivate players during a long physically and mentally demanding season. Walter used his experience to explain how traditional coaching with its emphasis on drilling technique would not have worked during his time coaching in Italy. The Game Sense approach was the best use of time because it motivated and excited both the coach and the players.

The thing was over there, the Italian people just wouldn't be motivated by unopposed training, analytical approach. And so Game Sense is inspiring, it's motivating to

athletes. It excites them. It excites our athletes as well as everyone else. (Walter, Interview 3 26/03/2008)

Paul discussed how he felt that the advantage of using games was their ability to generate “*competitiveness*” and “*fun*” amongst the players who he said were “*competitive beasts*” (Paul, Interview 3 12/02/2008). He also said that the players became excited when given the opportunity to participate in games at training rather than having to adhere to instructional technical sessions. Rodney felt that the key to using games was understanding when a player or players would gain the greatest benefit. Once players understood the reason for using a game they were excited and they would find solutions to problems generated by the game. Rodney made this comment when asked about the value of games in training:

Yeah, well the key is when to do it and why to do it and once they understand that, then they're excited 'cause they've got a reason to do it and then they'll find the solution. They'll recognise in the game well now's a good time. (Rodney, Interview 3 06/01/2008)

He also felt that specific physical conditioning was an outcome of using games because players were having fun and were unaware of the fitness outcomes: “*And you're also doing conditioning as well without realising it, 'cause you enjoyed it (laughter)*” (Rodney, Interview 3 06/01/2008). Arnold referred to the use of games as creating “*fizz*” to describe the enjoyment players experienced when playing games (Arnold, Interview 3 26/03/2008). He felt that games motivated players and provided excitement because they created a competitive environment at training: “*That's excitement for us, 'cause they like competing*” (Arnold, Interview 3 26/03/2008). He said that the players' desire for games was evidenced by their continued requests for more games during training sessions: “*like we get every week, we have requests for more games*” (Arnold, Interview 3 26/03/2008). He understood this, as many of the technique-driven activities did not motivate players: “*they don't particularly enjoy doing and I can understand why when you're doing skill, repetition skill work. I mean, it's boring*” (Arnold, Interview 3 26/03/2008). Arnold was pragmatic about the use of games saying it was not always possible to use games-based training because of the competing demands for training time: “*but your time's always your worst enemy in coaching*” (Arnold, Interview 3 26/03/2008).

8.3.3.4 Views on limitations and challenges of game-based training

The analysis of the response to the limitations of games-based training produced one theme which was consistent with three of the coaches. Paul, Walter and Arnold felt that disrupting the game to give feedback was difficult. They discussed the difficulties in stopping the game and providing feedback to players. Paul felt that in order to effectively use games there needed to be a number of additional coaches available to give feedback to players when they were removed from the game. He was also reluctant to stop a game because players become agitated when removed from a game because they were having fun. Because of this he saw the need to remember and record areas for development and work with players when they were more receptive to error correction and feedback. This response to a question about the limitations of using games in training reflects both Paul and Walter's views:

Yeah one of the big difficulties about using [games], this is where you need a lot of coaches on hand, 'cause you're going to ... it's pulling individuals out of a game that they're competitive and having a lot of fun in to do some remedial work. Sometimes they just go, fuck. So having the ability to recognise the issues of the athlete and then being able to address it at a different time is pretty important too I think. Like you just put it in the back of the recess or jot it down, this guy here's battling to pass to his left or whatever it may be. And then finding the right time to pull him out and give him that remedial work, when he's probably more receptive. (Paul, Interview 3 12/02/2008)

Walter was reticent to stop a game and felt that the process of stopping the game for remedial work or skill correction required the use of questioning. Players were not normally in a frame of mind to answer questions especially if the game was highly competitive: *"players get pissed off if you ask too many questions"* (Walter, Interview 3 26/03/2008). He was conscious of the need to be observant of players and wait for an appropriate moment to discuss an issue about performance.

Arnold also felt it was difficult to carry out skill correction while the players were participating in the game and that players did not want to stop playing when they were having fun. Arnold made this comment when asked about the limitations of using games in training:

It's bloody hard to do skill correction while they're playing a game. You can, but they don't want you stopping them and doing skill correction while they're playing the game. So it makes it difficult. (Arnold, Interview 3 26/03/2008)

Observations indicated that all the coaches used games-based activities in their coaching programs. Paul used games as part of the warm up at all the sessions I observed and then progressed to using game based scenarios. He started each session with a question to the players about the strengths and weaknesses of the team's next opponent and encouraged all the players to make a contribution to possible options. Walter began his sessions with a question to the team about particular scenarios which might emerge in their next competitive match and then created a game that mirrored the scenarios. He took time to question players about their interpretation of the scenario and their reactions. Rodney used a simple game at each session that involved creating space and decision making in an attacking situation for the backs. Paul, Walter and Rodney asked questions of the players during times when the game slowed or broke down to elucidate understanding. Arnold used games after first practising and refining skills in a traditional coach-directed approach, however at the end of each session he gathered the players and coaching staff together and facilitated discussions about the aims of session and encouraged feedback from the players.

Discussion of New Zealand site

Paul was the only coach to have participated in formal education on Game Sense. Walter and Rodney felt that they had a practical knowledge of Game Sense gained from their experience as players in the era prior to the introduction of professional rugby union. However, they were both aware that Game Sense had been formalised and had entered into the discourse of coach education. All four New Zealand participants felt that the use of games was an important part of their own coaching and would be an important consideration in future approaches to coaching. Their understanding of Game Sense was that it involved the use of small-sided games or game scenarios that replicated the conditions of a competitive game. They felt that by replicating these conditions of a competitive game, players learnt to deal more easily with the requirements of competition. Importantly they tended to see the use of games in their coaching as a medium for learning skills and decision making rather than merely as a means for testing pre-learned skills. They felt that games provided a high level of

motivation and inspiration and that this led to learning as suggested in much of the literature (Hadfield, 2009; Kidman, 2005; Light, 2004a).

Although not exactly following the pedagogy of Game Sense as suggested in the literature (see for example, Light, 2004) the participants' practical use of games is *consistent* with the pedagogy of Game Sense. Paul, Walter and Rodney created games or game scenarios and engaged players in discussion about the ramifications of actions associated with the circumstances. My observations also indicated that the participants allowed time for players to work through various permutations associated with the game or challenge. Paul was the only participant to articulate the specific need for questioning but observations indicated that Walter and Rodney did have a practical application of the questioning pedagogy required when using Game Sense. While Arnold did not use games as a teaching platform in the sessions I observed he did allocate time for discussion at the end of training with the purpose of engaging the players in reflection. He was also aware of the importance of games in creating fun and motivation.

Perhaps the most significant aspect of this part of the study is the context within which the New Zealand coaches worked and the influence this appeared to have on their practice. When coaching in general in New Zealand is considered, there seems to be an emphasis on holistic approaches to coaching with consideration given of the player's life and experience outside rugby union. In some ways this is similar to the constructivist perceptions of learning that researchers claim underpin Game Sense and TGfU (for example see, Kirk & Macdonald, 1998). These approaches consider the experiences and knowledge that learners (players) bring to the learning experience and which shape or structure the learning/knowledge that they construct. In this way, the coaches' approaches to coaching align well with the assumptions underpinning Game Sense and TGfU (Light, 2008).

8.4 Conclusion

Exposure to Game Sense

The participants at both sites had heard of the term Game Sense and used games in their coaching to different degrees. Coach education had not made a significant impact on the

participants' understanding or knowledge of Game Sense. Paul, Walter and Rodney at the New Zealand site had been aware of the work of Rod Thorpe with TGfU through the work of a sports educator in New Zealand. Only two of the participants, Ellery and Paul, one from each site, had been involved in any formal training in Game Sense. The remainder of the participants gained their knowledge about Game Sense from their personal experience during their time as players and through their experience of coaching. Walter and Rodney at the New Zealand site claimed that they learned about the use of games in the amateur era when there was limited time for training. Arnold had gathered his knowledge about Game Sense from other coaches. At the Australian site Ellery had a similar background to Walter and Rodney citing his experience as a student playing games at high school. Lincoln developed his views on games through his experience as a teacher, with the opinion that students prefer playing games to practising the required skills. Elvis and Joseph, like Arnold, gained their knowledge of Game Sense through their experience as coaches and through discussions with other coaches. Experience has been cited as one of the major avenues for developing expert coaching knowledge (Abraham & Collins, 1998; Culver & Trudel, 2006; Lyle, 2002; Mallett et al., 2009).

One significant difference between the two sites is the culture of coaching that the two sets of coaches work within. From what the Australian coaches said there was a strong management culture in Australian rugby union coaching. At the New Zealand site there seemed to be a strong movement toward more holistic conceptions of coaching captured in the notion of care. As part of this culture the New Zealand participants have been in contact with coach educators such as Lynn Kidman and Dave Hadfield who promote athlete-centred and questioning approaches to coaching and this approach has been taken up at a national level (Cassidy & Kidman, in press).

Coach education, especially in Australia, has not been responsible for coaches developing their knowledge and understanding about Game Sense. The role of pedagogy in formal coach education, at least at the elite levels of rugby union coaching in Australia, has also had minimal impact on coaching. This draws attention to the issue of pedagogy in coaching. Despite some recent attention, pedagogy is neglected generally in coach education programs and is under-represented in much of the coaching literature (Jones, 2006a; Kirk, 2009; Tinning, 2008; Woodman, 1993). It is only over the past four to five years that pedagogy in Australia has been considered to

challenge a dominant view of coaching as a non-problematic linear process of knowledge transmission and a non-critical acceptance of one way to teach (Kirk, 2009; Tinning, 2008). Participants at both sites did not articulate the underlying pedagogical principles of Game Sense, however the participants from New Zealand displayed a practical understanding and application of questioning to raise awareness in, and interaction with, players. Knowledge and dispositions associated with the participants' habitus explains how they interpret Game Sense and apply it in their coaching practice.

Understanding of Game Sense

When encouraged to think about Game Sense as a coaching approach the participants tended to say that it is the use of small-sided or minor games that creates a level of specificity and replicates game conditions (Evans, 2006b; Light & Evans, 2010). There was however confusion between the idea of Game Sense as a defined coaching approach and game sense as a practical, embodied sense of the game. Apart from Ellery the participants at the Australian site tended to think that Game Sense was an inherent sense of the game that was very difficult to coach. This embodied knowledge is related to game understanding rather than a particular teaching approach with an underlining pedagogy. The Australian participants felt that this ability is game sense and that it is developed through the use of small sided games. The pedagogy and intent of Game Sense is not well understood at the Australian site and this mirrors similar results from research reported elsewhere (Evans, 2006b; Light, 2004a; Light & Evans, 2010).

When encouraged to think of Game Sense as pedagogy the participants indicated that successful implementation required games to be designed in such way as to create a level of specificity that related to or was expected in an actual match. Participants at both sites valued the contribution of games and viewed them as important in their future approach to coaching. The difference between the two sites was that the majority of the participants from New Zealand viewed games as a way for players to learn the skills and knowledge required to play rugby union. This involved the capacity of games to motivate and challenge players and is consistent with Hadfield's (2005) and Kidman's (2005) claims that Game Sense creates intrinsic motivation and implicit learning that leads to deeper learning than that gained from de-contextualised skill training (Brooker, Kirk, Braiuka, & Bransgrove, 2000). In particular, Paul, Walter and Rodney at the New Zealand site viewed the use of games as having the capacity to provide a learning

environment and a way for players to improve. In contrast, the Australian participants relied on games to test players after the initial learning was completed through structured training.

Application of Game Sense

The Australian participants limited the use of games to the preseason period or viewed them as useful for the unstructured components of rugby union. Apart from Ellery, the Australian participants did not see the use of games as a central platform for learning and coaching. The observations confirmed this with the Australian participants employing games only after the technical or structured work was completed prior to the introduction of a game that utilised or tested the skills learnt. In contrast the New Zealand participants used games or game scenarios at all of the sessions I observed and used questioning to determine whether players understood the requirements of the task. There were often periods of prolonged discussion between players and with the coach.

