A PHENOMENOGRAPHICAL INQUIRY INTO EXPERIENCES OF USING GAME BASED APPROACHES AMONG PHYSICAL EDUCATION TEACHERS IN ENGLAND AND AUSTRALIA

A thesis submitted in partial fulfilment of the requirements for the Degree

of Doctor of Philosophy in Education

in the University of Canterbury

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University of Canterbury

2016

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Acknowledgements

To begin I would like to express my sincere gratitude to Prof. Richard Light for the guidance and support on offer throughout my doctoral journey. Your patience and encouragement were cornerstones of your supervision and I feel privileged to have been able to call on your knowledge and expertise throughout the past 5 ½ years. I could not have imagined a better supervisor and mentor for my study. Thank you.

I would also like to thank Assoc. Prof. Jeanne Kentel and Dr Amanda Mooney for your support at various stages of the design, analysis and writing stages of my study. I will forever be indebted to your commitment to my cause. My sincere thanks also go to University of Canterbury for accepting me as a candidate in their doctoral programme, and to the participants involved in this study who so unselfishly shared with me their time and experiences of teaching.

Finally, I would like to thank my family for their support before, during and after this chapter of my life. To Neridah, not one day of this journey did I ever feel I was experiencing alone. It was you who I always turned to to be my muse and my sounding board. How our life has changed since this study began but I can think of no better companion to have had by my side. To Kelebe and Kenenisa, every day I strive to make you proud. You give me strength and courage in abundance and what I have learned through this chapter of my life I pay forward to you tenfold. To Ma and Pa, the sacrifices you made to privilege me with the education I received I can never repay but play an immense part in my continued desire for knowledge and learning. Your support has been unwavering and a foundation for my growth and development. Thank you all.

Abstract

This study focuses on the analysis of collective meaning associated with secondary physical education teachers' (N=12) experiences of teaching games using a Game Based Approach (GBA). Participants taught in one of two different international contexts, southeast Australia or southeast England, and all had some experience of using a GBA to teach games. An elicitation interview technique was used to help understand experience 'in context' within a phenomenographic research framework with the purpose being to uncover the qualitatively finite number of ways that GBA-related teaching was/can be experienced. As guided by use of a phenomenographic analysis framework three conceptions of awareness were identified that detail the collective meaning associated with participants' experiences of teaching using a GBA, namely that of a *Learner*, a *Collaborator*, and/or a *Catalyst*. An analysis of findings is presented with discussion focusing on the context and meaning of GBA-related teaching experience. Implications for both GBA-related teaching practice and physical education teacher education programmes are presented. A number of recommendations from findings are offered for physical education teachers and teacher educators.

Chapter 1 - Introduction and Context

1.1 Introduction

In the eight years I was employed as a secondary school teacher of physical education in Australia and England, I lost count of the number of times my mind wandered whilst teaching. Without exception, as I scanned the chaos around me, I would be questioning my craft. With every observation, command, question and demonstration I offered, feelings of doubt and uncertainty as to my teaching effectiveness would wash over me, especially when utilising a game based approach (GBA). "Am I doing this right? Is this what my students should be doing? Should I be using Game Sense here? Is this what TGfU is?" Invariably, it was the expectation and responsibility associated with being a physical education teacher (e.g. to respond to student action) that would snap me back to reality, but a lingering feeling of pedagogical uncertainty would always remain. And to a certain extent it still remains.

Since 2008 I have worked as a lecturer within preservice physical education teacher education programmes in both Australia and England, helping to prepare the next generation of secondary school physical education teachers in both countries. My main role is to develop my students' teaching effectiveness through the enhanced understanding of pedagogical content knowledge and I have often wondered if my experiences of pedagogical uncertainty as a secondary school teacher of physical education using GBAs are similar to my students' experiences after they graduate. If it is the case that our personal experiences of using GBAs are similar, then a collective understanding of those experiences might help improve GBA use and teacher effectiveness in the future.

Feelings of pedagogical uncertainty, however, existed well before my experiences as a tertiary lecturer and secondary school teacher. Throughout my undergraduate degree I always felt ill at ease with the traditional methods of teaching being utilised; that somehow

an opportunity for learning was being wasted. Once I began my post-graduate studies, however, I was introduced to the work of Alan Launder and his Play Practice (PP) approach. PP uses the processes of shaping play, focusing play, and enhancing play to create an array of meaningful learning opportunities (Launder, 2001). It empowers teachers by providing them with the insight into the relevant theory that underpins practises, thus encouraging playful environments that stimulate pupils' interest and enables them to retain the joy of participation (Piltz, 2003). For me, PP represented a better and more enjoyable teaching and learning experience that reflected my own beliefs in the need to create a learning environment less restricted by the conventional role of the teacher. My utilisation of PP throughout all my preservice teaching placements helped strengthen my understanding of the theory and the practice of student-centred learning with the consideration of pupils' needs in and through game play now the main driver for my own teaching practice. However, after completing my studies and venturing to Japan to teach I found myself socialised to using more traditional methods of teaching with the predominant pedagogical approach used by Japanese counterparts being very technique orientated. The repetitious nature of learning and accompanying teaching practises were far removed from the ideals of PP that I had grown accustomed to using during my post graduate studies. Upon relocation back to Australia though, I found few resources that could help me, as a qualified in-service physical education (PE) teacher, develop my experiences of implementing and understanding PP and/or other GBAs. It is these experiences, as well as my own teaching and learning beliefs and desire to improve GBA practise that are at the core of this research study.

1.2 Overview of Study

Informed by mine and others' experiences of GBA implementation, this study investigates the nature of physical education teachers' experiences of using a game based

approach (GBA) to teach games. The study's research design incorporates a two-site approach to data generation with six participants recruited from each of two different locations: southeast England and southeast Australia. Through the primary use of elicitation interview technique (Vermersch, 1994) to facilitate participants' sharing of a specific GBA-related teaching experience, analysis of interview transcripts was completed within a phenomenographic framework to investigate the different conceptions, or structures of awareness (Marton and Booth, 1997), that participants offer with respect to their GBA-related teaching experiences. Drawing on the work of Clandinin and Connolly (1990; 2000) composite narratives are utilised to present the collective experience of teaching using GBAs as well as to emphasize the qualitatively different ways the phenomenon of using a GBA to teach games is experienced (Sykes, 2006; Watkins & Bond, 2007). To provide evidence of my reflexivity and place within and throughout the study, *My Voice* has been captured at relevant stages of analysis and discussion. These reflexive snapshots are included as companion to discussion in recognition of my 'presence' throughout the investigation.

As some recent studies on the implementation of GBA have suggested, teacher interpretation of GBAs and their own experiences of using them are central to their decisions about whether or not they continue with them and, if they do, the ways in which they adapt them to their practice (see Curry & Light, 2014). With this in mind, this study enquires into the nature of teacher experience with the experience at the centre of investigation being that of teaching games using a GBA. Researchers have used the term GBA to describe the range of pedagogical approaches that "focus on the game instead of decontextualized techniques or skills to locate learning within modified games or game-like activities and that emphasize questioning to stimulate thinking and interaction" (Light & Mooney, 2013, p. 2). With the investigation of teaching experience being the fundamental focus of this study Hella and Wright (2009) state that a deep understanding of experience requires an awareness of a

variety of contested accounts of that experience. Thus, for this study a phenomenographic research framework was chosen to explore a primary research question that inherently focuses upon GBA experience interpretation and meaning (with "meaning" being defined in this study as the idea or worth of experience).

Phenomenography is commonly referred to as the study of how people experience a given phenomenon (widely defined as an observable occurrence, occasion or experience) with it commonly used in educational contexts to explore subjective experiences of teaching (Lindner & Marshall, 2003; Marton & Booth, 1997). The study's research design also utilises elicitation interview technique within the aforementioned research framework as a means to help participants relive their experiences of GBA use. Briefly, the essence of elicitation interview as outlined by Vermersch (1994) and Cahour et al. (2005) is to go beyond activity description offered within reflected consciousness and to access a pre-reflected level of consciousness obtained through various and precise interview techniques. The following section presents the rationale for this study developed in part from my own experiences of using GBAs to teach games as well as from a research perspective that emphasises the importance of continued contextual analysis of teachers' use of contemporary pedagogies (such as GBAs). A justification of the research methods used is also presented.

1.3 Rationale for the Study

Despite over three decades of global interest in GBA research and its promotion (and mandated use) by government education bodies across the globe, the 'hype' and support for the use of GBAs to teach games is still yet to be reflected in practice (Jarrett, 2015; Pill, 2011). Reasons for this lack of 'uptake' are varied and range from a lack of exposure to effective GBA professional development opportunities to the prolonged acceptance of a *performative* culture often embedded within school-based physical education programmes

(Dismore & Bailey, 2010; Harvey & Jarrett, 2014). The literature on games teaching continues to acknowledge the many benefits of using GBAs, but rarely focuses on the subjective nature of teacher experience. Bucking this trend is the programme of research emanating from Singapore (see Fry, Tan, McNeill, & Wright, 2010; McNeill et al., 2004; Wright, McNeill & Fry, 2009) investigating the Games Concept Approach (GCA - an instructional pedagogy commonly classified under the umbrella term of GBA). Studies conducted over a decade period provide much needed insight into teachers' subjective experiences of GCA implementation. With the exception of Curry's two-year ethnography (see Curry & Light, 2014) exploring a department-wide shift to using the GBA known as Teaching Games for Understanding (TGfU), all other studies on teachers' interpretations and use of GBA have been conducted over relatively short periods of time. Harvey and Jarrett's (2014) systematic literature review of GBA research conducted post 2005 highlights how studies exploring PE teachers' perceptions of GBAs typically only ranged from between four to eight weeks. Furthermore, these same studies more often than not highlighted the key challenges associated with the employment of learner centred/game based pedagogies (see McNeil, Fry, Wright, Tan & Rossi, 2008).

The research does, however, suggest that teachers' unquestioned beliefs, knowledge and dispositions (developed throughout their lives) typically create challenges for their interpretation and uptake of GBAs (*see for example* Butler, 1996; Light & Evans, 2013). This is largely due to the tension between the unarticulated assumptions about learning and knowledge that underpin traditional approaches to games teaching and those that underpin GBAs (Light, 2008). Teachers' beliefs are embodied over their lives to typically operate at a non-conscious level through experiences of teaching or preservice practice teaching (Light & Curry, 2014; Light & Tan, 2006). More informed understanding of teachers' subjective experiences of teaching can help us navigate through/around the challenges of pedagogical

implementation as well as make better use of the emotion and circumstance of experience to ultimately enhance student learning. Furthermore, when we consider comments by Ahmad (2011) that learners "construct, find or develop meaning in their subjective experiences and this result becomes knowledge for them" (p. 79), the importance of investigating teachers subjective experiences of teaching is confirmed. Thus, this study meets the need for more understanding of how teachers' experiences of GBAs shapes their interpretation and use, or non-use, of them. It also contributes to redressing the lack of in-depth studies of significant enough duration to provide understanding of GBA interpretation and use (Harvey & Jarrett, 2014).