The implementation of Game Sense involves not just the use of a game during training but instead requires both the use of the pedagogical principles underpinning it and the ability to design games appropriate to the context and situation so that a learning environment is created (Chandler, 1996; Thomas, 1996; Thorpe & Bunker, 2008). As pointed out by Evans (2003) in his collaboration with French rugby union coach Pierre Villepreux on coaching rugby union the use of Game Sense does not involve merely a series of drills. It is a method of learning that is shared by the coach and the players, a point that has not been taken up by the participants at the Australian site. While many coaches use games-based training activities and the term Game Sense has become part of the discourse of coaching, it is an approach that is not well understood. Part of the confusion especially in Australia may rest in its name. Coaches report that Game Sense is often interpreted as a sense of a game and seen as a desired characteristic in elite players or as embodied knowledge and not as a unique coaching pedagogy (Brooker & Abbott, 2001).

Chapter Nine Conclusion

9.1 Introduction

The conclusion focuses on answering the research question by summarising what the study suggests is the impact of Game Sense on the coaching practice of the participants and explaining how this is shaped by the participants' coaching habitus. My use of Bourdieu's (1977) concept of habitus is central to understanding why the participants used or did not use Game Sense in their coaching and if they used it how it was used. This emerged as such an important aspect of the study that in fact it became an investigation into coach development/learning. The findings have significant implications for coaching and coach education in general. The study thus developed into an inquiry into coach development conducted through the lens of the participants' interpretation and use of Game Sense.

9.2 Impact of Game Sense on coaching practice at each site

At the Australian site the participants saw Game Sense coaching as comprising the use of small-sided games to develop games sense as an embodied sense of the game. Observations at the Australian site and discussions with these coaches suggest that games are used as an important part of training but that Game Sense pedagogy has had little impact upon their practice. This supports previous research on the impact of Game Sense on Australian rugby union coaches that suggests they use and value games, but do not adopt the pedagogy of Game Sense in the manner suggested by the literature (Light & Evans, 2010). In this study the Australian coaches used games as part of the warm up and then again after the structured or technical training was completed to test skills under pressure. Ellery was the only coach who attempted to use games as a medium for learning throughout his coaching sessions in his desire to implement what he called a "flow" (game-centred) approach. For example, he used games to improve the attacking ability of players, work on ball security and practise kick returns. Despite this he did not use questioning and, like the other Australian participants, he directed players during the sessions. Ellery, despite his reluctance to step back and take a role as facilitator instead of instructor, believed in the potential of Game Sense to improve decision making and tactical awareness and seemed to be slowly moving toward a Game Sense approach. Elvis and Lincoln also valued the potential of training games to develop game

sense but not as a means of developing skill. As with the coaches in Light and Evans' (2010) study, they used games only *after* the required skills had been developed in discrete drills-based sessions. This strong reliance on skill acquisition before the use of games obstructed the uptake of a Game Sense pedagogical approach and is reflected in Lincoln's view on the use of games:

So I reckon the game exposes your deficiencies, and then you go away, work on your deficiencies, sometimes in a closed environment, sometimes in a game environment, and then you come back to that. (Lincoln, Interview 3 09/08/2007)

This view on the use of games seems to suggest that the respondents think it is not possible to learn skills within the framework of a game when so much of the literature on Game Sense suggests that learning skills should occur at the same time players are learning tactical knowledge and decision making (Brooker & Abbott, 2001; Hadfield, 2005; Kidman, 2005; Light, 2004, 2006). Joseph had only a fleeting interest in, and knowledge of, Game Sense and like the others, saw some benefit in using games in training to develop skilful players. He did not take an active role in coaching, leaving this to assistant coaches, and primarily used his time to discuss issues with other coaches. Subsequently he had not really taken up Game Sense to any significant extent. The difficulties of implementing Game Sense in coaching as suggested in this study and by other research (see for example, Light & Evans, 2010) are also mirrored in the difficulties of implementing TGfU in physical education teaching where the traditional approach of teaching skills before the use of a game has been difficult to change (Light, Swabey & Brooker, 2004; Light & Tan, 2004; Light & Tan, 2006; Rossi, 2000).

By contrast, three of the participants at the New Zealand site displayed a sound knowledge of Game Sense and its application. They understood Game Sense, like the Australian participants, to be the use of small-sided games in training sessions. Game Sense had a significant influence on the New Zealand site with three of the four coaches convinced of its value. They used it extensively in their practice but also integrated it with more traditional approaches to skill work. While not being able to explicitly articulate the pedagogical principles of Game Sense such as modification, exaggeration or game suitability the participants were able to apply these principles in their practice. Walter and Paul both used games to challenge player understanding of game-related situations they would encounter in a match and used questions to stimulate discussion and understanding with players. That is to say that they had an embodied or non

conscious understanding or 'feel' for its pedagogical principles. In Bourdieu's (1977) terms, they had a practical mastery of Game Sense coaching (Calhoun, LiPuma & Postone, 1993; Kirk, 2009).

Interviews with the New Zealand coaches and observations of their practice suggest strongly that they were well versed in the Game Sense approach and used it extensively in training. Paul, Walter and Rodney used modified games and exaggerated certain tactical requirements they were trying to achieve in their practice. For example, Rodney often used a simple attacking game where players could manipulate space and time within an elongated area to improve decision making and creativity in attack. In this training he took a facilitators role during the games and only interrupted to ask questions. Paul used a series of line-out games to create competition within the forwards, posing questions regarding the capabilities of their opponents to encourage a tactical response from his players. In the introductory game he widened the distance between the line-outs to encourage faster footwork and improve the lifting and the jumping ability of players. On the other hand, Arnold was less familiar with Game Sense and used it far less than the others. While seeing something of value in Game Sense he was less convinced of its worth than the others and did not use a game-centred approach to the same extent they did. However, Arnold did provide extended periods of time during and at the end of training for discussion with and between players and coaching staff to review aspects of the training sessions. This approach shows on one level an understanding of an athlete-centred approach but not of its utility in Game Sense.

Game Sense had a limited impact upon coaching practice at the Australian site with the exception of Ellery whose habitus disposes him toward the use of game-based coaching but, at the same time, prevents him from 'letting go' and standing back to adopt its pedagogy. This is a common problem identified in the uptake of TGfU and Game Sense by physical education teachers and coaches (Butler, 2005; Harvey, Cushion & Massa-Gonzalez, 2010; Light & Tan, 2004; Light & Evans, 2010) and reinforces the need to consider the values, beliefs and dispositions of coaches when attempting to effect change in practice (Cassidy, Jones & Potrac, 2004; Jones, 2006; Potrac & Jones, 1999).

At the New Zealand site a significantly different coaching culture shaped the uptake of Game Sense by the coaches. Three of them articulated beliefs about coaching and player

learning that reflected a belief in the principles underpinning Game Sense. This was reinforced through observations of their practice where a significant amount of training used a Game Sense approach. Although Arnold was not as committed to the Game Sense approach as the others he was open to its use and potential benefits. At both sites the larger coaching culture within which they all worked and their coaching habitus (developed within specific environments over time) profoundly shaped their practice.

Much of the coaching literature argues that coaches' experience has a major influence on how they coach and this is supported by this study (Abraham, Collins & Martindale, 2006; Cassidy, Jones & Potrac, 2004, 2009; Culver & Trudel, 2006; Wright, Trudel & Culver, 2007). The use of games in coaching from the experience of the coaches who took a Game Sense approach, or were influenced by it, was seen as a way of developing more skilful players. Their experience, embodied in their habitus, then acted to structure their uptake of Game Sense in their coaching practice (Cushion, 2001; Cushion & Jones, 2006; Harvey et al., 2010). However, in Ellery's case, the movement towards the "*flow*" approach has taken a considerable amount of time and is only a recent development when compared with those at the New Zealand site. This emphasises the importance of the social and cultural (coaching) context that, in this study, seems to have had a profound effect on practice (Taylor & Garratt, 2010).

Formal coach education seems to have had a limited effect on the knowledge of the participants about Game Sense and their use of it, suggesting that coach education had little influence upon their knowledge and use of this approach to coaching. Indeed, coach education has been a "low impact" activity when compared with coach experience. The work of coach educators in New Zealand does seem to have had a significant impact on the New Zealand participants' knowledge of Game Sense and the use of questioning in their coaching practice. This is, however, within the context of the development of a broader coaching culture that supports such ideas in New Zealand (Cassidy & Kidman, in press).

Game Sense pedagogy has had minimal impact upon coaching at the Australia site but has had a far more significant impact upon the practice of the coaches at the New Zealand site. This can largely be explained through the influence that a coaching habitus has upon coaches' attitudes and practices and is explained in the following section. The concept of habitus provides a very powerful and persuasive theory for understanding

practice (Crossley, 2001; Jenkins, 2005) and has been used in research and writing on coaching and learning (Harvey, Cushion & Massa-Gonzalez, 2010; Kirk, 2006; Taylor & Garratt, 2010). The following part of the conclusion explains what shaped the influence of Game Sense on coaching practice by examining the participants' coaching habitus.

9.3 How has the coaches' habitus shaped their interpretation and use of Game Sense?

Using Bourdieu's (1977) concept of habitus provided a powerful means of identifying sets of dispositions and inclinations that structure (but not determine) coach action, decision making and interpretation of Game Sense. In other words, it provides a means of understanding why coaches adopted or rejected Game Sense, and the extent to which it shapes their practice. Social constructivists emphasise that learning is an active process of interpretation shaped by the learner's own experiences and existing knowledge (Fosnot, 1996b). This learning is situated in social and cultural settings and is influenced by these contexts (Kirk, 2009; Kirk & MacDonald, 1998; Ovens & Smith, 2006). Combining this socio-cultural perspective on learning with Bourdieu's concept of habitus, as suggested by Light (2008b) provides an effective means of understanding how coach experience over their professional lives operates to shape their interpretation and use of Game Sense and, more broadly, the ways in which they coach.

The coaches' different understandings of Game Sense and the variation in their application of it in their coaching is significantly shaped by their normally unarticulated beliefs about learning. The habitus of the participants from the Australian site structured a coach-centred approach and an objective view of knowledge as something that could be transferred. This view of learning can be seen in the participants' beliefs about the efficacy of learning styles in their approach to coaching and the way they valued holding, and making explicit, their technical knowledge as a type of cultural capital that players respected. This concurs with the findings in other research (Cushion, 2001; Cushion & Jones, 2006). This is reflected in their practice of using Game Sense in addition to, or after, the technical work has been completed. The habitus of the participants from the New Zealand site predisposed them toward an athlete-centred coaching approach and even Arnold, who did not use a Game Sense approach much, was aware of the need to discuss elements of training with players. Their views about learning centred on the requirement of a level of engagement with players so that the

coaching environment should facilitate empowerment of players, characterised by ownership, self awareness and a sense of belonging.

Similar differences in the habitus of the participants at both sites can be seen in their respective views about what makes a great rugby union player and provide some insight into the role of reproduction of practice at both sites. What mattered most at the Australian site was the need for hard work on the part of players, with coaches setting a good example and a management approach being followed. Foucault's (1977) notion of the panopticon and the power of control exerted by a sense of surveillance helps understand how the coaches' concerns with how their coaching looked, their need to appear in control and to be providing an example works against their uptake of Game Sense (Foucault & Gordon, 1980; Gore, 1997; Taylor & Garratt, 2010). The strong desire to manage and direct training creates tension with the underpinning pedagogy and ideals of Game Sense as was the case in Butler's (1996) study on teachers' responses to TGfU. On the other hand, the New Zealand participants take a more democratic view of their work, often explicitly articulating a desire to be "*athlete-centred*". Linked to this is the importance of empathy and care to assist players to develop self awareness. Such views are clearly better aligned with the principles and practice of Game Sense coaching than the managerial approach used at the Australian site.