Recommendations from researchers in the field (Harvey & Jarrett, 2014; Jarrett, Mouchet, Harvey, Scott & Light, 2014; Oslin & Mitchell, 2005) suggest the need for studies that focus on expanding the contextual analysis of GBA-related teaching experiences. Within a phenomenographic framework this study's use of elicitation interview allows for "in-depth, contextual and ecological analysis of GBA interventions" (p. 292) and to "extend our understanding and appreciation of teachers' own voices and perspectives on GBA use" (Jarrett et al., 2014, p. 293). The use of a phenomenographic approach to structure data captured with composite narratives to frame analysis of teachers' meanings of GBA experience also extends the range of in-depth qualitative research designs used in research into physical education teacher experience. To my knowledge this is the only research project on GBA that utilises composite narratives to frame analysis within a phenomenographic approach. In addition, such a design acknowledges the complexity of meaning experienced by teachers when teaching, irrespective of the context.

Devlin (2006) argues that there is a causal relationship between teaching conceptions and experience and teaching practice. Thus, an awareness of conceptions that have shaped experiences of GBA use may help improve practice (Marton & Booth, 1997). The analysis of

interview transcripts in this study produces an *outcome space* which represents the collective experiences of participants from which the ways that teachers understand GBAs and associated teaching and learning practices may be questioned (Marton, 1981; 1994). Shulman's (1987) argument that "teaching necessarily begins with a teacher's understanding of what is to be learned and how it is to be taught" (p. 7) may indeed be reflected in participants' interview transcripts. Thus, exploration of meanings attributed to how a game is to be taught (and/or has been taught) may reveal more appropriate contextual requirements for successful GBA implementation. Such insights have the potential to help improve current provision of GBA professional development opportunities around the world and facilitate further growth and change commensurate with educational ideals.

1.4 Context of Research and the Researcher

As a sport pedagogue with physical education-related teaching and learning experiences in England and Australia I have engaged in countless conversations aimed at exploring the enhancement of student learning, sport-related performance and the value added by informed selection of a specific pedagogical approach. My personal and collegial research to date showcases a focus on investigating my own experiences of teaching games using GBAs (Jarrett, 2011; Jarrett, Eloi & Harvey, 2014) as well as adding to the general discourse surrounding GBA understanding and use (Harvey & Jarrett, 2014; Jarrett, 2015; Jarrett & Harvey, 2014; Jarrett & Harvey, in press; Jarrett et al., 2014). Yet it is through the deliberate investigation of others' (in-service teachers) experiences of GBA teaching that this study is situated.

Since the 1960s and the development of a range of GBAs (including Teaching Games for Understanding, Game Sense – both discussed in depth later in this study) research into GBA use by teachers across a range of settings has expanded significantly. Arguably though,

this has led to teachers' blended conceptualisations of different GBAs (Jarrett & Harvey, in press). Thus, although certain GBAs may be similar there appears a need for teachers to recognise that not all GBAs are the same with each model or approach chosen impacting significantly upon learner experiences. Thus, there exists a need for teachers to recognise and respond to the contextual differences of each GBA when considering their use (Jarrett & Harvey, in press).

Recognition of the context of GBA-related teaching experience can also expose how differences in context might influence teaching practice (Light, 2012). This is especially important because, although it is widely thought that GBAs are universally applicable across the globe, Light (2012) and Jarrett and Harvey (in press) have argued that this reflects a naïve understanding of both *teaching* and *learning how to teach* processes which in turn neglects the notion of any profound influence of socio-cultural context. The influence of culture on GBA implementation has already been reported in Light and Tan's (2006) study on Australian and Singaporean teachers as well as Evans' (2011) study on the use of a GBA by elite rugby coaches in Australia and New Zealand. Although it is not the aim of this study to investigate specific cultural differences that might influence GBA-related teaching experiences at different locations, it is important to recognise the impact that both the place of culture as a component of context and the influence of culture on the location-specific development of certain GBAs (e.g. TGfU in England, Game Sense in Australia) might have on participants' experiences of GBA teaching. Thus, having participants from southeast England and southeast Australia allows for the possibility of difference in experience to emerge as a product of socio-cultural context. In addition to this the utilisation of two distinct site locations for this study (e.g. the recruitment of participants from southeast England and southeast Australia) also responds to the consistent global interest in and use of GBAs at each site and the subsequent breadth of research into GBAs emanating from both locations.

1.5 Primary Aim of the Study

The primary aim of the study is to investigate the research question: *What are the qualitatively different ways in which secondary school teachers of physical education experience game based approaches when teaching games?* The focus of this study is thus more aligned to investigating teachers' experiences of teaching games using what they consider to be a GBA. Teachers' authentic use of GBAs is not the focus of this study.

1.6 Organisation of the Thesis

This study investigates the primary question: *What are the qualitatively different ways in which secondary school teachers of physical education experience game based approaches when teaching games?* Chapter 2 provides a review of literature relating to the nature of experience and its role in education. Discussion is then related to a review of literature focusing on the key phenomenon under investigation within this study – GBAs – as well as teachers' experiences of use when teaching games. The term GBA is defined along with the historical development of its use as an umbrella term for a range of student centred teaching approaches. Literature supporting the use of GBAs to develop a range of psychomotor, affective and cognitive learning outcomes is presented along with a review of literature outlining teachers' existing perceptions of GBAs. Two main GBAs, namely TGfU and Game Sense, are discussed in detail as the use of each approach relates, in part, to the geographical location of participants of this study. Chapter 3 provides an overview of the research framework utilised for this study with a focus on the rationale for using phenomenography to guide the research design. After an anonymised overview of participant details are presented, data generation procedures are discussed with an in depth description of the utilised elicitation interview technique provided. A description of a composite narrative is

also included as well as how narratives were developed from participants' transcripts and the role they play in helping to describe findings.

Findings are presented in Chapter 4 with a key focus being the application of a phenomenographic framework that helped guide the determination of each category of conception within the outcome space. Composite narratives are then presented as part of category descriptions with *structures of awareness* presented to support and justify the different categories. *Dimensions of variation* (also referred to in this study as *expansions of awareness* - Yates, Partridge & Bruce, 2012) are also provided and used to demonstrate aspects of the phenomenon that thread through and link each category. Chapter 5 offers discussion of findings in relation to research questions as well as discussion relating to and informing the study's outcome space. The collective capacities of participants to discern different aspects associated with GBA teaching are also discussed. A summary of what can be learned about games teaching practice from discerned elements within and across each category is also presented. The concluding chapter (Chapter 6) provides a summary of the study as well as suggested future directions for the field. Recommendations and implications of findings for teachers and teacher educators are also discussed.

Chapter 2 - Literature Review

2.1 Introduction

In focusing on the exploration of secondary physical education teachers' personal experiences of using a GBA I recognise the importance of presenting my understanding of experience and its relationship with education. Furthermore, it is also important for me to offer a definition of what constitutes a GBA, especially in light of its use as an umbrella term for a range of student centred approaches used to teach games. Thus, this chapter is divided into two main sections. The first section explores *teacher experience and perceptions of pedagogy* leading to a specific discussion on the influence of context on teaching as well as the challenges of changing teaching practice. The second section is the *examination of GBAs* within which a historical overview of the thinking that led to the development and use of GBAs to teach games is provided. I also present a review of literature relating to GBA-associated learning and development opportunities as well as teacher interpretations of GBA use.

2.2 Teacher Experience and Perceptions of Pedagogy

This section discusses the nature of experience from a teaching perspective. Discussion then focuses on physical education teachers' beliefs and experiences concerning the teaching of PE with perceptions of GBA implementation concluding the section.

2.2.1 The nature of experience.

> Amid all uncertainties there is one specific frame of reference: namely, the organic connection between education and personal experience. (Dewey, 1938, p. 25)

The writings of John Dewey are synonymous with the exploration of the nature and value of experience as an educative tool (Archamboult, 1964; Quay & Seaman, 2013). His

seminal texts of *Experience and Education* and *The School and Society* explore the contrasts between traditional and progressive education with an emphasis on promoting meaningful education based on quality experiences. His view was that traditional education, although laden with experiences, was largely of the "wrong kind" and "defective from the standpoint of connection with further experience" (Dewey, 1938, pp. 26-27). As he explained:

> How many students, for example, were rendered callous to ideas, and how many lost the impetus to learn because of the way in which learning was experienced by them? How many acquired skills by means of automatic drill so that their power of judgement and capacity to act intelligently in new situations was limited? How many came to associate the learning process with ennui and boredom? How many found what they did learn so foreign to the situations of life outside the school as to give them no power of control of the latter? (Dewey, pp. 26-27).

To help marry the two terms Dewey (1938) holds that "education is a development within, by and for experience" (p. 28). As teachers we have a responsibility to develop our pupils and help them grow as learners, individuals and as a community. Dewey (1938) further contends that we do this through the shaping of experience:

> A primary responsibility of educators is that they not only be aware of the general principle of the shaping of actual experience by environing conditions, but that they also recognise in the concrete what surroundings are conducive to having experiences that lead to growth. Above all, they should know how to utilise the surroundings, physical and social, that exist so as to extract from them all that they have to contribute to building up experiences that are worthwhile. (p. 40)

Our responsibilities as teachers, though, are often neglected by inabilities to utilise the experiences gained from outside the school within the school learning environment itself; while conversely being unable to help pupils apply in daily life what is learned in school (Dewey, 1899/1976). Thus, the nature of experience holds significant wastefulness but also great educative promise. With respect to progressive teaching pedagogies and their utilisation in physical education, Light, Curry and Mooney (2014) suggest that use of language and reflective experience are the main aspects of learning in Game Sense that offer opportunities to intellectualize games teaching. This focus on promoting peer interaction (e.g. through shared language and group reflections) is also reflective of the importance Dewey (1938) placed on the quality of an educational experience within which social and interactive aspects of learning are key components.

It is important also to acknowledge that the nature of experience is complex making the connection between experience and wastefulness even more conceivable. For example, Piaget (1970) relates experience to the attainment and use of previous knowledge and Vygotsky (1978) emphasises the impact of culture and context on experience; both standpoints raising the complexity of understanding associated with the shaping of experience. Yet throughout all interpretations of the elements and value of experience its role in the promotion of meaningful education opportunities for pupils remains, just as its role in the promotion of quality teaching is confirmed.

2.2.2 Teacher experience.

> We rely on the weight of experience to make judgments and decisions. We interpret the past - what we've seen and what we've been told - to chart a course for the future, secure in the wisdom of our insights. After all, didn't our ability to make sense of what we've been through get us where we are now? It's

> reasonable that we go back to the same well to make new decisions. It could also be a mistake. (Soyer & Hogarth, 2015, p. 73)

Soyer and Hogarth's (2015) quote is included at the beginning of this section as a reminder about the nature and impact of experience on teaching. Teacher experience encompasses every contextual variance imaginable, from a well-supported school curriculum inspiring motivated students to some teachers' abdication to perform the most basic of teaching responsibilities. Our journeys as teachers, however, have all been influenced by our previous experiences - the good and the bad, the meaningful and the wasteful. As East (2014) suggests the practice of being a teacher and aligning with institutional, peer, pupil and curriculum expectations "is challenged by teachers' existing beliefs and practices, which are often influenced by their own experiences as pupils in school" (p. 686). And the further into our teaching journey we are, the more likely our use of innovations in the classroom might be limited by our experiences (East, 2014). This is a concept further supported by George Foreman (Professor Emeritus at the University of Massachusetts) who stated, "Experience is not the best teacher. It sounds like heresy, but when you think about it, it's reflection on experience that makes it educational" (cited in Chalufour & Worth, 2003, p. 93).