The use of Lau's (2004) three themes for operationalising habitus provides an opportunity to view more closely the role of habitus and its influence on the participants' interpretation and use of Game Sense. Firstly the participants' views on the characteristics of good coaches at both sites represent differences in the place that Game Sense does or might have in their coaching practices. The habitus of the Australian participants predisposes them toward a coach-centred approach whereas the New Zealand participants are predisposed towards an athlete-centred coaching. The difference between the two sites means that the New Zealand participants are more inclined to have a positive approach to implementing Game Sense. Secondly, the participants' perceptions about Game Sense created differences between the two sites due mainly to the way the Australian participants did not perceive the need for learning to be a key part of their work with players. Managing and organising were more highly thought of.

Lau's (2004) third operational element provides an understanding about the habitus of the participants and their ability to move towards a Game Sense approach through their beliefs in innovation. Innovation implies change and without a belief in change and its possibilities, and a whole heartedness to make changes, then it is not possible to change practices (Butler, 2005; Hadfield, 2005; Kidman, 2005). More specifically, in the case of Game Sense this requires a change from instructing to facilitating, and leads to significant changes in relationships with players and requires a core belief in empowering players (Butler, 2005; Hadfield, 2005; Kidman, 2005). The Australian participants generally took a cynical view of innovation and, with the exception of Ellery, were of the view that innovations in rugby union coaching were limited to the development of the physical capabilities of players. The New Zealand participants had a positive attitude toward innovation, saw rugby union coaching changing rapidly and felt that there was a need to learn. For example, Walter, commenting on developing an athlete-centred, holistic approach, said that; *"You know, I've learnt more in four years than in 40 years"* (Walter, Interview 1 19/10/2007). Rodney suggested an athlete-centred approach was required as the main thrust of innovation:

Yeah, I mean the most obvious, to give you a really obvious shift and it's happened in the last 10 years, is it's gone from being prescriptive to being more about empowerment. So it's gone from telling to asking. (Rodney, Interview 1 06/09/2007)

The significant differences in the habitus of both sites can be explained by Mauss (1973) who points out that an activity such as coaching can be practised skilfully but differently at two separate locations or nations and that this difference is captured in the habitus. The habitus is shaped by a person's unique personal biography and relates to their experiences, nationality, social class, age and generation (Kirk, 2009). The learning that takes place as a result of socio-cultural practices are taken up as expert performance, such as coaching, and these are embodied over time in the habitus. In the coaching literature, Jones, Armour and Potrac (2004) propose that habitus is the bridge that negotiates or links structure and agency when examining the interplay between the person and the group.

At a more common sense level coaches in this study hinted at sets of structuring common beliefs that shape coaching. For example, Elvis's response to a question on innovation suggests a notion of a collective habitus: *"I think everyone's got fundamentally the same broad structures but the devils in the detail"* (Elvis Interview 1

28/02/2007). Practice at the two sites in this study is structured by two different, collective habitus that had a profound influence on the interpretation and use of Game Sense. As others suggest, this collective habitus often leads coaches to act, often unconsciously, in a way that satisfies the expectations of a group (Lyle, 1999; Taylor & Garratt, 2010). It is, however, important to note the variations at each site where, coincidentally, one coach displays a habitus that is significantly different from the other three and, consequently, has a different view of Game Sense. As Wacquant (1998) reminds us, the individual habitus is a variation of a common matrix.

Coaching at the elite level requires a particular habitus, which is unique to the sport and the context of its use (Cushion, 2001; Cushion & Jones, 2006; Kirk, 2009). The habitus of the participants is due in part to the reproduction of values and views of coaching, which have been taken up in the social spaces traversed by the participants over their lifetimes. Cushion (2001) raised questions about the habitus of coaches and the implications for coaching practice that are supported by this study. The coaches' habitus have been developed over their lifetimes and their trajectories through social spaces, which means they have acquired certain dispositions that have influenced their interpretation and use of Game Sense. More generally, coach experience has tended to be the avenue by which they develop their coaching practice with habitus providing a way to understand how experience structures practice. There is a strong link between experience and coaching with a view that the knowledge acquired by experience is often tacit, difficult to verbalise, implicit and to a large degree unconscious and acquired on a day-to-day basis (Jones, Armour & Potrac, 2004). It is therefore very powerful because it operates at a non-conscious and often unnoticeable level.

Bourdieu's (1977) emphasis on corporeal knowledge and the central role that habitus plays in his challenge to the cognitive bias in the social sciences suggests that habitus provides an ideal concept for analysing and understanding how past experience shapes current practice in coaching. The use of Lau's (2004) ideas on operationalising habitus helps to specifically identify characteristics of a coaching habitus and to understand why coaches perceive Game Sense in the way they do and how it structures their uptake of it. The culture or context of coaching can have both a positive or negative effect on the adoption of innovations such as Game Sense (Taylor & Garratt, 2010) and the use of habitus provides a useful way to understand why an innovation such as Game Sense has or has not been taken up (Harvey et al., 2010).

How were the coaches' habitus constructed?

Tracing the construction of the coaching habitus of the participants as a means of understanding *how* they became the coaches they are, provides a useful means of understanding coach development as an ongoing and long-term process. In doing so it further highlights the importance of context and the specificities of the particular fields or COP within which coaches practise and develop.

Participants at both sites had generally positive experiences of participation in sport and specialised in rugby union from an early age leading to long engagement with, and attachment to, rugby union. They were all exposed to coaching and leadership positions while they were still playing, where they were all influenced by significant others, mainly teachers and coaches. They shared similar pathways into elite coaching with clubs and people associated with rugby union being instrumental in their obtaining positions as coaches and assisting their learning the culture of rugby union and rugby union coaching. In terms of sport and coaching, Cushion (2001) suggests that coaches belong to interlocking communities as part of their personal trajectories towards establishing a career. These affiliations with social networks and communities contribute to knowledge building and the community becomes epistemic where it contributes to conceptual frameworks required in that community (Ovens & Smith, 2006; Wenger, 1998, 2000). This study lends support to Cushion's (2001) claims and to the idea of the development of a coaching habitus being contingent upon interaction in social spaces and the movement through these social spaces (Kirk, 2009). Kirk also argues that there is a need to recognize the deep values that surround the embodiment that occurs in and through social practices such as sport.

The tighter focus on the construction of the habitus through participation in COP, however, provides a more detailed look at how the habitus was constructed and is more able to explain the variations between the habitus of the four coaches at both sites. The COP of clubs or provinces provided opportunities for participants to move from newcomers to mature expert players over time picking up implicit values, beliefs and sets of dispositions that constitute their habitus. While there was reasonable uniformity amongst three of the four coaches at each site one coach varied in attitude, disposition and the nature of their practice. Examination of how the coaching habitus of the coaches were constructed highlights how specific aspects of experience, practice and discourse within particular contexts contribute toward the construction of an individual coaching

habitus within a larger collective habitus of coaching and within differing cultures of sport as a field in both countries.

9.4 Closing thoughts

The results of this study have significant implications for research on coaching, coach education and coach development. They suggest that Game Sense has had a significant impact upon rugby union coaching in New Zealand but less of an impact upon coaching at the same level in Australia. In doing so they highlight the issue of pedagogy in coaching and the ways in which it has been neglected by coaches and coach education programs (Cassidy et al., 2004; Jones, 2006b). Game Sense was developed in Australia with many national and state governing bodies claiming to use Game Sense in their coach education but nowhere is there any significant explanation of *how* to coach the Game Sense way. This is not only restricted to Australia with, for example, the Rugby Football Union (RFU) in England also supporting a Game Sense approach in their youth programs with little explanation of its pedagogy. Game Sense thus becomes merely the use of games in training as a useful adjunct to existing approaches and loses its most distinctive and useful aspect - its athlete-centred pedagogy.

The results of this study also offer a persuasive explanation for the different ways in which Game Sense influences practice at both sites by considering the different socio-cultural contexts and by using Bourdieu's (1977) concept of habitus. It is also worth noting here that the differences between the two sites identified in this study may well be very much changed now since the appointment of a New Zealand coach, Robbie Deans, in 2009 as the Wallabies' head coach. With the insights into the dominant approach to rugby union coaching in New Zealand with which this study has provided me it has been fascinating to see the problems that Deans initially experienced, the subsequent changes in the Australian national team's style of play and its recent results as we approach the 2011 Rugby World Cup in New Zealand. As I have suggested in this thesis, the globalisation of rugby union (and sport in general) is having a significant impact upon coaching.

The identification of a coaching habitus and its influence on the uptake of a coaching innovation has implications for any state or national governing sporting bodies and for existing coach education programs with their typically brief, formal education courses.

It also has implications for further research on coaching. While habitus has proved to be attractive for some researchers in the field it is yet to be operationalised in empirical research, so this study provides an example of one way in which this can be done (Cassidy et al., 2004). As the study progressed its focus on habitus increased as a means of explaining why Game Sense was interpreted and used in the ways it was at both sites. This increasing focus on habitus and the need to better understand the concept and where it fitted into Bourdieu's (1977) intellectual project proved a testing task for me as I had to do 'the hard yards' in my study. However, this immersion in Bourdieu's (1977) work and my focus on linking it to real practice in rugby union coaching has had a huge impact upon me as a researcher and as a coach. This part of the study pushed me to the edge on many occasions but I have emerged with a very different perspective on research and coaching through this integration of theory and practice.

My first exposure to Game Sense occurred six years ago in discussions about coaching with Professor Richard Light who is now my supervisor. As I explained in the introduction, this chance meeting with him changed my thinking about coaching. I have come into this research project as a practising coach and have tried to keep this perspective throughout the study. Engaging with theory such as that of Bourdieu has been demanding, particularly as I came from a sport science background, but continually linking it to the practice of the coaches in the study and the day-to-day realities of coaching has given the study meaning for me. Hopefully it will also have meaning for others with a coaching background and for practising coaches. When I seized the opportunity to do a PhD on rugby union coaching with Professor Light I set off on a personal and professional journey that has provided deep insights into the power of research, the complexity of coaching and into the humanistic aspects of the research approach I have adopted. The results of this study will make a contribution to knowledge of coaching and has, at the same time, led to a profound personal transformation as coach, researcher and person.

References

- Abernethy, B., Hanrahan, S., Kippers, V., Mackinnon, L. T., & Pandy, M. G. (2005). *The biophysical foundations of human movement* (2nd ed.). Sydney, (NSW): Palgrave Macmillan.
- Abraham, A., & Collins, D. (1998). Examining and extending research in coach development. *Quest*, 50, 59-79.
- Abraham, A., Collins, D., & Martindale, R. (2006). The Coaching Schematic: Validation Through Expert Coach Consensus. *Journal of Sport Sciences*, 24(6), 549-564.
- Alexander, K., & Penney, D. (2005). Teaching under the influence: feeding Games for Understanding into Sport Education development-refinement cycle. *Physical Education and Sport Pedagogy*, 10(3), 287-301.
- Almond, L. (1983). Games Making. *Bulletin of Physical Education*, 19(1).
- Almond, L. (2001). *Teaching for understanding: An historical perspective. Keynote presentation*. Paper presented at the Teaching Games for Understanding in Physical Education, Waterville Valley NH USA.
- Andriessen, J. (2006). Arguing to Learn. In R. K. Sawyer (Ed.), *The Cambridge Handbook of the Learning Sciences* (pp. 443-459). New York: Cambridge University Press.
- ARU. (2004). *ARU Smart Rugby: Confidence in Contact. A guide to the Smart Rugby program*. Sydney: ARU.
- ASC. (2009). *Australian Sports Commission Annual Report 2008-2009*. Canberra
- Austin, L., & Pargman, D. (1981). The Inner-Game Approach to performance and skill acquisition *Motor Skills: Theory into Practice*, 5(1), 3-12.
- Baum, F. (2007). Social capital. In B. Carson, T. Dunbar, R. D. Chenhall & R. Bailie (Eds.), *Social determinants of Indigenous health* (pp. 306). Sydney: Allen & Unwin.
- Baumgartner, T. A., & Hensley, L. D. (2006). *Conducting and Reading Research in Health and Human Performance* (4 ed.). Boston: McGraw Hill.
- Biggs, J. (1996). Enhancing teaching through constructive alignment. *Higher Education*, 32, 347-364.
- Biggs, J., & Tang, C. (2007). *Teaching for quality learning at university: what the student does* (3 ed.). London: Open University Press.
- Blomquist, M., Luhtanen, P., & Laakso, L. (2001). Comparisons of two types of instruction in badminton. *European Journal of Physical Education*, 6, 139-156.
- Bourdieu, P. (1977). *Outline of a theory of practice*. Cambridge ; New York: Cambridge University Press.
- Bourdieu, P. (1978). Sport and social class. *Social science information*, 12(6), 819-840.
- Bourdieu, P. (1984). *Distinction: a social critique of the judgement of taste*. London: Routledge.
- Bourdieu, P., & Wacquant, L. J. D. (1992). *An invitation to reflexive sociology*. Chicago: University of Chicago Press.
- Brooker, R., & Abbott, R. (2001). Developing intelligent performers in sport: Should coaches be making more sense of Game Sense. *Journal of Sport Pedagogy*, 7(2), 67-83.
- Brown, J. S., Collins, A., & Duguid, P. (1989). Situated cognition and the culture of learning *Educational Researcher*, 18(1), 32-42.
- Bruner, J. S. (1966). *Toward a theory of instruction*. Cambridge, Mass.: Belknap Press of Harvard University.

- Bunker, D., & Thorpe, R. (1982). A model for the teaching of games in secondary school. *Bulletin of Physical Education*, 18, 5-8.
- Bunker, D., & Thorpe, R. (1986). The curriculum model. In D. Bunker, R. Thorpe & L. Almond (Eds.), *Rethinking games teaching* (pp. 7-10). Loughborough, UK: Department of Physical Education and Sports Science, University of Technology
- Burns, R. B. (2000). *Introduction to research methods* (4 ed.). Sydney: Longman.
- Butler, J. (1996). Teacher responses to Teaching Games for Understanding. *Journal of Physical Education, Recreation and Dance*, 67, 28-33.
- Butler, J. (2005). TGFU pedagogy: Old dogs, new tricks and puppy school. *Physical Education and Sport Pedagogy*, 10(3).
- Cain, N. (2008, February 3). The Line Out: High and Mighty. *Sunday Star Times*, p. B10,
- Cassidy, T., Jones, R. L., & Potrac, P. (2004). *Understanding sports coaching: the social, cultural and pedagogical foundations of coaching practice*. London: Routledge.
- Cassidy, T., Jones, R. L., & Potrac, P. (2009). *Understanding sports coaching the social, cultural and pedagogical foundations of coaching practice* (2nd ed.). Milton Park, Abingdon, Oxon ; New York: Routledge.
- Cassidy, T., & Kidman, L. (2010). In press Initiating a national coaching curriculum: A paradigmatic shift. *Physical Education & Sport Pedagogy*.
- Cassidy, T., & Rossi, T. (2006). Situated Learning: (Re)examining the Notion of Apprenticeship in Coach Education. *International Journal of Sports Science & Coaching* 1(3), 235-246.
- Chandler, T. (1996). Reflections and further questions. *Journal of Physical Education, Recreation & Dance*, 67(4), 49.
- Chandler, T. J. I., & Nauright, J. (1999). *Making the rugby world*. London: Frank Cass Publishers.
- Charlesworth, R. (2001). *The coach: managing for success*. Sydney, N.S.W.: Macmillan.
- Christina, R. W., & Corcos, D. M. (1988). *Coaches guide to teaching sport skills*. Champaign, Ill.: Human Kinetics Books.
- Coakley, J. (2007). *Sports in society: issues & controversies* (9th ed.). Boston: McGraw-Hill Higher Education.
- Coakley, J., Hallinan, C., Jackson, S., & Mewett, P. (2009). *Sports in society: issues & controversies in Australia and New Zealand*. Sydney: McGraw Hill.
- Coffield, F., Moseley, D., Hall, E., & Ecclestone, K. (2004a). *Learning styles and pedagogy in post-16 learning. A systematic and critical review*. London: Learning and Skills Research Centre.
- Coffield, F., Moseley, D., Hall, E., & Ecclestone, K. (2004b). *Should we be using learning styles? What research has to say to practice*. London: Learning and Skills Research Centre.
- Cohen, L., Manion, L., & Morrison, K. (2000). *Research methods in education* (5th ed.). New York: Routledge.
- Collins, A. (1988). *Cognitive apprenticeship and instructional technology. (Technical Report 6899)*. Cambridge, MA: BBN Labs Inc.
- Cote, J. (2006). The Development of Coaching Knowledge. *International Journal of Sports Science & Coaching*, 1(3), 217-222.
- Cote, J., & Frazer-Thomas, J. (2008). Play, practice, and athlete development. In D. Farrow, J. Baker & C. MacMahon (Eds.), *Developing sport expertise* (pp. 17-28). London: Routledge.

- Cote, J., Salmela, J. H., Trudel, P., Baria, A., & Russell, S. J. (1995). The coaching model: a grounded assessment of gymnastic coaches' knowledge. *Journal of Sport & Exercise Psychology, 17*, 1-17.
- Crespo, M. (2008). The European framework for the recognition of coaching competence and qualifications. *Paper presented at the International Coaching Conference.*
- Creswell, J. W. (1994). *Research Design: Qualitative and quantitative approaches.* London: Sage Publications.
- Creswell, J. W. (1998). *Qualitative inquiry and research design: choosing among five traditions.* Thousand Oaks, Calif.: Sage Publications.
- Culver, D., & Trudel, P. (2006). Cultivating coaches' communities of practice. Developing the potential for learning through interactions. In R. L. Jones (Ed.), *The Sports Coach as Educator. Re-conceptualising sports coaching* (pp. 185). New York: Routledge.
- Culver, D., & Trudel, P. (2008). Clarifying the Concept of Communities of Practice in Sport. *International Journal of Sports Science & Coaching, 3*(1), 1-10.
- Cushion, C. J., Armour, K. M., & Jones, R. L. (2006). Locating the coaching process in practice: models 'for' and 'of' coaching. *Physical Education and Sport Pedagogy 11*(1), 83-99.
- Cushion, C. J., & Jones, R. L. (2006). Power, discourse, and symbolic violence in professional youth soccer: The case of Albion Football Club. *Sociology of Sport Journal, 23*(2), 142-161.
- Davis, B., & Sumara, D. (2003). Why aren't they getting this? Working through the regressive myths of constructivist pedagogy. *Teaching Education, 14*(2), 123 - 140.
- Davis, B., Sumara, D., & Luce-Kapler, R. (2000). *Engaging minds: learning and teaching in a complex world.* Mahwah, N.J: L. Erlbaum Associates.
- den Duyn, N. (1997). *Game Sense. Developing thinking players.* Canberra: Australian Sports Commission.
- Dewey, J. (1916/97). *Democracy and education: an introduction to the philosophy of education.* New York,: The Macmillan company,.
- Dewey, J. (1963). *Experience and education.* New York: Collier.
- Dickson, S. (2001). *A preliminary investigation into the effectiveness of the national coaching accreditation scheme.* Canberra: Australian Sports Commission.
- Dumais, S. A. (2002). Cultural capital, gender, and school success: The role of habitus. *Sociology of Education, 75*(1), 44.
- Dwyer, B. (2004). *Full time: a coach's memoirs.* Sydney: Pan Macmillan,.
- Ella, M. (2008, May 24). Coaching spotlight turns away from Tahs. *The Weekend Australian*, p. 53, from <http://www.theaustralian.news.com.au/story/0,25197,23748105-16957,00.html>
- Ella, M. (2010, June 19). Rugby failing indigenous players. *The Weekend Australian.*
- Ely, M., Anzul, M., Friedman, T., Graner, D., & Steinmetz, A. C. (1991). *Doing qualitative research: circles within circles.* London ; New York: Falmer Press.
- Erickson, K., Cote, J., & Fraser-Thomas, J. (2007). Sport experiences, milestones, and educational activities associated with high-performance coaches' development. *Sport Psychologist, 21*(3), 302-316.
- Evans, J. R. (2006a). Capturing the Essence of Rugby through Game Sense. *Proceedings of Teaching Games for Understanding in the Asia-Pacific Region, 71-79.*
- Evans, J. R. (2006b). Elite level rugby coaches' interpretation and use of game sense. *Asian Journal of Exercise and Sports Science, 3*(1), 17 -24.
- Evans, L. (2003). *Rugby-Understanding the moving game.* London: GamePlanner.

- Fernandez-Balboa, J. M. (2009). Bio-pedagogical self-reflection in PETE: reawakening the ethical conscience and purpose in pedagogy and research. *Sport, Education and Society*, 14(2), 147-163.
- FitzSimons, P. (2003). *The Rugby War* (Second ed.). Sydney: HarperCollins.
- Fleming, N. D., Robson, G., & Smith, R. (2005). *Sports Coaching and Learning: Using learning preferences to enhance performance* (1 ed.). Christchurch: Digital Print and Copy.
- Fosnot, C. T. (1996). Constructivism: A Psychological Theory of Learning. In C. T. Fosnot (Ed.), *Constructivism: theory, perspectives, and practice*. New York: Teachers College Press.
- Foucault, M. (1977). *Discipline and punish: the birth of the prison* (1st American ed.). New York: Pantheon Books.
- Foucault, M. (1979). *Discipline and punish: the birth of the prison*. New York: Vintage Books.
- Foucault, M., & Gordon, C. (1980). *Power/knowledge: selected interviews and other writings, 1972-1977*. New York: Harvester Wheatsheaf.
- Fox, S. (2000). Communities Of Practice, Foucault And Actor-Network Theory. *Journal of Management Studies*, 37(6), 853-868.
- Galipeau, J., & Trudel, P. (2006). Athlete learning in a community of practice. In R. L. Jones (Ed.), *The Sports Coach as Educator. Re-conceptualising sports coaching* (pp. 185). New York: Routledge.
- Gallwey, W. T. (1974). *The inner game of tennis*. New York: Random House.
- Gallwey, W. T. (1976). *Inner tennis: Playing the game*. New York: Random House.
- Garner, I. (2000). Problems and inconsistencies with Kolb's learning styles. *Educational Psychology*, 20(3), 341.
- Gilbert, W., Cote, J., & Mallett, C. (2006). Developmental Paths and Activities of Successful Sport Coaches. *International Journal of Sports Science & Coaching*, 1, 69-76.
- Goetz, J. P., & LeCompte, M. D. (1984). *Ethnography and qualitative design in educational research*. Orlando: Academic Press.
- Gore, J. M. (1997). Power relations in pedagogy: An empirical study based on Foucauldian thought. In C. O'Farrell (Ed.), *Foucault: The legacy* (pp. 651-663). Kelvin Grove, Qld: Queensland University of Technology.
- Grbich, C. (2004). Qualitative research design. In V. Minichiello (Ed.), *Handbook of research methods for nursing and health science*. Sydney: Prentice Hall Health.
- Grehaigne, J. F. (1992). *L'organisation du jeu en football*. Joinville-le-Pont: Editions Actio.
- Grehaigne, J. F., Godbout, P., & Bouthier, D. (1999). The foundations of tactics and strategy in team sports. *Journal of Teaching in Physical Education*, 18, 159-174.
- Grehaigne, J. F., Richard, J. F., & Griffin, L. L. (2005). *Teaching and learning team sports and games*. New York & London: Routledge Falmer.
- Griffin, L. L., Brooker, R., & Patton, K. (2005). Working towards legitimacy: two decades of Teaching Games for Understanding. *Physical Education and Sport Pedagogy*, 10(3), 213-223.
- Griffin, L. L., & Butler, J. (2005). *Teaching Games for Understanding: theory, research, and practice*. Champaign, IL: Human Kinetics.
- Griffin, L. L., Mitchell, S. A., & Oslin, J. L. (1997). *Teaching sport concepts and skills: a tactical games approach*. Champaign, IL: Human Kinetics.
- Griffin, L. L., & Patton, K. (2005). Two decades of Teaching Games for Understanding: Looking at the Past, Present, and Future. In L. L. Griffin & J. Butler (Eds.), *Teaching Games for Understanding: theory, research, and practice*. Champaign, Illinois: Human Kinetics.