There are commonly understood assumptions about the role experience plays in becoming a teacher. Tudela (2014) for example, states that preservice teachers are understood to be "vulnerable, innocent and in need of guidance" (p. 157) due to a lack of teaching experience whereas the practices of in-service teachers are often legitimized and made possible (even if inappropriate) based on the assumption that experience leads to full development and certainty in ones' identity as an expert. This view of teacher knowledge as Tudela (2014) explains "references experience with the assumption that one achieves expertise only through experience" (p. 160). So, what might be expected to influence experience on a teaching journey? Keck's (2015) study about getting to the heart of teacher

experience provides an appropriate, if not contentious, starting point. Keck states that one of the realities of teaching is that "teachers struggle to maintain the attention of students whose thoughts, actions and desires are drawn toward things extra-curricular" (p. 22). What Keck also makes clear is that:

> The attention bias of schooling is selective – schools in their traditional form exist by virtue of their focus on certain features of the landscape, and their ignorance of others. Education's attention is 'blinkered' – generally requiring reality to be simplified – and its successful functioning requires teachers and students to buy into a similar simplification of experience… Teachers are abandoned by education, or by the institutions of education, at the point where the idealizations and simplifications that constitute the institution's intended rationality require that all experiences which question this rationality be ignored or marginalized. (p. 22)

Keck's aforementioned focus highlights one of the many forces (e.g. schools and school policy) that contribute to teacher socialisation, which has been defined by Zeichner and Gore (1990) as "that field of scholarship which seeks to understand the process whereby the individual becomes a participating member of the society of teachers" (p. 329). The *force* of teacher socialisation will be discussed in more detail in the Chapter 2.2.3.

Broadening discussion on awareness of the factors that influence experience, Keck (2015) also acknowledges the need for conscious attention to the 'baggage' teachers bring with them from across the spectrum of their professional life. An awareness of what and how this 'baggage' can influence experience plays a significant role in teachers' day-to-day teaching practice with opportunities to utilise and/or avoid influential elements important in helping teachers make connections between theory and practice and increasing the likelihood of more meaningful experiences to inform future practice (Sonmez, 2015). The literature

provides an adamant response/suggestion for teachers to address their 'baggage' issues and achieve conscious attention by highlighting the importance of using critical self-reflection and reflexivity to interrogate experiences (Keck, 2015; Rufo, 2014; Sonmez, 2015). The use of reflective thinking and writing can potentially help to link theory and practice for teachers and be important elements in teachers' education to challenge the status quo of educational practice (Amobi & Irwin, 2009; Rufo, 2014; Sonmez, 2015). MacPhail and Tannehill (2012) support this view and suggest that the ability to examine and reframe assumptions about self and the professional self as agents of change are important skill sets to develop. Thus, our abilities and desires as teachers to seek opportunities to share experiences and beliefs can act as safeguards to help avoid habitualised methods of instruction and pave the way for engagement in supportive communities of practice and experiment with innovative and student centred forms of instruction like the use of GBAs (Nash 2009; Penney, 2008; Pill, Penney & Swabey, 2012; Rufo, 2014).

2.2.3 Physical education teacher experience.

Just as it has long been viewed that physical education teachers hold preconceived ideas about the role they should play in the school (e.g. a curriculum idealist) and in the physical education lesson (e.g. a requirement to be authoritarian or a champion of technique development), so too have physical education teachers' personal theories of learning been viewed as having considerable influence on decisions about instruction (Applefield, Huber & Moallem, 2011; Jarrett, 2015). How and why these notions are conceived and the impact personal learning theories have on teaching practice has often been related to an individual's socialisation.

Utilising the work of Lawson (1986) and his exploration of the roles that various socializing agents play on physical education teacher development, research exploring the socialisation of physical education teachers suggests that the dialectical perspective of

socialisation consists of three phases; acculturalisation, professional socialisation, and organisational socialisation (see Deenihan & MacPhail, 2013; Lawson, 1986; Richards, Templin & Graber, 2014). Curtner-Smith, Hastie and Kinchin (2008) defined the first phase of acculturalisation as beginning at birth and appearing to be "the most potent type of socialization experienced by physical education teachers" and further contended that "interest in sport, often nurtured by parents, draws prospective physical education teachers to the profession. Interactions with physical education teachers and coaches, and experiences of school life and physical education and sport shape views on what constitutes good pedagogical practice" (p. 99).

The second phase, professional socialisation, refers to "the time in which future teachers are enrolled in a teacher certification program at a college or university" (Richards et al., 2014, p. 113). It refers to the impact of a physical education teacher education (PETE) course on a preservice physical education (PE) teacher and is believed to be the least influential phase out of the three (Curtner-Smith et al., 2008). The third phase, known as organizational socialisation, refers to a school's influence on a teacher and has been defined as "the process by which one is taught and learns the ropes of a particular organizational role" (Van Maanen & Schein, 1979, p. 211). Essentially, it is the process by which incumbent teachers of physical education pass their beliefs, practices, and protocols on to beginner physical education staff members (Lee & Curtner-Smith, 2011). Arguably then, a teacher's acculturation, professional socialization and organizational socialization play important roles in the development of their confidence to appropriately teach physical education (Morgan & Bourke, 2008) as well as helping to explain why they interpret and deliver a specific pedagogical approach as they do (Curtner-Smith et al., 2008).

Wanyama and Quay (2014) argue that the teaching of physical education faces challenges all around the World. This is particularly so if a physical education teacher's

accumulated experience base is limited, as having a broad base of experience to help generate and entertain new ideas and skills enables construction of further knowledge enhancing further learning (Elliot & Campbell, 2013). With physical education teachers constructing and developing knowledge from their own experiences of physical education as a pupil, any dominance within their schooling of programmes lacking pedagogical and content variety and/or frequency has a worrisome legacy. As explained by Morgan and Bourke (2008) "the quality of an individual's school physical education experiences directly predicted his or her confidence to teach physical education" (p. 2). Just as teaching confidence in physical education can be difficult to alter, so too the beliefs of teachers. As Rossi (1999) and Barker and Rossi (2011) point out, the beliefs of in-service PE teachers will vary and can be difficult to change with beliefs "acting as a filter through which a host of instructional judgements and decisions are made" (Harvey & O'Donovan, 2011, p. 767). Such beliefs, as Green (2002) contends, are primarily informed by teachers' personal biographies and acculturation and inform the development of entrenched predispositions that significantly impact upon teacher development (Harvey & O'Donovan, 2011). However, preservice PE teachers' beliefs can be changed as research by Moy, Renshaw and Davids' (2014) suggests. Their study into Australian preservice PE teachers' receptiveness to an alternative pedagogical approach to teach games found strong evidence to show that it is possible for PETE educators to change beliefs in order to overcome the constraint of acculturation.

Beliefs formulated within this professional socialisation phase of a teachers' development (i.e. during a teacher training programme such as PETE) can also have significant impact on perceived development. For example, Ozer et al., (2013) suggest that in-service PE teachers' and preservice PE teachers' beliefs about training and knowledge inadequacies associated with PETE experiences can influence physical education teacher attitudes towards inclusion. Also, in a study about in-service PE teachers' beliefs about

teaching children with disabilities, Obrusnikova (2008) argues that PETE experiences such as positive teaching episodes with children with disabilities and access to purposeful course work in adapted physical education are key indicators of perceived development of teaching skills. Yet we should also be mindful that the impact of PETE programmes on teachers' beliefs and attitudes may be 'washed out' by organisational socialisation experiences in the first few years of teaching (Lortie, 1975; Zeichner & Tabachnick, 1981). A recent study by Maciulevičienė and Gedvilienė (2015) into teachers' perceptions of the realities of modern physical education classes is an example of the effects of organisational socialisation on physical education teachers' beliefs. The authors note that in-service PE teachers tend to subjectively better evaluate the contemporary realities of classes compared to their students. Informed by each in-service PE teachers personal beliefs and teaching experiences, these contemporary realities included limited consultation with pupils to inform lesson planning and the absence of pupil performance evaluation and feedback. In this instance the effects of organizational socialisation on the beliefs of teachers is demonstrated by a blanket perception by teachers that *teacher is expert*. Clearly those beliefs are challengeable yet they indicate the effects socialisation has on teachers' beliefs and professional development.

Broader educational literature shows that teachers' beliefs inform their teaching behaviour (Korthagen, 2004; Tsangaridou, 2006). For significant change in teachers' beliefs to occur, if at all, Guskey (2002) suggests that there needs to be evidence of improvement in student learning. When considering how such evidence might be gained the changing of classroom practices becomes a focus for intervention. Butler (2005) has suggested though that changes in teachers' practices can only occur when there is a core belief in innovation, and even then the conflict that may exist between a teacher's core beliefs about teaching and learning and the assumptions that underpin use of a new pedagogical approach can create further barriers to implementation (Light, 2008). Yet, as explained by Aelterman,

Vansteenkiste, Van den Berghe, De Meyer and Haerens (2014), even if teachers are predisposed to altering their practice, teachers do not necessarily act upon their beliefs that might motivate and inform this change. This has both positive and negative connotations for the trialling of pedagogical innovations such as the consideration of using GBAs to teach games.

2.2.4 The influence of context on teaching.

> Context plays an important role in teachers' functioning as professionals. (Sahin & White, 2015, p. 572)

A dynamic and powerful relationship exists between teachers' beliefs and the context of learning and teaching they operate in (Northcote, 2009). This statement is akin to McLaughlin's (1991) suggestion that "teaching practice is embedded in the *nowness* of the teaching context" (p. 69). Such a statement highlights the influence a supportive/unsupportive teaching context can have on overall teaching practice as well as how effective teachers can be as agents of change (Dexter, Anderson & Becker, 1999). The influence of context on teaching practice has been highlighted in studies by Ernest (1988) and Coll and Taylor (2008) with specific discussion relating to possible constraints and opportunities a teaching context provides.

The notion that teaching most commonly takes place in institutional contexts adds another layer of complexity, for "institutional policy often dictates the kinds of teaching that are privileged" (Lawrence & Lentle-Keenan, 2013, p. 4). The significance of social context on teaching and learning has also been recognised in the literature. For example, the *Holistic Approach to Learning and Teaching Interaction* (Patel, 2003) recognises the social context of interaction as a vitally important component of effective learning and teaching. The impact of changes in socio-cultural context in terms of its influence on learning processes and teaching practices has also been highlighted in studies by Light and Tan (2006) and Curry and Light

(2014). For example, the contextual factors that influenced Curry's study investigating a department-wide change in teaching practice were found to have altered significantly over the course of the longitudinal study. This study also found that individual agency played a significant part in shaping teaching practice and that more contextual factors impeded implementation success rather than facilitating success, thus highlighting the power of contextual change. Thus, from a teacher's experience perspective, exploration of interaction (and of the effectiveness of any interchange of ideas) requires appreciation of both the teaching context and the social context to better inform teaching practice.

From a physical education perspective, teaching practice is intimately shaped by teachers' prior embodied experiences and knowledge and the socio-cultural context in which it is presented to them (Light & Tan, 2006). This can include the broad culture and cultures of institutions (Light & Tan, 2006) and, according to Fullan (1992) and McLaughlin (1991), the students, demands of the curriculum, instructional goals and expectations, existing instructional skills, and processes of school. Thus, the learning context and the teacher are mutually shaped by each other (Govender, 2009) which in turn supports Light and Fawns' (2003) argument that teaching cannot be separated from environmental contexts. Hence, the role of context in physical education, and more specifically games teaching, is also significant. Through consideration of a Deweyan perspective Quay and Stolz (2014) state that context "is not merely environment, it is experience itself" (p. 18). Thus, with respect to games teaching and use of a specific pedagogical approach (e.g. a GBA such as Game Sense), the context of the game which is a central feature of Game Sense becomes the prominent feature of the environment and as such experience itself (Quay & Stolz, 2014).

2.2.5 Perceptions of curricular and pedagogical innovation.

To paraphrase Bell et al. (2015) today many schools and teachers make claims to support student-centred experiences, but whilst many "talk the talk they do not always walk

the walk" (p. 251). Although these schools and teachers entertain perceptions of curricula as challengeable and changeable, their desire and ability to embrace pedagogical innovation to facilitate such change is sometimes less forthcoming. Indeed, with perceptions of some subjects, for example physical education, being merely an activity in the school day (Wanyama & Quay, 2014) the road to improved teaching and learning has many, many obstacles. Yet the pedagogical landscape of the future should not be viewed as all doom and gloom as Bell et al. (2015) state that "institutions vary in their appetite for experimentation and risk" (p. 251). Indeed, comments by Rufo (2014) provide the tonic many a school and teacher could use to embrace pedagogical innovation in that every teacher can and should attempt to make a difference to their pupils' learning by being cognizant of opportunities in the classroom that value creative agency. As in any new relationship when teachers implement a different or unfamiliar pedagogical approach into the classroom it is often accompanied by a period of unaccustomed behaviour such as a reluctance for teachers or their schools to wholeheartedly commit (Jarrett, 2015). The challenges that teachers face in the initial stages of this new relationship, if overcome, can be the mainstays of a mutually beneficial teaching and learning experience. Yet the reverse of this is also true. "Failure to adequately invest, plan and commit to the introduction of a new pedagogical approach can bring with it long term consequences that include an unwillingness to ever start a new relationship again" (Jarrett, 2015, p. 27).

Why is there a need for pedagogical innovation and why now? According to Applefield et al., (2000) the idea of a paradigm shift in pedagogical innovation is less about revolution and more about evolution. They understand that a paradigm shift brings new perspectives, new conceptualizations and new ways of thinking to a subject with major conceptual changes historically occurring across all fields of study at certain times. Thus, it is less about the need to suddenly and radically change something but instead more about a

cyclical process of taking stock of empirical literature, embracing new thinking and challenging the status quo. So, just as Dow (2006) supported the notion that a paradigm shift in what and how we think about pedagogy was needed to promote authentic learning experiences, Amande-Escot and O'Sullivan's (2007) belief that "constructivist theories are at the core of education thinking" (p. 186) reflects a similar evolution or time in educationists thinking about potential benefits of a change to constructivist informed pedagogy.

In the field of physical education this evolution of thinking about curricula and pedagogical innovation is at the heart of this study and is supported by a breadth of research published over the past two decades into student centred and game based pedagogies (Collier & O'Sullivan, 1997; Kirk & Macdonald, 1998; Light & Fawns, 2003; Spittle & Byrne, 2009). Much has been written of late about newer and innovative pedagogical approaches that can better assist children experience physical education (O'Sullivan, 2013), yet Pajares (1992) argues that, given that in-service PE teachers have built up a teaching routine through continual experience, it may not be a straightforward process for them to change their current teaching style. As Pintrich, Marx and Boyle (1993) suggest, a teacher's willingness to implement an alternative teaching approach relates to their motivational beliefs with some teachers resistant to change based on their belief that any alternatives are ineffective or too difficult to implement (Aelterman et al., 2014). Furthermore, any change in thinking and practice is often difficult to facilitate and/or embrace due to the limitations of traditional, formal curricula (Light, 2002) and resistance from communities of practice that embrace traditional technique-based instruction protocols (Nash, 2010; Forrest, Webb, & Pearson, 2006). For in-service PE teachers, many of whom have limited and/or consistently reduced timetabled engagement with pupils, implementing a new pedagogical approach may initially reveal itself as being inefficient and counterproductive to pupils' achievement. Even when new pedagogies are trialled, without appropriate support and initial success over time their

implementation can become more perfunctory to the point of cessation. And with the understanding that prior learning and experience are cornerstones of influence on future action, in-service PE teachers' limited exposure to new and progressive pedagogical approaches when they were school pupils can and often does translate to a narrow acceptance of pedagogical variation utilised in their own teaching (Harvey, Cushion & Sammon, 2015).

Is there any wonder that pedagogical innovation in physical education is discussed more than it is practised? If the challenges of consist and drawn-out curricula change are also considered, such as the National Curriculum (NC) in England and the Australian Curriculum (AC) in Australia respectively, arguably such changes to the pedagogical status quo in physical education are made even more difficult.

2.3 Examination of Game Based Approaches (GBAs)

The term GBA has been adopted by a number of scholars and practitioners (for example Harvey & Light, 2015; Light, Quay, Harvey & Mooney, 2014; Serra-Olivares, González-Víllora, García-López & Araújo, 2015) to describe the range of pedagogical approaches that "focus on the game instead of decontextualized techniques or skills to locate learning within modified games or game-like activities and that emphasise questioning to stimulate thinking and interaction" (Light and Mooney, 2013, p. 2). GBAs have also been described as an alternative to the more 'traditional' teacher-centred approaches historically synonymous with games teaching in physical education and sports settings (Light, 2002). Reviews of GBA literature by Oslin and Mitchell (2006), Harvey and Jarrett (2014) and Stolz and Pill (2014) have highlighted a number of pedagogical approaches utilised around the world that reflect similar, but contextualised (e.g. country specific) characteristics. The range of GBAs mentioned in literature include Teaching Games for Understanding (TGfU; Bunker & Thorpe, 1982), Game Sense (GS) (Light, 2004), Play Practice (PP; Launder, 2001),

Tactical Games Model (TGM; Mitchell, Oslin & Griffin, 2006), Tactical Decision Learning Model (TDLM; Gréhaigne, Wallian & Godbout, 2005), Ball School (BS; Kroger & Roth, 2005), Integrated Technique-Tactical Model (IT-TM; López-Ros & Castejón, 1998), Invasion Game Competence Model (IGCM; Mesquita, Farias, & Hastie, 2012) and the Games Concept Approach (GCA; Rossi, Fry, McNeill & Tan, 2007).

2.3.1 Historical development.

In the late 1960's the work of Deleplace (1966) and Mahlo (1969) recognised the significance of developing an understanding of both technique and tactics within the one model of games teaching. In essence, their recognition that cognitive processes were important aspects of effective game play performance helped to stimulate and inform further research from authors in France around the globe (Harvey, Cushion, & Massa-Gonzalez, 2010). Additional research by Wade (1967) and Mauldon and Redfern (1969) in England helped to stimulate the emergence of a change in thinking as to how sport and games could or should be taught. In essence, a shift away from the predominance of repetitive practice, technique focused learning scenarios in sport was being suggested to be replaced by a greater emphasis on the pupil and their place in the learning environment - now commonly referred to as a game based approach (GBA). Yet, as stated by Jarrett and Harvey (in press) it was arguably Bunker and Thorpe's (1982) publication identifying a model for the teaching of games in secondary schools that stimulated the current global interest into how sport and games are taught. Their critique of the "centrality and fundamentality of the teaching of sports-techniques in games" and proposal that "games teaching should begin not with practice of the prerequisite skills but with participation in a game modified to suit the level of experience and ability of the players" (Kirk, 2010, p. 51) coincided with their development of a coherent approach to teaching sport and games, namely, Teaching Games for Understanding (TGfU).

It is at this point, however, that instead of starting to segregate comment and analysis relating to select and different GBAs (e.g. TGfU, Game Sense) I have made the decision to keep using the collective term GBA for the literature analysis that follows. This has been done for three reasons: first, the historical use of GBA-related terms interchangeably to describe a single approach (e.g. see Pill [2011] and reference to 'TGfU-GS'); second, the overriding view held by researchers and practitioners that all GBAs offer similar learning benefits and challenges; and thirdly, fidelity-of-approach issues that often accompany GBA research (Jarrett & Harvey, 2014). Having said that, later in this chapter in subsections 2.3.5 & 2.3.6 two specific GBAs (e.g. TGfU and Game Sense) become the focus of discussion as a means to highlight recognition of historical and contextual influences of pedagogical approach development. Similarities and differences between each approach are discussed in detail as the use of each approach relates, in part, to the geographical location of participants of this study – southeast England and southeast Australia.

2.3.2 Pupil development and performance outcome achievement.

GBA-related literature reviews completed by Oslin and Mitchell (2006), Harvey and Jarrett (2014), Stolz and Pill (2014) and Miller (2015) have provided extensive overviews of empirical research describing pupils' development and performance outcome achievement. The first three reviews also provided a review of teachers' (and sport coaches') perceptions associated with GBAs and their intervention. Accordingly, discussion in this section will provide a review of research that links pupils' achievement of performance outcomes with being taught using a GBA with discussion later in the chapter exploring teachers' perceptions and experiences of teaching using a GBA.