- Hadfield, D. (2005). The change challenge: Facilitating self-awareness and improvement in your athletes. In L. Kidman (Ed.), *Athlete-centred coaching: Developing inspired and inspiring people*. Christchurch: Innovative Print Communications Ltd.
- Hadfield, D. (2009, January 19). Understanding decision making in rugby. *RFU Technical Journal* Retrieved February 17, from <http://www.rfu.com/TakingPart/Coach/CoachResourceArchive/~~/media/Files/2009/Coaching/Articles/TacticsPhilosophy/decisionmaking.ashx>
- Halloran, J. (2007). Too much pressure. *The Sydney Morning Herald*, p. 25,
- Hammersley, M., & Atkinson, P. (1983). *Ethnography: principles in practice*. London ; New York: Tavistock.
- Hammersley, M., & Atkinson, P. (1995). *Ethnography: principles in practice* (2nd ed.). London ; New York: Routledge.
- Hantrais, L., & Mangen, S. P. (1996). *Cross-national research methods in the social sciences*. London ; New York: Pinter.
- Harris, B. (2009, February 7). Prop holding Court in Ireland. *The Australian*, p. 18, from <http://www.theaustralian.news.com.au/story/0,25197,25018121-5015651,00.html>
- Harvey, S. (2009). A Study of interscholastic soccer players perceptions of learning with Game Sense. *Asian Journal of Exercise and Sports Science*, 6(1), 1-10.
- Harvey, S., Cushion, C. J., & Massa-Gonzalez, A. N. (2010). Learning a new method: Teaching Games for Understanding in the coaches' eyes. *Physical Education & Sport Pedagogy*, 15(2).
- Hay, P. (2005). Making judgements: Student ability and assessment in physical education. *Journal of Physical Education New Zealand*, 38(1), 41-50.
- Heron, M., & Tricker, D. (2008). *Independent review of the 2007 rugby world cup campaign*. Wellington: NZRFU.
- Holt, N., Streat, W., & Bengoechea, G. (2002). Expanding the Teaching Games for Understanding model: New Avenues for future research and practice. *Journal of Teaching in Physical Education* 21, 162-176.
- Hooton, A. (2008, May 17). Great Expectations. *Good Weekend*, 30-39.
- Hopper, T. F., Butler, J., & Storey, B. (2009). *TGFU: Simply good pedagogy: Understanding a complex challenge*: PHE Canada.
- Horton, P. (2009). Rugby union football in Australian society: an unintended consequence of intended actions. *Sport in Society*, 12(7), 967-985.
- Hutchinson, J. (2008). A Saint-Sational career. *Sunday Telegraph Magazine*, 25-28
- Irwin, G., Hanton, S., & Kerwin, D. G. (2005). The Conceptual Process of Skill progression Developments in Artistic Gymnastics. *Journal of Sport Sciences*, 23(10), 1089-1099.
- Jeffray, S., & Almond, L. (1986). *Introduction to Coventry Curriculum Development: Coventry teachers explore teaching for understanding*. Coventry, England: Elm Bank Teachers Centre.
- Jenkins, P. (2006a, January 28). Let's not kid ourselves, Wallabies way off mark. *The Daily Telegraph*,
- Jenkins, P. (2006b). Name your price. *The Daily Telegraph*, p. 87,
- Jenkins, P. (2006c, October 24). Richest player ever. *The Daily Telegraph*, p. 69,
- Jenkins, R. (2002). *Pierre Bourdieu* (2 ed.). London: Routledge.
- Jones, R. L. (2004). Coaches roles. In R. L. Jones, K. Armour & P. Potrac (Eds.), *Sports coaching cultures* (pp. 116-134). London: Routledge.
- Jones, R. L. (2006). How can educational concepts inform sports coaching. In R. L. Jones (Ed.), *The Sports Coach as Educator: Reconceptualising Sports Coaching* (pp. 3-13). Abingdon, Oxon; New York: Routledge.

- Jones, R. L. (2007). Coaching redefined: an everyday pedagogical endeavour. *Sport Education and Society*, 12(2), 159-173.
- Jones, R. L. (2009). Coaching as caring (the smiling gallery): accessing hidden knowledge. *Physical Education & Sport Pedagogy*, 14(4), 377 - 390
- Jones, R. L., Armour, K., & Potrac, P. (2004). *Sports coaching cultures*. London: Routledge.
- Karakayali, N. (2004). Reading Bourdieu with Adorno: The limits of critical theory and reflexive sociology. *Sociology*, 38(2), 351-368.
- Kidman, L. (2001). *Developing decision makers: an empowerment approach to coaching*. Christchurch: Innovative Print Communications.
- Kidman, L. (2005). *Athlete-centred coaching: Developing inspired and inspiring people*. Christchurch: Innovative Print Communications Ltd.
- Kidman, L. (2007). Humanistic Coaching - Teaching Games for Understanding. *Conference proceedings of Proceedings for the Asia Pacific Conference on Teaching Sport and Physical Education for Understanding*, 59-71.
- Kirk, D. (1983). Theoretical guidelines for teaching for understanding. *Bulletin of Physical Education*, 19(1).
- Kirk, D., & Claxton, C. (1999). Learning excellence and gender: promoting girls' participation in physical education and sport. *BAALPE Annual Conference, July, University of Wales, Cardiff*.
- Kirk, D., & MacPhail, A. (2000a). *The game sense approach: rationale, description and a brief overview of research*. Leicestershire: Institute of Youth Sport,.
- Kirk, D., & MacPhail, A. (2000b). Reconsidering the teaching games for understanding model from a situated learning perspective. *ICPE 2000 Proceedings*, 104-116.
- Kirk, D., & MacPhail, A. (2002). Teaching Games for Understanding and situated learning: Rethinking the Bunker and Thorpe model. *Journal of teaching in physical education*, 21, 177-192.
- Kitson, R. (2005, July 2). How All Blacks went back to their roots. *The Guardian*, pp. 8,9. Retrieved from <http://www.guardian.co.uk/sport/2005/jul/02/lions2005.rugbyunion2>
- Knowles, Z., Tyler, G., Gilbourne, D., & Eubank, M. (2006). Reflecting on reflection: exploring the practice of sports coaching graduates. *Reflective Practice*, 7(2), 163-179.
- Krippendorff, K. (2004). *Content analysis: an introduction to its methodology* (2nd ed.). Thousand Oaks, Calif.: Sage.
- Kruse, S. D. (1997). Reflective activity in practice: vignettes of teachers' deliberate work. *Journal of Research and Development in Education*, 31(1), 46-60.
- Launder, A. (2001). *Play Practice*. Champaign: Human Kinetics.
- Lave, J., & Wenger, E. (1991). *Situated learning: legitimate peripheral participation*. Cambridge: Cambridge University Press.
- LeCompte, M. D., & Preissle, J. (1993). *Ethnography and qualitative design in educational research*. San Diego: Academic Press.
- Lemyre, F., & Trudel, P. (2004). The learning path of volunteer coaches. *Avante*, 10, 40-55.
- Light, R. (2001). Culture, tactics and embodied masculinity in Japanese and Australian school rugby. *International Sports Studies*, 23(1/2), 37-46.
- Light, R. (2002). Social nature of games: Australian preservice primary teachers first experience of TGfU. *European Physical Education Review*, 8(3), 291-310.
- Light, R. (2004a). Coaches' experience of Game Sense: opportunities and challenges. *Physical Education and Sport Pedagogy*, 9(2), 115-132.
- Light, R. (2004b). Implementing a game sense approach in youth sport coaching: Challenges, change and resistance. *Waikato Journal of Education*, 10, 169-180.

- Light, R. (2005). Special issue: Teaching Games for Understanding. *Physical Education & Sport Pedagogy*, 10(3).
- Light, R. (2006a). Game Sense: Innovation of just good coaching? . *Journal of Physical Education New Zealand*, 39(1), 10-21.
- Light, R. (2006b). Introduction: The games approach to coaching. *Journal of Physical Education New Zealand*, 39(1), 5-7.
- Light, R. (2006c). Participation, community and learning in the nippers. *Change*, 9(1), 7-15.
- Light, R. (2006d). Special Issue: Teaching Games for Understanding. *Journal of Physical Education New Zealand*, 39(1).
- Light, R. (2008a). Complex learning theory-Its epistemology and its assumptions about learning: Implications for physical education. *Journal of Teaching in Physical Education*, 21, 21-37.
- Light, R. (2008b). *Sport in the lives of young Australians*. Sydney: Sydney University Press.
- Light, R. L. (in press). Opening up learning theory to social theory in research on physical education and sport. *Physical Education and Sport Pedagogy*.
- Light, R., & Butler, J. (2005). A personal journey: TGfU teacher development in Australia and the USA. R. Light (ED) An international perspective on teaching games for understanding. *Physical Education and Sport Pedagogy*, 10(3), 241-254.
- Light, R., & Evans, J. R. (2010). The impact of Game Sense on Australian rugby coaches' practice: A question of pedagogy. *Physical Education and Sport Pedagogy* 15(2), 103-115.
- Light, R., & Fawns, R. (2001). Thinking body: constructivist approaches to games teaching in physical education. *Melbourne Studies in Education*, 43(2), 69-88.
- Light, R., & Fawns, R. (2003). Knowing the game: integrating speech and action in games teaching through TGfU. *Quest*, 55, 161-177.
- Light, R., Swabey, K., & Brooker, R. (2004). A snap shot of pre-service and beginning teachers' implementation of TGfU. . *Proceedings for the Second International Conference: Teaching Sport and Physical Education for Understanding, Melbourne, Australia: University of Melbourne*, 44-52.
- Light, R., & Tan, S. (2004). Early career teachers' experiences of implementing TGfU/GA in Australia and Singapore. *Second International Conference for Physical Educators (ICPE 2004). Global Perspectives in the Integration of Physical Activity, Sports, Dance, and Exercise Science in Physical Education : From Theory to Practice*, 321-330.
- Light, R., & Wallian, N. (2008). A constructivist-informed approach to teaching swimming. *Quest*, 60(3), 387-404.
- Lombardo, B. J. (1999). Coaching in the 21st century: Issues, concerns and solutions. *Sociology of Sport Online* 2(1).
- Lyle, J. (1999). The coaching process: An overview. In N. Cross & J. Lyle (Eds.), *Principles and practice for sport*. Oxford: Butterworth-Heinemann.
- Lyle, J. (2002). *Sports coaching concepts: a framework for coaches' behaviour*. London; New York: Routledge.
- Lyle, J. (2007). A review of the research for the impact of coach education. *International Journal of Coaching Science*, 1(1), 19-36.
- Lyle, J., & Cushion, C. (2008). *Sports coaching: professionalism and practice*. London: Elsevier.
- Macey, D. (2001). *Dictionary of critical theory*. London: Penguin Books.
- MacIntyre, A. (2007). *After virtue: A study in moral theory* (3rd ed.). Notre Dame, Indiana: University of Notre Dame Press