Over the past three decades there have been numerous studies and subsequent positive associations made between GBA interventions and the development of different aspects of pupils' game play performance. In brief, GBA interventions have been associated with 1) the

development of on and off-the-ball skills (see Harvey, 2009; Gray & Sproule, 2011; Gray, Sproule & Morgan 2009; Harvey, Cushion, Wegis & Massa-Gonzalez, 2010; Robinson & Foran, 2011; Turner & Martinek 1999; Zhang, Ward, Li, Sutherland & Goodway 2012), 2) the development of tactical awareness (see Bohler, 2009; Hastie & Curtner-Smith 2006; Jones & Farrow, 1999; Lee & Ward 2009; Memmert & Harvey 2010; Mitchell & Oslin, 1999), 3) the development of higher order thinking (see Diaz-Cueto, Hernández-Álvarez & Castejón, 2010), and 4) improved tactical creativity (see Greco, Memmert & Morales 2010; Memmert, 2006 & 2007; Memmert & Harvey 2010; Memmert & Roth 2007; Rink, French & Tjeerdsma, 1996). It is also worth noting here comments by Rovegno, Nevett, Brock and Babiarz (2001) and Harvey (2009) who suggested that by structuring the learning environment (i.e. the game) in a particular way, pupils could offload their cognition onto the environment thereby encouraging them to utilise technical skills to overcome complex tactical problems. Such are the opportunities associated through exposure to GBA intervention. Yet as alluded to by Miller's (2015) systematic review of GBA literature, the studies he identified as involving more than eight hours of GBA intervention demonstrated stronger development of pupils' game performance variables (such as decision making and skill execution). Although an association between use of GBAs and positive development of game-play performance outcomes exists, there are obviously inconsistencies as to the amount of time teachers are using and pupils are exposed to GBA interventions. Thus according to Miller (2015) and Harvey and Jarrett (2014) discrepancies in intervention length (i.e. how long a pupil learns through their teacher's use of a GBA) and, as an extension of this premise, induction length (i.e. how long a teacher is exposed to learning how and why to implement at GBA) should be acknowledged as being influential in teachers' and pupils' GBA experiences.

Along with literature highlighting positive links between GBAs and pupils' improved game-play performance outcomes, additional elements of engagement that can positively impact upon learning have also been associated with GBA use. As Mandigo, Holt, Anderson and Sheppard (2008) state, "one way to improve children's engagement in PE is to increase their intrinsic motivation" (p. 408). Their study into children's motivational experiences following TGfU-autonomy supportive games lessons reported high levels of pupil motivation. Other studies have also found a positive link between use of GBAs and pupil motivation (see Gray, Sproule & Morgan, 2009; Jones, Marshall & Peters, 2010; McNeill, Fry & Hairil, 2011). As Light (2010) suggests, the nature of affective experience is an important dimension of sport and games participation and research on the development of learning in the affective domain continues to be recognised in GBA literature (see Curry 2012; Jones & Cope 2010; McKeen, Webb, & Pearson 2005; Stolz & Pill 2012) with links to pupil enjoyment also reported (see Chen & Light, 2006; Fry, Tan, McNeil, Wright, 2010; Light, 2003).

Links between a GBA intervention and the development of positive pupil attitudes to physical activity have also been discussed in the literature (see Haneishi, Griffin, Seigel & Shelton, 2009; Harvey, 2009; McNeill et al., 2011; Wright et al., 2009). The development of pupils' attitudes towards peers and teachers however, remains less of a focus in the literature. Oslin and Mitchell's (2005) review of GBAs provided only brief comment on the influence of the student social system on peer involvement in game play and comments included in the study by Mandigo et al., (2008) provide some insight into the development of positive pupil attitudes towards peers. Research into pupils' attitudes towards teachers is just as limited with Jarrett (2011), in the context of higher education in England, finding positive change in university students' attitudes towards their lecturer through their experience of a change to GS pedagogy.

Chen and Light (2006) suggested that a pupil's active engagement within a GBA session places them in a holistic (i.e. physical, cognitive and social) learning environment. Such statements offer hope for continued and sustained research into GBA intervention and support Light's (2012) suggestion that GBA interventions offer support for aspects of learning that are often unintended and less tangible i.e. a positive development of personal identity and sense of belonging. Yet commentary on the holistic view of learning and its association with GBA use is limited (Harvey & Jarrett, 2014). From an ethical development perspective, increased consideration of others (in and out of the lesson/session) has been associated with engagement with GBA interventions as well as promotion of equal opportunity and the redressing of unequal power relations between learner and teacher (Light, 2012). Yet, although texts by Light (2012) and Harvey and Light (2013) begin to expand understanding on the potential for GBA use to develop personal, social and ethical dimensions of learning (i.e. cooperation, fair play, responsibility and ownership, social justice and moral development) further empirical research to complement existing comment contained in these aforementioned texts as well as publications by Harvey (2009) and Fry et al., (2010) is required.

Research on the development of values associated with experiences of a GBA intervention is also scarce and mostly limited to studies exploring how different cultural meanings shape participants' interpretations. Insights into the interpretations of GBAs from around the world have been provided in numerous studies (Dıaz-Cueto et al., 2010; Li & Cruz 2008; Light & Tan 2006; Peters & Shuck 2009; Wang & Ha 2009; Wright et al., 2009) which all highlight the influence of culture on pupils' and teachers' experiences of GBAs. Further discussion in relation to how society and culture influence the context of teaching (and teaching using a GBA specifically) will be elaborated on later in this chapter.

2.3.3 Perceptions of GBAs.

Utilising Dewey's (1896) notion of the organic interrelatedness of self and situation, the connection between how something is perceived and how it is experienced can be understood as mutually interdependent. In essence, this means that perception does not exist in isolation from experience and experience does not exist without influence from perception. Recognition of this theorising is important as it relates to Dewey's (1934, p. 44) belief that "experience is limited by all the causes which interfere with perception". The logic of this then suggests that the influence on experience by means of perception, and vice versa, is continual with no one experience having the chance to complete itself. So what does this mean for physical education teachers and their perceptions/experiences of GBAs?

As previous sections of the chapter have indicated, personal career development as a physical education teacher will inevitably be influenced by perceptions and experiences associated with a wave of acculturalisation, professional socialisation, and occupational socialisation (Lawson, 1986). Therefore, in order to better understand in-service PE teachers' experiences of using a GBA to teach games it is important to firstly acknowledge and explore relevant literature relating to both acculturation influences (i.e. as has been presented in previous sub-sections exploring teacher beliefs and PE teacher beliefs) as well as professional socialisation influences (e.g. research relating to preservice physical education teachers' perceptions and experiences of GBAs).

A number of studies relating to a range of different contexts have been published in relation to preservice physical education teachers' perceptions and experiences of GBA understanding and implementation. Li and Cruz (2008) report that in Hong Kong, preservice PE teachers perceived that TGfU was a viable pedagogical model and when on teaching placements in schools its use to frame learning contributed to pupils' cognitive development and the provision of fun. Similarly, Wang and Ha (2009) confirm that the majority of

preservice PE teachers in their study were likely to use TGfU in the future due to perceived enhancement of pupil engagement, tactical development and inclusivity. Positive perceptions of GBA use were also reported in a number of studies when preservice PE teachers had access to effective support during in-school placement and microteaching occasions (see Nash 2009; McNeill et al., 2004; Wang & Ha 2012a; Wright et al., 2009). Active engagement in a supportive community of practice as Nash (2009) reported, helped preservice primary teachers to develop their conceptual understanding of TGfU and self-confidence which led to improvements in their communication skills and behaviour management strategies when teaching PE. In contrast, Wang and Ha (2012b) highlighted that an absence of theoretical support, defined by a cooperating/mentor teacher's lack of knowledge of TGfU, significantly impacted preservice primary teachers' conceptual knowledge development and ultimately their TGfU-related teaching experience. Other concerns found within literature in relation to preservice PE teachers' and preservice primary teachers' perceptions of GBAs included conceptual and instructional difficulties (e.g. Dudley & Baxter, 2009; Rossi et al., 2007), lack of perceived behavioural control (Wang & Ha, 2009), an entrenched mind set and personal experience stemming from exposure to more traditional approaches to learning (e.g. Light and Georgakis 2007), effects of culture (Light & Tan, 2006), limitations associated with understanding and using high level questioning (e.g. McNeill et al., 2008), and a lack of knowledge about the assumptions about human learning that underpin each GBA (Butler, 2005).

Studies that report the positive development of teaching behaviours when adopting the use of GBAs, however, dominate the literature. For example, Light and Georgakis' (2007) study of preservice primary teachers and Roberts' (2007) study with preservice PE teachers who were taught using a TGfU approach both report a perceived development of teaching confidence. Light and Georgakis' (2007) study clearly identifies the potential for

development in teaching confidence offered by exposure to a GBA. Their study suggested that utilisation of a GS pedagogy offered a useful means for developing preservice primary teachers' inclination and ability to teach PE. Conclusions indicated that exposure to a GS approach when learning how to teach PE provided preservice primary teachers with both a greater confidence to teach physical education and a greater appreciation of the value of sport and physical education provision in school. Jarrett's (2011) study on preservice PE teachers' perceptions of a change to GS pedagogy also identified a range of cognitive learning opportunities provided to students that in turn helped to develop their teaching confidence. Positive perceptions of GBA induction and implementation have also been recorded. Li and Cruz (2008) report on preservice PE teachers' perceptions that TGfU is a viable instruction model contributing to pupils' cognitive development and the provision of fun, whilst Wang and Ha (2009) confirm in their study that "the majority of pre-service teachers are likely to use TGfU in the future" (p. 407).

In contrast to the volume of studies available on preservice PE teachers' and preservice primary teachers' perceptions of GBAs, fewer studies exploring in-service PE teachers' perceptions of GBAs exist. In Casey and Dyson's (2009) study into an in-service PE teacher's experience of using TGfU to teach a unit of tennis, pedagogical and time constraint issues associated with planning and implementation are reported. Feelings of insecurity and apprehension when orchestrating pedagogical change, were also felt by the in-service PE teachers with comment noting the need to provide pupils with a short "crash course in how to be taught this way" (p. 190). Similar findings were also included in a study by Diaz-Cueto et al., (2010) into five in-service PE teachers' perceptions of implementing either a basketball or handball unit with one outcome suggesting that through their experiences teachers began "doubting their own pedagogical expertise and knowledge" (p. 378). Rossi et al., (2007) also highlight the confusion felt by in-service teachers, especially in

relation to the different forms of GBAs that they were exposed to, with the use of GBAs seen as just another "teaching trick" (p. 106). Light and Tan (2006) noted significant cultural implications when implementing GBAs in societies with differing social conventions with the resultant impact potentially affecting the interpretation, use and effectiveness of the approach adopted.

In a study by Pill (2011) that surveyed 64 in-service PE teachers' degree of engagement with GBA curriculum design and enactment it is reported that TGfU-GS "had yet to be fully understood and implemented by the majority of teachers" (p. 115). The survey also indicates that positive aspects of GBA pedagogy (e.g. small sided games) were not just distinctive to GBAs and that other iconic aspects such as use of questioning and utilisation of conceptual links between games of similar categorisation were not always employed within unit development. he lack of utilisation of conceptual links between games was also a feature of discussion in Brooker, Kirk, Braiuka and Bransgrove's (2000) study into a in-service PE teacher's implementation of a basketball unit utilising a GS approach and Butler's (1996) study of 10 in-service PE teachers' experiences of using TGfU.

Rossi et al., (2007) underscore a positive outcome in their professional development initiative study, which was well received by in-service PE teachers as an opportunity to embrace new ideas about teaching. Diaz-Cueto et al., (2010) also note that the initial apprehension felt by in-service PE teachers was altered as they saw the positive changes in pupils' decision-making and tactical performance. Butler (1996) also reports positive changes in pupil decision making as well as increases in time relating to being on-task and engaged in cooperative group interactions.

Cultural, social and institutional contexts within which preservice and new in-service teachers attempt to implement GBAs critically shapes interpretations and teaching experiences associated with GBA utilization (see Light & Butler 2005; Light & Tan 2006).

Empirical research literature exploring teachers' perceptions of using/interpreting different GBAs provides its audience, not only with an insight into the context of experience, but also with an understanding of the contextual differences that influence the development of each type of GBA. For example, the use of a Game Sense approach to engage undergraduate sports students on a taught university unit focused on learning to teach games included comments from participants which highlight a shift in expectations associated with a change of implementation of pedagogical approach (Jarrett, 2011). Participants in this study were attending a university in England and reported the use of GS (originally developed for sports coaches in Australia) as 'different', 'more like club sport' and 'more engaging' in contrast to their British-based secondary school experiences of other game-centred approaches to learning (e.g. TGfU). Arguably, such comments highlight contextual factors that have shaped the development of each approach in each country of origin.

The prominence of contextual influence on the development of the games concept approach (GCA) in Singapore is also worth noting. In a study that explored the views of Singaporean teachers of a mandated change in curriculum pedagogy, Rossi et al., (2007) suggest that the regulative discourses framed by governmentality in Singapore meant that the implementation of a GBA was paradoxical in terms of the expectations of teachers in a climate of control. In addition, empirical and theoretical articles also emanating from Southeast Asia by Wang and Ha (2009) and King and Ho (2009) highlight perceived Eastern-Western social and cultural differences in teachers' value orientation and management of discipline perceptions. They further stress the different contextual influences on GBA and how context can influence its interpretation and implementation. These issues mentioned above are stark reminders of some of the challenges teachers face when implementing a GBA.

The influence of context on GBA teaching and learning experience, however, extends beyond just social and cultural agendas (Light & Tan, 2006). In addition to Light and Curry's (2014) research into the influence of institutional context on TGfU implementation, Harvey, Cushion and Massa-Gonzalez (2010) suggest that the institutionalized context of a high school soccer coach's practice (e.g. a performative culture focussed on winning) in the USA made it difficult for him to develop his use of TGfU. Thus, contextual factors surrounding GBA implementation (for example, country of origin or institutional agenda) hold significance for teachers and the overall achievement of desired student learning outcomes. The opportunities and challenges associated with initiating and implementing a change in pedagogical practice are both context specific and subjective in nature. Evidence does however suggest that when pedagogical change expectations are set with appropriate support (e.g. active community of practice and programme of professional development) in a realistic time frame, greater appreciation, understanding and commitment to change can result.

2.3.4 Criticisms and challenges of GBA use.

Key criticisms of GBA use and the literature that promotes its use have already been alluded to within this chapter, specifically in relation to terms being used interchangeably (e.g. TGfU and Game Sense), the promotion of blended conceptions of approaches (e.g. authors' insistence on using hybrid terms such as the acronym TGfU-GS - see Stolz & Pill, 2013), and limited articulation of verification benchmarks. With the expanding global appeal and use of GBAs - suggested by the ongoing international series of TGfU conferences and the expanding literature - questions about fidelity of approach and the provision of ongoing GBA-related professional development opportunities continue to be raised (Harvey & Jarrett 2014; Jarrett, 2015). It is important at this point to highlight the current discourse amongst academics surrounding the level of emphasis that should be placed on discouraging teachers' use of "inauthentic" versions of GBAs (Light, 2013). Such differences of opinion played out

within the literature can, no doubt, have effects on GBA "uptake" by teachers and highlight one challenge currently facing teachers considering use of a GBA.

Light and Harvey (2015) identify two other areas of particular concern for GBA implementation, 1) the teacher's ability to design practise games, analyse learning, make necessary adjustments, and 2) the effective use of productive and generative questioning. Light and Harvey's concerns about teachers' abilities to engage students with appropriate or high level questioning are not new to GBA discourse (see Wright et al., 2009). Light and Harvey's most recent publication provides the reader with a useful way of thinking about questioning with reference to Vygotsky's (1978) zone of proximal development (ZPD). Specifically they use Cazden's (2001) notion of group scaffolds to discuss the development of student knowledge within the ZPD through questioning. They go on to state that "practitioners could use these questions by stopping the game at a teachable moment, posing a question, and then dividing their pupils into small groups to discuss their possible solutions to the question posed" (p. 8). The theoretical standpoint and structure of learning presented makes sense. Yet as Green (2002) and Stolz and Pill (2013) state, a key challenge for the promotion of effective and appropriate GBA use, whether in relation to a specific aspect of GBA use or a theoretical standpoint, relates to physical education teachers making decisions about which pedagogical approach to adopt based on ideology as opposed to a choice based on empirical research contained in the literature. So what influence does a teacher's ideological position have on GBA implementation?

Brooker et al.'s (2000) investigation of a teacher's experience of Game Sense when delivering a Year 8 unit of basketball also finds that teachers are reluctant to let go of traditional approaches to teaching because they are more aligned to the teacher's own learning experiences. This reflects certain scholars' general explanations of teaching practice (see Siedentop & Locke, 1997) as well as Buchmann (1987) who described most teachers'

practice as being recipe-like, familiar and safe, with an absence of reflexivity. Pill (2011) suggests that perhaps if we present the use of GBAs as a change in emphasis rather than a change in practice, use of GBAs may be "more likely to be assimilated into the valued ideology and practice of physical education teachers" (p. 120). Historically, this view has been supported by others who believe that we, as a profession, should concentrate less on the broader philosophies that drive GBA use and more on "the everyday practical constraints on the PE teacher" (Green, 1998, p. 135). In response, Kirk (2011) offers caution to this viewpoint stating that what we must see from teachers is not only an espoused commitment to improving everyday practice, but also a practical and philosophical understanding of it. As Davis and Sumara (2003) highlight in relation to contemporary use of constructivist-informed teaching, teachers (and researchers) can pick up the language of constructivism but not practise it. This continued uncoupling of theory and practice helps us to refocus attention back onto the importance of recognising differences between GBAs. Although Stolz and Pill (2014) point out that teachers may "not necessarily see or want to see the same boundaries between pedagogical models as researchers do" (p. 63), Kirk (2011) suggests that the presence of continual modification and slippage away from the intended approach may undermine intended learner achievement.

What are some of the other criticisms/challenges of GBA implementation? The absence of GBA teaching experience prior to its use in physical education class has been consistently highlighted in the literature as a constraint on GBA use (see Brooker et al., 2000; Jarrett, 2015; Pill, 2011). Pill's (2011) investigation of the penetration of TGfU-GS curriculum design and enactment with physical education teachers reports that a lack of experience and exposure to TGfU-GS was a constraint on teachers' abilities to design and enact this type of teaching. The absence of role modelling and having a lack of opportunity to

observe GBA in action were also offered in discussion with additional reason for teachers' GBA wariness:

> One of the major conceptual shifts in teaching that awareness of TGfU-GS approach implies is that the uniqueness of a game lies in thinking and decision making that occurs as players read the game environment and then respond with an appropriate movement selection. The results from this analysis of teachers' engagement with TGfU-GS suggest that thinking about games and sport teaching from this perspective is not a common feature of the teaching practice of physical education teachers. (Pill, 2011, p. 119)

The challenges associated with implementing a GBA are potentially exacerbated by what research suggests are typically short induction periods in teacher GBA education programs (Harvey & Jarrett 2014). Induction programmes offered to teachers at tertiary level are typically associated with a set unit of work, often confined to a limited period of time prior to a practicum experience. For example, research by McNeil, Fry, Wright, Tan and Rossi (2008) on the Singapore Government's mandated introduction of a Games Concept Approach (GCA) to physical education teaching confirmed an induction period of only 18 hours prior to in-school delivery. Unsurprisingly, findings from the study suggested the need for greater emphasis on peer-teaching workshops and learning opportunities to better understand GCAs in Physical Education Teacher Education (PETE) classes prior to practicum delivery. Similar findings are also reflected in studies by Wang and Ha (2009) and Pill (2011), which further support the need for more ecologically robust GBA induction and development opportunities such as effective mentoring programmes (Wang & Ha, 2012b). The issue of time was also raised in Robinson and Foran's (2011) study into preservice teachers' implementation of an eight session, 90-minute (per session) after-school TGfU tennis unit for students in grades 4-6. Whilst the results of the study support the use of TGfU

as having a positive impact on student game play development, the authors reserved their conclusion based on not having an understanding whether or not such positive impact on students' game play development could be achieved in a more 'typical' physical education unit curriculum experience (e.g. five x 60 minutes lessons).

A range of "radical suggestions" to help prepare teachers (and pupils) for GBA implementation has been offered in response to the challenges that initial users of GBAs face (Jarrett, 2015). Suggestions include a focus on relearning the roles of teacher and pupil (e.g. engage in microteaching opportunities within in-service professional development days that focus on developing GBA implementation knowledge through reflection, collaboration and discussion), changing the learning landscape (e.g. use context specific games and activities outside of those usually offered in traditional curricula), and making use of alternative resources (e.g. use cross-curricular references and interdisciplinary teaching models to develop use of similar pedagogical approaches by/with teachers of different subjects).

Feelings of insecurity and apprehension when undertaking a pedagogical change are prominent in GBA literature. Casey and Dyson (2009) suggest the need to provide school students with a short "crash course in how to be taught this way" (p. 190) to help manage initial anxiety over a change in expectations and what can be a radically different experience for pupils. As noted by Nash (2009) a change in pedagogy may often be difficult to facilitate due to students' preconceived notions of traditional, formal curricula and the emphasis in certain learning environments on traditional technique-based instruction. I also focus discussion on the need to redefine and relearn the roles of teacher and student as a means to facilitate successful implementation of a GBA.

> Teachers and pupils often hold preconceived ideas about the role they should play in the PE lesson. For example, a teacher may conceive the requirement to be authoritarian or a learner might conceive a dependence on being told what to

> do, how to do, and when to do it. When considering the prevalence of repeat cycle sport or activity focused curricula often adhered to by schools (i.e. the same sport being taught every year in a secondary school PE programme), it is understandable that teachers and pupils might even develop similar preconceptions as to *how* a sport or activity should be taught or learned based on experiences of learning from previous years. Redefining and relearning the assumed roles of teacher and pupil in the PE lesson may help to initiate use and development of GBA practice. (Jarrett, 2015, p. 27)

The promotion of higher order thinking has been both a catalyst and a goal of GBA use since a shift in pedagogical approach to games teaching and coaching arguably began in the mid-1980s. Asking questions that: 1) generate dialogue and learning and 2) provide opportunities for formulating, testing and evaluating solutions within a 'debate of ideas' are now recognised as stalwarts of effective GBA implementation and offer a road map to engaging students/athletes in higher order thinking (Gréhaigne, Richard & Griffin, 2005). Yet the literature still reports on problems arising from both the effectiveness of questioning (Harvey, Cushion & Massa-Gonzalez, 2010; Roberts, 2011) and pedagogical content knowledge limitations (Wright et al., 2009). The existence of such issues could be considered to be indirectly attributable to many teachers' conceptual misunderstanding of GBAs and subsequent difficulty with GBA implementation. Typically, we still see teaching practice that although planned as student-centred, inherently lacks effective questioning (arguably predominantly divergent) and/or the facilitation of opportunities for reflection/discussion (Davis & Sumara, 2003).