- Magill, R. A. (2004). *Motor learning and control: concepts and applications* (7th ed. ed.). Boston: McGraw-Hill.
- Mahlo, F. (1974). *Acte tactique en jeu [Tactical action in play]*. Paris: Vigot.
- Malinowski, B. (2005). *Argonauts of the western pacific* (4 ed.). London: Routledge.
- Mallett, C., Rossi, T., & Tinning, R. (2009). *Knowledge networks and Australian Football League coach development: People of influence*. Paper presented at the 2008 AIESEP World Congress. Sport pedagogy research, policy and practice: International perspectives in physical education and sports coaching.
- Martens, R. (2004). *Successful coaching* (3 ed.). Champaign, Ill.: Human Kinetics.
- Masters, R. (2008). Skill learning the implicit way-say no more. In D. Farrow, J. Baker & C. MacMahon (Eds.), *Developing sport expertise* (pp. 89-103). London: Routledge.
- Mauldon, E., & Redfern, H. B. (1969). *Games Teaching: A new approach for the primary school*: McDonald and Evans Ltd.
- Mauldon, E., & Redfern, H. B. (1981). *Games Teaching: A new approach for the primary school*: McDonald and Evans Ltd
- Mauss, M. (1973). Techniques of the body. *Economy and Society*, 2(1), 70-87.
- May, T. (1999). Reflexivity and Sociological Practice. *Sociological Research Online*, 4(3).
- May, T., & Cantley, C. (2001). *Social research: issues, methods and process* (3rd ed.). Buckingham: Open University Press.
- McCullick, B. A., Belcher, D., & Schempp, P. G. (2005). What works in coaching and sport instructor certification programs? The participants' view. *Physical Education & Sport Pedagogy*, 10(2), 121 - 137.
- Merleau-Ponty, M. (1962). *Phenomenology of perception*. London: Routledge & Kegan Paul.
- Merriam, S. B. (1998). *Qualitative research and case study applications in education* (2nd ed.). San Francisco: Jossey-Bass Publishers.
- Messner, M. A. (2008). Boyhood, Organized Sport and the Construction of Masculinities. In D. M. Newman & J. O'Brien (Eds.), *Sociology: exploring the architecture of everyday life* (7th ed., pp. xiv, 389 p.). Los Angeles: Pine Forge Press.
- Mosston, M., & Ashworth, S. (1990). *The Spectrum of Teaching Styles: From Command to Discovery*. New York: Longman.
- Mutch, A. (2003). Communities of Practice and Habitus: A Critique. *Organization Studies*, 24(3), 383-401.
- Nash, C., & Collins, D. (2006). Tacit knowledge in expert coaching: Science or art? *Quest*, 58(4), 465-477.
- Nash, M., J. (2008). *Using Communities of Practice & TGfU to develop pedagogy among primary generalist pre-service teachers*. Paper presented at the 2008 AIESEP World Congress. Sport pedagogy research, policy and practice: International perspectives in physical education and sports coaching.
- Nauright, J., & Chandler, T. J. I. (1996). *Making men: rugby and masculine identity*. London ; Portland, Or. : F. Cass.,
- Neuendorf, K. A. (2002). *The content analysis guidebook*. London ; Thousand Oaks, Calif.: Sage Publications.
- Neuman, W. L. (2006). *Social Research Methods: qualitative and quantitative approaches* (6 ed.). Boston: Pearson/Allyn and Bacon.
- O'Connor, D., & Cotton, W. (2009). *Community Junior Sport Coaching*: Australian Sports Commission.

- Penney, D. (2006). Coaching as teaching. In R. L. Jones (Ed.), *The Sports Coach as Educator: Reconceptualising Sports Coaching* (pp. 26-36). Abingdon, Oxon ; New York: Routledge.
- Phillips, D. C. (1997). Coming to grips with radical social constructivisms. *Science & Education*, 6(1), 85-104.
- Phillips, M. G. (2000). *From sidelines to centre field: a history of sports coaching in Australia*. Sydney: UNSW Press.
- Piaget, J. (1970). *Psychology and epistemology*. Paris: Denoel-Gonthier.
- Pope, C. (2005). Once more with feeling: affect and playing with the TGfU model. *Physical Education and Sport Pedagogy*, 10(3), 271-286.
- Pope, C. (2006). Affect in New Zealand junior sport: the forgotten dynamic. *Change*, 9(1), 17-25.
- Potrac, P., Jones, R., & Armour, K. (2002). It's all about getting respect: The coaching behaviors of an expert English soccer coach. *Sport, Education and Society*, 7(2), 183 - 202.
- Potrac, P., Jones, R., & Cushion, C. (2007). Understanding power and the coach's role in professional English soccer: A preliminary investigation of coach behaviour. *Soccer & Society*, 8(1), 33 - 49.
- Prawat, R. S. (1999). Dewey, Pierce and the learning paradox. *American Educational Research Journal*, 36, 47-76.
- Pringle, R. (2008). 'No rugby-no fear': collective stories, masculinities and transformative possibilities in schools. *Sport, Education and Society*, 13(2), 215 - 237.
- Propp, V. (1968). *Morphology of the folk tale*. Austin: Texas: University of Texas Press.
- Pyke, F. S. (2001). *Better coaching: advanced coach's manual* (2nd ed.). Belconnen, A.C.T.: Australia Sports Commission.
- Rink, J. (1996). Tactical and skill approaches to teaching sport in games: Introduction. *Journal of Teaching in Physical Education*, 15(4), 397-399.
- Rink, J. (2001). Investigating the assumptions of pedagogy. *Journal of Teaching in Physical Education* 20, 112-128.
- Ritchie, J., & Lewis, J. (2003). *Qualitative research practice: a guide for social science students and researchers*. London: Sage Publications.
- Rodgers, W., Reade, I., & Hall, C. (2007). Factors that Influence Coaches' Use of Sound Coaching Practices. *International Journal of Sports Science & Coaching*, 2, 155-170.
- Rossi, T., Fry, J. M., McNeill, M., & Tan, C. W. K. (2007). The Games Concept Approach (GCA) as a mandated practice: views of Singaporean teachers. *Sport, Education and Society*, 12(1), 93 - 111.
- Rushal, B. S., & Wiznuk, K. (1985). Athletes' Assessment of the Coach-The Coach Evaluation Questionnaire. *Canadian Journal of Sports Sciences*, 10, 157-161.
- Russell, C. (2004). Ethnography and participant observation. In V. Minichiello (Ed.), *Handbook of research methods for nursing and health science*. Sydney: Prentice Hall Health.
- Ryan, G. (Ed.). (2008). *The changing face of rugby: The union game and professionalism since 1995* Cambridge Scholars Publishing.
- Saury, J., & Durand, M. (1998). Practical knowledge in expert coaches: On-site study of coaching in sailing. *Research Quarterly for Exercise and Sport*, 69(3), 254.
- Schmidt, R. (1988). *Motor control and learning: A behavioral emphasis*. Champaign: Human Kinetics.
- Schmidt, R. (1991). *Motor learning & performance: From principles to practice*. Champaign, Ill: Human Kinetics Books.

- Schon, D. A. (1983). *The reflective practitioner: how professionals think in action*. New York :: Basic Books.
- Schon, D. A. (1987). *Educating the reflective practitioner*. San Francisco :: Jossey-Bass.
- Schwartz, H., & Jacobs, J. (1979). *Qualitative Sociology: A Method to the Madness*. New York: Free Press.
- Shilling, C. (2003). *The body and social theory* (2nd ed.). London ; Thousand Oaks, Calif.: SAGE Publications.
- Sirna, K., Tinning, R., & Rossi, T. (2009). The health and physical education subject department office as a site for student teacher's professional identity. *British Journal of Sociology of Education*.
- Slade, D. (2005). *Teaching attack and defence in team games: A TGFU approach*. Palmerston North: Stick2Hockey Limited.
- Smith, W. (2006). One man's code: why Broncos always come first for Bennett. *The Australian*, pp. 31,32.
- Solomon, G. B. (1999). Predictors of coach effectiveness in competitive sport: the role of the actual and expected performance. *International Sports Journal*, 3(2), 25-36.
- SPARC. (2009). *Sport and Recreation New Zealand Annual Report 2009*. Wellington.
- Stirling, A. E., & Kerr, G. A. (2009). Abused athletes' perceptions of the coach-athlete relationship. *Sport in Society*, 12(2), 227 - 239.
- Strauss, A. L., & Corbin, J. M. (1998). *Basics of qualitative research: techniques and procedures for developing grounded theory* (2nd ed.). Thousand Oaks: Sage Publications.
- Swartz, D. (1997). *Culture and power: the sociology of Pierre Bourdieu*. Chicago: University of Chicago Press.
- Thomas, K. (1996). *Game Sense - Whats Happening*. Paper presented at the 1996 National Coaching and Officiating Conference, Brisbane.
- Thorpe, R., & Bunker, D. (2008, May 14-17). *Teaching games for understanding: Do current developments reflect original theory?* Paper presented at the 4th International Teaching Games for Understanding (TGfU), Vancouver, BC, Canada.
- Thorpe, R., Bunker, D., & Almond, L. (1986). *Rethinking games teaching*. Loughborough: Department of Physical Education and Sports Science.
- Tight, M. (2003). *Researching higher education*. Maidenhead: Open University Press.
- Tinning, R. (1996). Mentoring in the Australian Physical Education Teacher Education Context: Lessons from Cooking Turkeys and Tandoori Chicken In M. Mawer (Ed.), *Mentoring in Physical Education: Issues and Insights* (pp. 197-216). London: Falmer Press.
- Tinning, R. (2008). Pedagogy, Sport Pedagogy, and the Field of Kinesiology. *Quest*, 60(3), 405-424.
- Titscher, S., Meyer, M., Wodak, R., & Vetter, E. (2007). *Methods of text and discourse analysis*. London: Sage.
- Tomlinson, A. (2004). Pierre Bourdieu and the sociological study of sport. In R. Giulianotti (Ed.), *Sport and modern social theorists*. New York: Palgrave Macmillan.
- Tucker, J. (2009, April 19). Queenslanders are left red-faced after another defeat. *The Sunday Telegraph*, p. 97,
- Turner, A. P., & Martinek, T. J. (1992). A comparative analysis of two models for teaching games (Technique approach and game-centred [tactical Focus] approach). *International Journal of Physical Education*, XXIX, 15-31.

- Vallee, C. N., & Bloom, G. A. (2005). Building a successful University Program: Key and Common Elements of Expert Coaches. *Journal of Applied Sport Psychology, 17*, 179-196.
- von Glaserfeld, E. (1996). Introduction: Aspects of Constructivism. In C. T. Fosnot (Ed.), *Constructivism : theory, perspectives, and practice*. New York: Teachers College Press.
- Vygotsky, L. S. (1978). *Mind and Society*. Cambridge Ma: MIT Press.
- Wacquant, L. J. D. (1989). Towards a Reflexive Sociology: A Workshop with Pierre Bourdieu. *Sociological Theory, 7*(1), 26-63.
- Wacquant, L. J. D. (1995a). Pugilistic point of view: How boxers think and feel about their trade. *Theory and Society, 24*(4), 489-535.
- Wacquant, L. J. D. (1995b). Pugs at Work: Bodily Capital and Bodily Labour among Professional Boxers. *Body and Society, 1*(1), 65-93.
- Wacquant, L. J. D. (1998). Bourdieu. In R. Stones (Ed.), *Key sociological thinkers* (pp. xvi, 366 p.). London: Macmillan.
- Wacquant, L. J. D. (2006). Habitus. In M. Zafirovski & J. Beckert (Eds.), *International encyclopedia of economic sociology* (pp. 315-319). London ; New York: Routledge.
- Wade, A. (1967). *The F.A. guide to training and coaching*. London: Heinemen.
- Watkins, C., & Mortimore, P. (1999). Pedagogy: What do we know. In P. Mortimore (Ed.), *Understanding pedagogy and its impact on learning* (pp. xii, 236 p.). London: SAGE Publications Ltd.
- Webb, J., Schirato, T., & Danaher, G. (2002). *Understanding Bourdieu*. Crows Nest, NSW: Allen & Unwin.
- Webb, P., & Thompson, C. (1996). *The Game Sense and Skills Based Approaches to Coaching: Implications for Coaches, Teachers and Coach Educators*. Paper presented at the 1996 National Coaching and Officiating Conference, Brisbane.
- Webb, P., & Thompson, K. (1998). *Using game sense in teaching and coaching*. Paper presented at the 20th National ACHPER Conference Adelaide.
- Wenger, E. (1998). *Communities of practice: learning, meaning, and identity*. Cambridge, U.K. ; New York, N.Y.: Cambridge University Press.
- Wenger, E. (2009). Communities of Practice: A brief introduction. Retrieved May 23, 2009, from <http://www.ewenger.com/theory/index.htm>
- Willingham, D. T. (2006). Do Visual, Auditory, and Kinesthetic Learners Need Visual, Auditory, and Kinesthetic Instruction? *Journal*. Retrieved from <http://www.readingrockets.org/article/12446>
- Wilson, R. (2006, 29 April 2006). A monster force. *The Daily Telegraph*, p. 62,
- Wolff, S. (2004). Ways into the Field and their Variants. In U. Flick, E. v. Kardorff & I. Steinke (Eds.), *A companion to qualitative research*. London: Sage Publications.
- Woodman, L. (1993). Coaching: A science, an art, an emerging profession. *Sports Science Review, 2*(2), 1-13.
- Wright, S., McNeill, M. C., & Fry, J. M. (2009). The tactical approach to teaching games from teaching, learning and mentoring perspectives. *Sport, Education and Society, 14*(2), 223-244.
- Wright, T., Trudel, P., & Culver, D. (2007). Learning How to Coach: The Different Learning Situations Reported by Youth Ice Hockey Coaches. *Physical Education and Sport Pedagogy, 12*(2), 127 - 144.
- Yin, R. K. (2003). *Case study research: design and methods* (3rd ed.). Thousand Oaks, Calif.: Sage Publications.