As Light (2014) suggests, questioning is the central mechanism employed for promoting student-centred learning and a stimulant for dialogue, reflection, and the conscious processing of ideas. A study by Vande Broek, Boen, Claessens, Feys and Ceux (2011)

comparing instructional approaches to enhance tactical knowledge in volleyball found that the student-centered approach with a tactical questioning group significantly improved the students' Tactical Awareness Test results when compared with the two other instructional groups (that being teacher centred and student centred without questioning). These findings highlight the importance of effective questioning within a student-centered approach to enhance the tactical decision-making process. Appropriate support and education of teachers and coaches is therefore needed in helping them develop a questioning approach, which is seen as central to effective games-based teaching/coaching.

As part of a global teaching fraternity/sorority we must also recognise that GBA literature written in English and emanating from English speaking countries is no doubt being used to inform GBA selection and practice in countries where English is not readers' first language. Thus, another challenge for teachers might be the limited contextualisation of findings and their presentation in the readers' second or third language. Limited correlation of GBA-related research findings published in different languages is also an issue. Studies published in English by Tallir et al., (2007), Dıaz-Cueto et al., (2010), Memmert (2006, 2007), Gutierrez Diaz del Campo, Villora, Lopez & Mitchell (2011) and Vande Broek et al., (2011) have enhanced our understanding of GBAs from a European perspective, yet a wealth of additional GBA research no doubt remains unseen. The publication of GBA-related research in bilingual journals such as PHENex Journal/Revue phenEPS, AGORA para la educacion fisica y el deporte/AGORA for PE and Sport, and e-Journal de la Recherche sur l'Intervention en Éducation Physique et Sport/eJournal for Research in Teaching PE and Sport over the past few years though is beginning to address this oversight but much work remains.

2.3.5 GBAs in England.

Games teaching objectives in England have gone through a number of phases over the past century, from an emphasis on athleticism and fitness for military service in the early 20th century, to the post-World War II belief that physical education should service the needs of elite sport in England (Kirk, 1992). Three decades ago another phase began with a developing focus on student centred teaching and learning that continues to be part focus of PETE programmes throughout England. Tertiary students completing PETE programmes are now becoming more and more accustomed to learning and practising with GBAs through classroom based and practicum learning opportunities[1]. Yet, unlike governing bodies in Singapore and New South Wales that have recognised the use of specific GBAs to teach games in the curriculum (Curry & Light, 2007; Light & Butler, 2005), in-service PE teachers in England are free to adopt any pedagogical approach available.

Harvey and Jarrett's (2014) review of GBA literature identified eight studies completed in the UK exploring aspects of GBA intervention practice. Of those eight, five focussed upon TGfU, two focussed on TGM, and one gave comment on the use of Game Sense. This limited breadth of empirical research exploring the quality of provision of GBA learning opportunities in UK PETE programmes is concerning even though there is a substantial volume of GBA-related teaching resources/theoretical papers available to develop teaching practice (e.g. Griffin & Butler, 2005; Light, 2012). What this data might also represent is a confusing offering of similar, but different pedagogical approaches that may ultimately ward off GBA trialling by preservice PE teachers and new in-service PE teachers. Furthermore, historical comments from UK Education Secretary Michael Gove suggesting more teacher training should be school-based with less university contact time mean the future development of effective and appropriate GBA understanding and practice in English schools remains uncertain (Harrison, 2012). Added to this, cyclical changes to the National

[1] Anecdotal support found after reviewing numerous University PETE programmes across England

Curriculum that have occurred in 1989, 1995, 2000, 2008, and 2014 could inevitably bring with it a reluctance from in-service PE teachers to alter curriculum delivery and/or use of pedagogical innovation due to curriculum reform fatigue (MacLean, Mulholland, Gray & Horrell, 2015).

2.3.5.1 Teaching Games for Understanding (TGfU).

First developed in England by Bunker and Thorpe in the early 1980's as an alternative to the dominant technique-based traditional approaches used in games teaching, TGfU was a concept developed to keep the focus of learning *on* and *through* the game (Bunker & Thorpe, 1986; Light, 2002). Bunker and Thorpe had recognised physical education teachers' tendency to teach the 'how' before exploring the 'why' which they believed limited pupils' enjoyment of physical education and their development of game performance (e.g. tactical awareness; Thorpe & Bunker, 1986). With the main premise of TGfU being that learning should take place "within the context of games modified to suit the learner" (Light, 2002, p. 289) the simultaneous development of technique, understanding, decision-making and perception is offered to pupils within a step-by-step procedural framework (Light & Tan, 2006).

Learning that focuses on 'how' a skill should be performed has arguably been a recurring theme within PE learning environments for generations. However, it is argued by scholars such as Bunker and Thorpe (1982) and Deleplace (1979) that a traditional technique or skill-focused approach (also known as a teacher-centred approach) 1) offers a focus on performance which can alienate a large proportion of pupils from experiences of achievement, 2) leaves pupils knowing little about games, 3) develops limited decision making capacity, and 4) develops instructor-dependent performers. Such admissions led to the development of globally contextualised game based approaches to teaching games, such as Bunker and Thorpe's development (in England) of the Teaching Games for Understanding (TGfU) model.

Developed and refined over the past three decades, TGfU is a step-by-step six stage procedural model designed for use by physical educators and sports coaches to develop skilful games players (Griffin & Patton, 2005). The model places the "student in a game situation where tactics, decision-making, problem solving and skill is developed at the same time" (Webb, Pearson & Forrest, 2006, p. 1). The essence of utilising the TGfU model "allows teachers to place skill development tasks within the context of games" and that the facilitation of dialogue opportunities amongst and after game play "enables pupils to intellectualize the concepts and strategies inherent in games and even transfer concepts from one game to another" (Wright, McNeil & Butler, 2004, p. 47). Of significant importance in the delivery of learning opportunities within a TGfU structure is the notion of "getting the game right" so that pupils "think more about, and within, the game" (Harvey, 2009, p. 7). This then has the potential to enhance development of psychomotor, cognitive, affective and social skills relevant to game play.

According to Gréhaigne, Godbout and Bouthier (2001) student centred approaches to learning (such as TGfU) have the capacity to enhance engagement in peer discussion and in-turn promote development of cognitive aspects of performance. The questioning of participants in relation to their understanding of performance is a key pedagogical feature of TGfU and is designed to support learning by getting participants to recognise and acknowledge experiences of success and to formulate action plans for future practice.

When utilising a TGfU approach four pedagogical principles also help shape game design. Griffin and Patton (2005) offer the following explanations for each principle: Sampling - exposure to different game forms to help pupils transfer their learning from one game to another; Representation – the use of condensed games that have a similar tactical structure to the advanced form of the game; Exaggeration – the changing of specific rules to overstate a specific tactical problem (e.g. changing the dimensions of the playing surface);

and Tactical Complexity – the use of developmentally appropriate games to match pupils' abilities. Using these principles to shape pupils' learning of games can be challenging, especially if those charged with teaching games in schools have limited contextualised experience of being taught the same way (Collier, 2009).

2.3.6 GBAs in Australia.

Since the creation of TGfU in the early 1980's a number of pedagogical variations embracing similar constructionist principles have been developed (collectively referred to as GBAs) with each being influenced by cultural aspects of learning associated with their country of origin i.e. Game Sense (Australia), the Tactical Games Model (USA), Play Practice (Australia), the Tactical-Decision Learning Model (France), the Ball School model (Germany), the Games Concept Approach (Singapore), and the Invasion Games Competence Model (Belgium). In 2011 Pill stated that research concerning the implementation of GBA informed curriculum and pedagogy in Australian school settings was limited, this is despite the development of Game Sense in Australia over a decade beforehand. This absence of GBA research narrative in Australia, he argued, was a constraint on the considered use of GBAs for in-service PE teachers and specific school contexts. At that time in 2011 Pill identified only three studies with a GBA focus in schools (see Austin, Haynes & Miller, 2004; Brooker et al., 2000; Chen & Light, 2006). Since then a number of school-based GBA focused studies have been published (see Forrest, Wright & Pearson, 2012; Georgakis, Wilson & Evans, 2015; Light et al., 2014; Mooney & Casey, 2014; Pill, 2011; Pill, 2013) with Stolz and Pill (2013) suggesting that now Game Sense is the most common version of GBA referred to in Australian games teaching literature. This shift in teaching practice reflects a developing uptake in GBA-related teaching and learning in Australian tertiary PETE programmes but yet according to a study by Pill (2014a) into in-service PE teachers' use of Game Sense "preservice teacher education did not feature as the significant education informing the use of

a GS approach" (p. 24). Thus, Australian PE continues to be discussed in terms of its pedagogical shortcomings and unrealized potential (Pill, 2014b).

2.3.6.1 Game Sense.

The pedagogical approach known as Game Sense (not to be confused with the term game sense which is often used to refer to the practical understanding of games) is often referred to as the "Australian version of TGfU" (Light, 2013, p. 20) due, in part, to the significant role Rod Thorpe (co-developer of TGfU) played in its development, predominantly for use by Australian sport coaches (Light, 2013). According to Light (2013), learning through a Game Sense approach is situated within modified games that involve competition and decision making with an emphasis on questioning to stimulate thinking and intellectual engagement and to make it learner centred. Game Sense is, by design, less structured than TGfU with the absence of a prescriptive model initially intended to encourage existing good coaching practice and avoid any association with pedagogical practices used in school based physical education (Light, 2013). When utilising a Game Sense approach questions are not asked to correct answers, but instead to stimulate thinking and interaction with the understanding that there is no single way or solution to perform games (Chen & Light, 2006). At its core a Game Sense approach involves offering a sequence of games to achieve certain outcomes through a "game – reflection and discussion – game" design (Light, 2012). It requires use of pedagogical features that involve; 1) designing a game based learning environment, 2) emphasising questioning and other indirect teaching/coaching strategies to generate dialogue, 3) providing opportunities for collaborative formulation of ideas/solutions that are tested and evaluated, and 4) developing a supportive socio-moral environment (Light, 2013). Thus, this framework emphasises the need for flexibility when teaching and as such is designed to disassociate GS from the evolution of TGfU into a structured model (Light, 2013; Thorpe & Bunker, 2008).

With use of TGfU and Game Sense often underpinned by similar theories of learning (i.e. constructivism) any distinction between each approach can often be blurred. Arguably, this can lead to teachers' and coaches' blended conceptualisations of uniquely different pedagogical approaches. Although similar in their intention (i.e. to promote learner involvement through playing modified/conditioned games) there is a need for teachers considering using TGfU or Game Sense to acknowledge the number of important similarities and differences between the two pedagogical approaches as their selection and utilisation can significantly affect learner experiences.