Appendix 1 Participant Profiles

Australian Site

Ellery

At the time of the data collection Ellery was the head coach of an Australian team in the Super 14 rugby competition. Ellery spent his formative years in metropolitan Sydney where he attended state primary school. During his time at primary school he sampled sports including rugby league, rugby union and cricket. Sport was what he enjoyed the most about his childhood where one season of sport rolled into another. He said that he was fortunate to have played so much sport growing up. This deep involvement in sport continued into his high school years and it was during this time that he specialised in rugby union mainly as a result of the schools decision to concentrate on rugby. His teacher and coach at high school had a philosophy about how to play rugby which was based around a style that encouraged open attacking rugby, to take risks and be creative. This teacher used the game of touch football as the major activity for training sessions for the four years that Ellery was in his physical education classes. Ellery pointed out that he and his team mates learnt valuable skills such as catch pass, evasion and manipulation of defences through large numbers of repetitions playing touch football. During high school Ellery played rugby with a number of future elite players who developed game knowledge through playing games.

After finishing high school Ellery joined Sydney rugby where he progressed through the ranks of Colts rugby and onto the senior rugby system where he played 150 first grade games for his club over a 14 year period. Ellery played hooker in the front row and was a mobile, competitive player with a high work ethic. He also experienced elite level rugby at a provincial level playing 15 games for New South Wales. During this period Ellery completed teacher training at university. He progressed to the position of deputy principal before moving into professional coaching. The skills learnt as a teacher such as management were important in his transition into coaching. He said that he felt the skills of teaching are the same as the skills of coaching.

1993 was pivotal period in Ellery's movement into coaching; his coach at the time gave him leadership responsibilities including being made the captain and a coaching role so he was able to experience coaching while he was still playing. The team won the

premiership that season and this fuelled a desire in Ellery to continue coaching after he ceased playing. As a result of these circumstances he started coaching at his club immediately after finishing his playing career in 1994.

Ellery's coaching career commenced when he was 34 years old when he coached reserve grade and this led to international experience before coaching in the Super 14 competition.

Lincoln

At the time of the data collection Lincoln was the head coach of an Australian team in the Super 14 rugby competition. Lincoln spent his childhood and the majority of his adult life in a regional city where attended a catholic primary school. From the age of 6 growing up he played rugby union and rugby league in the winter and cricket in the summer as well as spending time as a competitive swimmer. During this period of involvement the emphasis was on fun and participation. His family had strong interests in sport and sport was the focal point of family discussions. His family took a keen interest in other prominent regional sports such as the rugby league and horse racing.

Lincoln has fond memories of the people who were involved in rugby. Lincoln eventually focused on rugby in high school because of the family's inclination towards rugby and a private school education where rugby was the main sport. His decision to play rugby came about because his father had played and his older brother played so he was already in the system from a young age. In his high school years he attended a private catholic high school where rugby was the main winter sport. He was of the view that rugby traditionally occupied a white middle class profile in the community and possibly a different clientele to other sports.

Most of the coaching at high school was conducted by other senior students. As a senior player he was exposed to a number of prominent coaches in Australia. He was of the opinion that one local coaching identity who was innovative by introducing individual feedback to players and providing structure to coaching sessions. He was also instrumental in establishing the level 3 coaching program within the coach education system in Australia for rugby. Lincoln saw these coaches as highly motivated, with tremendous passion that could masterfully and clinically control the coaching environment.

As a hooker in the front row Lincoln played in his local rugby competition and was part of a premiership team. He also enjoyed a period of time (7 years) as captain of his team. While playing rugby at university he completed an Arts degree and a Bachelor of Human Movement Studies. His provincial rugby experience saw him play in over 70 games.

Lincoln moved into coaching immediately at the completion of his playing career after being approached by a club stalwart who suggested he needed to put back into the club after many years of participation. Lincoln knew that he wanted to coach at the end of his playing career and continued playing in the provincial team in order to keep learning and picked up information from respected coaches that he could use later on in his coaching career. Lincoln experienced a level of coaching while still playing and had leadership experience as a captain of the teams he played in; for six months he was the captain coach.

Before taking up his first professional coaching Lincoln had worked at the AIS and previous to that he had taught at a state high school as a physical education and health science teacher. Lincoln thought that both of these occupations had helped prepare him for a career as a rugby coach. The game turning professional in 1995 was the catalyst for Lincoln to consider coaching as a profession. He thought he had been successful as an amateur coach in moulding players into a competitive outfit.

Elvis

At the time of the data collection Elvis was the head coach of an Australian team in the Super 14 rugby competition. Elvis grew up in a state where rugby was a minor sport. His first impressions of sport were that his body shape significantly affected which sports he played. Elvis started out playing soccer up to the age of 15. At this point his body changed and he moved into rugby, at the same time he also took up rowing. Elvis said there many similarities between rugby and rowing, he made the comparison that both sports required discipline and both required the ability to generate forces.

His first experiences of rugby were at the age of 15 and because rugby was not played extensively in his state he gleaned his early information on how to play from television replays. This is where the genesis of his ability to watch and analyse commenced. Travelling internationally was a positive aspect of his early participation in rugby and a

catalyst to stay involved. A training session with an All Black captain was a significant experience in his early development as a sixteen year old and provided him with the motivation to continue with rugby. Later he was coached at school by a Wallaby forward and this provided additional exposure to high achieving role models. These personal approaches to coaching were lessons he carried on to his senior career as a coach and he was aware of the influences that these people had on his life and his desire to do the same for others. Elvis was also aware of the interconnectedness of rugby as many of the people he been associated with as a young player were part of his life as a coach. Elvis was also attracted to rugby by the friendships he had established at school and his family had strong ties and interests in rugby.

Elvis remembered all his coaches from his time at school and has kept in contact with many of them. He also said that the parents who were associated with his participation in rugby offered opportunities for discussion and acted as mentors. His early exposure to coaches and parents was influential because of their work ethic and enthusiasm which was geared towards helping them to be better as players.

Elvis played rugby for 15 years which included playing for Australia. After playing rugby in the transitional period from amateurism to professionalism he retired. He missed playing and still wanted to be involved in rugby, so after six months he accepted an invitation of a past associate from his club to take up coaching.

Elvis completed a degree at university and worked in his chosen profession before moving into professional coaching. The skills he used in professional life such as negotiation and mediation were important in his coaching. He stated that coaching was all about people management.

Joseph

At the time of the data collection Joseph was the head coach of an Australian team in the Tri Nations rugby competition. Joseph as a child attended a local catholic convent primary school where played rugby league and cricket. After finishing primary school Joseph attended a catholic high school where played a range of sports including rugby, rugby league and cricket. Joseph said that the major reason for his participation in sport was about entertainment, passion and enjoyment. Joseph eventually settled on rugby in

his late teens when a local team did not have enough players, rugby then became the focus of his sporting life.

Joseph moved into senior rugby and played hooker for 16 years during that period he had exposure to provincial level rugby coaches. Joseph said that coaching was a natural extension of playing. He moved interstate with his job and his coaching career commenced when he captain coached the team at his new location. After 2 seasons of coaching Joseph returned to his original club in 1983 and coached for 5 years. He then moved on to coach elite aged teams and experienced a level of success that advanced his coaching career.

Although Joseph initially attended teachers college for a short period of time he is not academically trained. However, Joseph went on to establish a successful career as a senior manager in the freight forwarding industry before taking up a professional coaching career. Joseph went on to coach professionally in France, Wales and England.

New Zealand Site

Paul

At the time of the data collection Paul was in his mid forties and the head coach of a NPC team in New Zealand. Paul grew up in a large regional centre on the south island of New Zealand. Paul attended government primary and high schools where sport was a valued part of school life, especially rugby and cricket. He identified three teachers from his late primary and early secondary school period that he felt had a significant influence on him as a player. The first coach was a person who understood him as young boy and was able to motivate him and the rest of the team to get the best out of him as a player. In his early high school years he had two coaches who were also teachers who were able to communicate effectively and teach him about the technical aspects of rugby. They also had personal characteristics that were important to him such as a sense of humour and gave of themselves.

Paul left school at the age of seventeen after completing his studies to pursue his rugby career. He started his professional life as a labourer before taking up a job as a meat inspector. He preferred to work outside so his rugby club organised an apprenticeship in the building industry and after completing his trade training, commenced his own business. He played rugby for 14 years which included over 150 games for his club and represented his province in over 100 matches. His time as a player also included two

separate periods when he played rugby in Europe as a professional before the game was officially professional. Towards the end of his rugby career Paul took up a position as the CEO of a provincial rugby union club for three years and then worked as a rugby development officer for the New Zealand rugby union. He was appointed as the manager of a rugby academy for one of the provincial rugby unions in the Super 14 rugby competition. His first professional rugby coaching appointment was as an assistant coach to one of the teams in New Zealand's NPC competition.

Walter

At the time of the data collection Walter was part of the coaching staff for the New Zealand All Blacks. Walter had spent his formative years in a small rural town on the north island of New Zealand where rugby was the focal point of the community. He attended the local primary school and the local high school.

During his time at primary school he played a number of sports including rugby union, cricket, athletics and tennis. He enjoyed his early participation in sport however rugby was his passion from the age of five and his father was his first rugby coach. During his later years in high school he played in the first fifteen rugby team where he was introduced to formal coaching. At high school he received coaching from a number of significant teachers and coaches, one of those being a former international player who was the first person to teach him about the requirements of his position. The most significant influence was his maths teacher who spent time with him on a personal level and provided individualised training sessions on aspects of his game.

After completing high school Walter moved to a large regional centre and completed an honours degree in teaching, majoring in geography and physical education. However his strong community links meant that he returned each weekend to play for his club team. After completing his university studies he moved to large regional city to improve his chances of playing representative rugby. Walter taught for a short period of time before taking up a job that would release him for representative rugby duties. He went on to establish a rugby career that saw him represent his province and the national team. His time as a player also included time playing in Europe as a professional before the game was officially professional.

In Europe he was exposed to the coaching philosophies of Pierre Villepreux who favoured a game-based approach over technical instruction. When he returned to New Zealand he moved into coaching and coach development. He worked as the CEO of a provincial rugby union club for three years and then worked as a rugby development officer for the New Zealand rugby union. He was appointed to coach the New Zealand under 19s team and also coached locally as a volunteer while coaching professionally. Walter was the head coach of a provincial team in the Super 14 competition before being appointed as an assistant coach to the New Zealand national team.

Rodney

At the time of the data collection Rodney was the head coach of a Super 14 team in New Zealand. He grew and spent his formative years in a small farming community and town on the south island of New Zealand. While he played a range of sports growing up his preferred sport was rugby and from his primary school days he had enjoyable memories of playing rugby with his friends. He attended the local primary school and then went on to finish his schooling at a private high school in a large regional centre of the south island. Rugby was the main winter sport for boys at this school.

Although he remembered all his coaches from primary and secondary school years he did not nominate any one coach as being influential. However he did express a view that they all cared about their players and were trying to help them improve as players. After finishing high school he completed a teaching degree at university and during that period he also made his provincial rugby debut. He went on to establish a provincial level rugby career that lasted for another 11 years accumulating over 140 games. During that period he also represented New Zealand in the national team the All Blacks. Rodney spent one year playing rugby professionally in Europe before the sport was officially recognised as a professional sport. After his playing career finished he took up coaching rugby at an amateur level. He coached for seven years as an amateur before taking up his first professional appointment when he spent three years as the head coach of an NPC team. Rodney also enjoyed three years as an assistant coach to the New Zealand national team. During his time as a professional coach Rodney has been actively involved in coach development activities in his region, predominantly in rugby and netball.

Arnold

At the time of the data collection Arnold was the head coach of an NPC team in New Zealand. Arnold grew up playing a wide range of sports including, tennis, gymnastics, swimming and cross country running. However his first love was rugby. Arnold remembered all his coaches from primary and secondary school but felt none of them influenced him in a positive way as they were all dictatorial and used the same training activities for all sessions.

Arnold completed his high school at a private catholic high school where it was compulsory to play rugby. After completing high school Arnold completed a teaching degree at university but never took up a career in teaching. He spent a short period of time playing and coaching in England before returning to New Zealand. He went on to establish his own business which he operated for two decades. After playing rugby for fifteen years at a senior level and without a significant break Arnold moved into coaching. Arnold's twenty years of coaching experience started as an amateur in his local area when he was approached to coach by someone from his past club. He progressed through to provincial level teams and onto coach national under age teams. He was later appointed to his first professional coaching appointment as an assistant coach to a New Zealand team in the Super 14 competition.

Appendix 2 Coaching Behaviour Observation Instrument

Coach _____ Date _____
 Start _____ Finish _____
 Scale 1 Sometimes
 2
 3
 4 Always

Coaching Practice					Field Notes
The coach outlines the goals for the session	1	2	3	4	
Uses games in the coaching session?	1	2	3	4	
Does the coach use problem solving approaches to coaching	1	2	3	4	
Uses questions to stimulate players	1	2	3	4	
Uses jargon or complicated language to describe the session?	1	2	3	4	
Takes time to discuss coaching objectives with players.	1	2	3	4	
Players have autonomy of decision making during the session	1	2	3	4	
Seeks feedback from players during the session	1	2	3	4	
Seeks feedback from players at the end of the session	1	2	3	4	
Is there interaction between the players?	1	2	3	4	
Is there interaction between the coach and players?	1	2	3	4	

Signed **Observer**.....

Appendix 3 Ethics



The University of Sydney

NSW 2006 Australia

Human Research Ethics Committee

www.usyd.edu.au/ethics/human

Senior Ethics Officer:

Gail Briody

Telephone: (02) 9351 4811

Facsimile: (02) 9351 6706

Email: gbriody@usyd.edu.au

Rooms L4.14 & L4.13 Main Quadrangle A14

Human Secretariat

Telephone: (02) 9035 9309

(02) 9035 9308

Facsimile: (02) 9035 9310

Email: dbrielson@usyd.edu.au

6 December 2006

Dr R Light
Faculty of Education and Social Work
Education Building – A35
The University of Sydney

Dear Dr Light

Thank you for your correspondence received on 30 November 2006 addressing comments made to you by the Human Research Ethics Committee (HREC). After considering the additional information, the Executive Committee at its meeting on 30 November 2006 approved your protocol entitled "How has the development of game sense and the ideas about coaching underpinning it impacted upon the practices of elite level rugby union coaches in Australia, how do they interpret it and what are their thoughts about its efficacy?"

Details of the approval are as follows:

Ref No.: 11-2006/9620
Approval Period: 30 November 2006 – 30 November 2007
Authorised Personnel: Dr R Light
Mr J R Evans

The HREC is a fully constituted Ethics Committee in accordance with the *National Statement on Ethical Conduct in Research Involving Humans-June 1999* under Section 2.6.

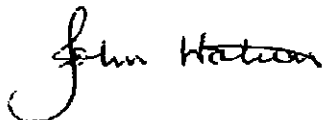
The approval of this project is **conditional** upon your continuing compliance with the *National Statement on Ethical Conduct in Research Involving Humans*. We draw to your attention the requirement that a report on this research must be submitted every 12 months from the date of the approval or on completion of the project, whichever occurs first. Failure to submit reports will result in withdrawal of consent for the project to proceed.

Chief Investigator / Supervisor's responsibilities to ensure that:

- (1) All serious and unexpected adverse events are to be reported to the HREC as soon as possible.
- (2) All unforeseen events that might affect continued ethical acceptability of the project are to be reported to the HREC as soon as possible.
- (3) The HREC is to be notified as soon as possible of any changes to the protocol. All changes must be approved by the HREC before continuation of the research project. These include:-

- Notifying the HREC of any changes to the staff involved with the protocol.
 - Notifying the HREC of any changes to the Participant Information Statement and/or Consent Form.
- (4) All research participants are to be provided with a Participant Information Statement and Consent Form, unless otherwise agreed by the Committee. The Participant Information Statement and Consent Form are to be on University of Sydney letterhead and include the full title of the research project and telephone contacts for the researchers, unless otherwise agreed by the Committee and the following statement must appear on the bottom of the Participant Information Statement. *Any person with concerns or complaints about the conduct of a research study can contact the Senior Ethics Officer, University of Sydney, on (02) 9351 4811 (Telephone); (02) 9351 6706 (Facsimile) or gbriody@usyd.edu.au (Email).*
- (5) The HREC approval is valid for four (4) years from the Approval Period stated in this letter. Investigators are requested to submit a progress report annually.
- (6) A report and a copy of any published material should be provided at the completion of the Project.

Yours sincerely



Associate Professor J D Watson
Chairman
Human Research Ethics Committee

cc: Mr John Robert Evans, Room 309, Faculty of Education and Social Work, Building – A36,
The University of Sydney

Encl.
Participant Information Statement



PARTICIPANT INFORMATION STATEMENT

Research Project

How has the development of Game Sense and the ideas about coaching underpinning it impacted upon the practices of elite level rugby union coaches in Australia

(1) What is the study about?

The project will look into coachs' responses both to their general coaching experience and then with their use of Game sense in coaching. The research project will involve 5 coaches working at elite level in Rugby Union.

(2) Who is carrying out the study?

The study is being conducted by John Evans who is a PhD student in the Faculty of Education and Social Work at the University of Sydney. The study will be supervised by Dr Richard Light

(3) What does the study involve?

Participants will be interviewed up to 3 times and the responses will be audio-taped.

(4) How much time will the study take?

The interviews will take approximately 30 minutes to complete and will take place at a time and location agreed to by the participant between November 2006 to September 2007.

(5) Can I withdraw from the study?

Yes Being in this study is completely voluntary - you are not under any obligation to consent. If you consent to take part in the study you may withdraw at anytime. You may also request that any unprocessed data generated be destroyed.

(6) Will anyone else know the results?

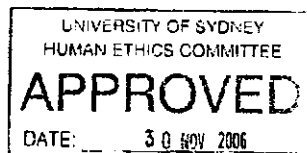
All aspects of the study, including results, will be strictly confidential and only the researchers will have access to information on participants. A report of the study may be submitted for publication, but individual participants will not be identifiable in such a report. The anonymity of the university and the area will also be protected by the use of pseudonyms.

(7) Will the study benefit me?

Not directly, although it will be used to assess if "Game Sense" pedagogy is a useful coaching tool.

(8) Can I tell other people about the study?

You can tell other people about the study



(9) **What if I require further information?**

When you have read this information, John Evans will discuss it with you further and answer any questions you may have. If you would like to know more at any stage, please feel free to contact:

John Evans Room 309, A36 PhD student at the University of Sydney. Contact details: Telephone, (02) 9351 6260, E-mail, J.Evans@edfac.usyd.edu.au

(10) **What If I have a complaint or concerns?**

Any person with concerns or complaints about the conduct of a research study can contact the Senior Ethics Officer, Ethics Administration, University of Sydney on (02) 9351 4811 (Telephone); (02) 9351 6706 (facsimile) or gbriody@usyd.edu.au email

This information sheet is for you to keep



Appendix 4 Interview Schedule

The three rounds of interviews used semi structured questions to elucidate responses from the participants. I advised each of the participants that they were free to contribute any relevant information that they thought reflected their views. In this sense the interviews were, to some extent, conversational in nature but were always guided by the research question and the focus questions for each round. The participants were encouraged to elaborate or expand on any points and this was used to draw out salient points.

Round 1 Interview

The first round of interviews focused on the participants' life histories with an emphasis on their experiences of sport and coaching. This included their beliefs and values about coaching and the traits of good players and how they can be developed. The interview was structured around the following questions:

Can you please provide me with a brief description of your own sporting background beginning from your childhood before commencing as a professional coach?

What are your clearest memories of sport and of rugby in particular?

Was there anything that stood out for you?

What memories do you have of coaches or teachers from your childhood?

Did they have any particular traits or characteristics that stuck in your memory?

Have you developed any principles about coaching or a philosophy about coaching?

From what point in your life did you begin thinking about becoming a rugby coach?

Could you please tell me the conditions that lead to you becoming a coach or your reasons for becoming a coach?

Could you tell me what you think makes a good coach?

Could you list a few things that make a good coach?

What are the characteristics of great rugby players?

How do you develop those characteristics?

Can you discuss any innovations in coaching rugby recently?

What would motivate you to take a new or innovative approach to coaching?

How do you keep informed of developments in approaches or changes to coaching?

Have you experimented with any new ideas or approaches to coaching over recent times?

Round 2 Interview

The second round of interviews focused on the participants' views about learning and how this might shape their interpretation of new coaching pedagogy such as Game Sense. This included questions inquiring into their beliefs about learning and their role in the learning of players.

Have you developed any principles about coaching or a philosophy about coaching?

In general terms, not just rugby, how do you think people learn?

More specific to Rugby, how do you think players learn to play?

How do you think coaches can best help players to learn to play well?

How do you see the relationship between teaching and learning with Rugby players- what is the relationship between what the coach does and what players learn?

What role do you think the coach has in the learning process for the players?

How do you know when a player has learnt at training or in a game?

How do you give feedback to a player?

Do you use questions with players to determine whether or not they understand?

What role do games have in the learning process for players?

Is learning different in a game to other forms of training?

Are there ways players can learn from each other?

If yes, how do you encourage this?

Are there areas of the game that coaches can learn from players?

How do players move to this position within the team?

How do you develop and improve the skills of rugby players?

Round 3 Interview

The third round of interviews focused on the participants' knowledge and understanding of Game Sense. It also inquired into their use of games-based training and what they thought the limitations of Game Sense might be in its application within their training regimes.

Have you ever heard of the term Game Sense or TGfU ?

What is your understanding of the term Game Sense?

Have you ever attended seminars, information sessions or coach education programs on Game Sense or TGfU or ever read anything about it?

What types of activities do you use for problem solving either individually or collectively amongst players?

Do you ever use games-based training activities in your coaching sessions?

To what extent do you use games in your training sessions?

What are the benefits of games for developing players and teams?

Which areas of player development are games best suited to?

Can you identify any issues that would determine whether you would use games-based activities as part of your coaching session?

What would prevent you from using a games approach?

RARE BOOKS LIB.

- 8 MAR 2011

X

UNIVERSITY OF SYDNEY LIBRARY



000000614777143