2.3.7 Similarities and differences between TGfU and Game Sense.

This section highlights a number of similarities and differences that exist between TGfU and Game Sense. Recognition of commonality and difference when learning about and implementing different GBAs is important for the professional development of teachers and, more importantly, the education of pupils through games and achievement of positive game-play performance outcomes (Jarrett & Harvey, in press).

It has been widely stated in the literature (Light 2013; Reid & Harvey, 2014) that TGfU and Game Sense have similar theoretical underpinnings supporting use of either approach to develop holistic learning (e.g. cognition, affect, motor development and social learning). This makes sense considering the evolution of Game Sense from TGfU. Since 1998 the constructivist perspective has been the dominant theory associated with learning through use of TGfU and Game Sense (Light, 2013). Constructivist theories of learning see the learner "drawing on prior experience and knowledge to interpret and make sense of learning experiences" (Light & Georgakis, 2007, p. 25). Supporting the association of TGfU and Game Sense with a broader constructivist theory of learning are comments by Kirk and Macdonald (1998) that detail constructivist approaches as offering emphasis on learning as

> An active process in which the individual seeks out information in relation to the task at hand and the environmental conditions prevailing at any given time, and tests out her or his own capabilities within the context formed by the task and the environment. (p. 376)

As stated by Jarrett and Harvey (in press), more recent theorising by Light (2008; 2013) has seen the adoption of the more general term complex learning theory (CLT) to describe the basic ideas underpinning TGfU and Game Sense. In essence CLT has been used to simplify the confusion associated with the diverse range of constructivist approaches linked to TGfU and Game Sense use (e.g. constructionism, psychological constructivism, social-constructivism). CLT, as presented by Davis and Sumara (2003), suggest that all forms of constructivism that have been used to theorise learning contain the same three broad themes; that learning is active, social, and a process of interpretation. With respect to TGfU and Game Sense, use of CLT helps to encourage a broader conceptualisation of the learning that occurs in and through use of the approach and recognises the complex nature of learning (Light, 2013). Yet even with the recognised use of a blanket term such as CLT, theoretical differences underpinning each approach still exist. For example, Mouchet (2014) states that TGfU is based on a paradigm that is essentially cognitivist with an educative focus on individual sense and meaning making, whereas Light (2013) states that social constructivism is "more useful in understanding and theorising the learning that takes place in and through Game Sense due to its emphasis on learning as a social process" (p. 28).

With the terms TGfU and Game Sense often used interchangeably is it any wonder that teachers are more aware of the similarities that exist between the two approaches rather than the differences? (Jarrett & Harvey, in press). Also contributing to a blended conceptualisation of approaches is the limited articulation of verification benchmarks used by a large proportion of TGfU and Game Sense studies. Light (2013) has suggested that the

main difference between TGfU and Game Sense is the latter's 'looser approach'. This highlights the fundamental difference in the origins of each approach with TGfU being a prescriptive education-focused *model* and Game Sense being a more performance-focused *approach* more open to interpretation to support coaches' (and teachers') existing good practice (Jarrett & Harvey, in press). With TGfU originally geared toward teaching games in physical education classes, the model offered a prescriptive approach to help teachers provide their pupils with opportunities to recognise underlying principles of games based on space, time, force and risk where tactical understanding was reduced to simple ideas that might transfer to other similar games (Kidman, 2005). The distinct education focus of TGfU is confirmed by Rod Thorpe who commented that the "central aim in the lesson was to ensure children understood what they were doing and learning more about games" (Kidman, 2005, p. 233). The more 'fluid' Game Sense approach is supported by the absence of a model, which arguably provides teachers with greater opportunities to teach what they see rather than being hamstrung by any assumed requirement for structured sequencing of learning.

According to Light (2013) the use of modified games within TGfU is designed to help pupils/players understand the place of certain skills in the game through engagement in game play. If required, pupils/players can then practise these skills before returning to the game. In Game Sense the focus of learning is within games as much as possible with no prior identification of skills to be developed. Skills and tactics are thus "learnt and developed within game contexts rather than being identified within, and practised for, game contexts" (Light, 2013, p. 23). The implications of this difference are significant as it requires teachers to consider the context of learning (e.g. pupils' ability levels, motivations) as well as the structure of the learning episode (e.g. intended learning outcomes) prior to determining which approach better serves the needs of pupils (Jarrett & Harvey, in press).

It is typical for a TGfU lesson to begin with a simple game or activity that progressively becomes more tactically complex (Light, 2013) with the underlying purpose of learning to maximise appreciation, enjoyment, cognitive development and physical growth to encourage participation in future games, activities and sport (Storey & Butler, 2010). A Game Sense approach adopts a similar focus but traditionally geared more towards a sport coaching protocol where the games used typically aim at improving or changing specific aspects of team play (Light, 2013; Light & Mooney, 2014). Thus, the holistic education focus of TGfU when compared to the more performative sport-specific origins of Game Sense implies the need for difference in the structure of learning.

2.4 Chapter Summary

The first section of this chapter provided a review of literature relating to the nature of experience from a teaching perspective. Discussion of teachers' perceptions of pedagogical innovation was also presented along with comment surrounding research conducted into the influence of context on teaching. The second section examined the literature relating to teachers' understanding and use of GBAs and the range of pedagogical approaches often grouped underneath this umbrella term. A more in depth focus on the GBAs of TGfU and Game Sense was then presented as each of these pedagogical approaches had contextual and geographic significance to this study. Pupil development and performance outcomes associated with use of GBAs were also discussed with the intention being to highlight the depth and breadth of literature that "supports" use of GBAs within school based physical education settings. My intention here was to give prominence to the premise that use of GBAs is well accepted by academics, but not as well accepted (and practiced) by physical education teachers (Stolz & Pill, 2014). This in turn also helped to inform the very focus of

this study which stems from a desire/need to investigate teachers' experiences of teaching games when using what they consider to be a GBA.

Thus, this study seeks to build on the aforementioned research into teachers' perceptions of GBAs by aiming to reveal, at a collective level, the qualitatively different ways in which GBA teaching can be experienced. Such an undertaking requires the use of an innovative research framework designed to capture teachers' relived experiences of GBA teaching so that variation and meaning within those relived experiences can be investigated. The following chapter addresses the research framework used in this study with the specific aim being to investigate the question: *What are the qualitatively different ways in which secondary school teachers of physical education experience game based approaches when teaching games?*

Chapter 3 - Methodology and Methods

3.1 Introduction

Paramount to expanding and improving our understanding of the implementation and efficacy of GBAs across different learning contexts, Harvey and Jarrett (2014) stated the need to utilise research designs and data generation techniques that further permit the in depth, contextual and ecological analysis of GBA interventions. Thus, an appreciation of research designs already used in GBA research is required to help position the design of this study. Kirk (2005) outlined the prominence of comparative experimental research designs used during what I term the *first phase* of empirical scrutiny of TGfU throughout the 1980's and 1990's (see Griffin, Oslin & Mitchell, 1995; Lawton, 1989). Kirk suggested more practice referenced approaches to examine the effects of GBA use, which, arguably, ushered in a *second phase* of empirical scrutiny in relation to GBAs. Studies exploring the usefulness of GBAs to facilitate learning (see Harvey, Cushion, Wegis, & Massa-Gonzalez, 2010; Lee & Ward, 2009; Wright et al., 2009) have helped move away from what Kirk described as a "tendency within the academic community to seek to contain and normalize new or radically innovative educational developments" (2005, p. 221). I have previously argued (see Jarrett et al., 2014) that there is a need for a *third phase* of research into GBAs that "not only makes use of valid and more innovative research designs but also builds on the few first person accounts of teaching and coaching experiences seen in phase 1 and 2 (see for example Light, 2002) to extend our understanding and appreciation of teachers' own voices and perspectives on GBA use" (p. 293). Hence, the unique design of this study which uses elicitation interview techniques within a phenomenographic framework to explore secondary physical education teachers' experiences of teaching games utilising a GBA.

3.2 Justification of Methodology

The constructivist learning perspectives that have been suggested to underpin GBAs (Kirk & MacDonald, 1998) see learning as a process through which the learner interprets learning experiences based upon past experience and existing knowledge. From this perspective what is learnt varies from individual to individual because their interpretation is shaped by different sets of dispositions and knowledge. It has also been argued that teachers' beliefs and experiences shape their learning of *how to teach* which in turn suggests that the process of GBA interpretation is strongly shaped by social-cultural context (Light & Tan, 2006). This is a perspective I acknowledge throughout this study. Thus, exploration of how and why teachers interpret and use GBAs to teach games demands an understanding of the nature of lived experiences that have shaped their interpretation and implementation of GBAs.

3.3. Phenomenography

> By learning about how the world appears to others, we will learn what the world is like, and what the world could be like. (Marton & Booth, 1997, p. 13)

According to Watkins and Bond (2007) "meanings exist through the way individuals experience situations" (p. 291). Thus, a phenomenographic approach was chosen for this study to explore a research question that inherently focuses upon variations in meaning offered through the reliving of past experiences (Marton & Booth, 1997). Phenomenography is commonly referred to as the study of how people experience a given phenomenon (widely defined as an observable occurrence, occasion or experience) with it commonly used in educational contexts to explore subjective experiences of teaching (Lindner & Marshall, 2003; Marton & Booth, 1997;). Dahlin (2007) suggests that phenomenography can best be understood as a research framework designed to highlight and describe variations in

experience or variations in the ways people *see* a phenomenon. Thus, as a research programme synonymous with educational research and having a focus on educational and pedagogical development applications, phenomenography has often been used to help answer questions about thinking and learning (e.g. Åkerlind 2008; Entwistle, 1997; Marton, 1986). Phenomenography is substance orientated and is about how people perceive, experience and conceptualise something with these ways of experiencing an aspect of the world normally termed "conceptions" (Marton, 1981, p. 177).

Phenomenographers accept that a group of people hold a variety of conceptions. This means that a range of different ideas and meanings evident across a group are identified in order to develop collective meaning on the variation of meaning (Loughland, Reid & Petocz, 2002). In phenomenography individual voices are not heard. Instead it is the description and analysis of experience at a collective level that is the focus with the aim being to find all the qualitatively different ways of seeing the phenomenon as expressed by interviewees (Thune & Eckerdale, 2009).

Marton and Booth (1997) state that when an action is performed the actor experiences both the situation in which the action has occurred and the relation to whom or what he/she is acting. In phenomenography this "individual-world relationship formed between individuals and situations is expressed as internal relations" (Watkins & Bond, 2007, p. 291) and supports the notion that phenomenography adopts a non-dualist perspective (Marton & Booth, 1997; Watkins & Bond, 2007). Recognition of a holistic perspective adopted by phenomenography was important for the design of this study as it reflected the non-dualist, situatedness of learning that underpins the use of GBAs to teach games (Kirk & MacPail, 2002; Light & Fawns, 2003). How we experience the world is central to/in phenomenography, so using this framework helped to keep the lens of enquiry focused on the situatedness of participants' experiences of GBA use.

Marton and Booth (1997) have stated that knowledge is created from the relations between persons and in relation to the world. In reference to the learner they explain:

> There is not a real world 'out there' and a subjective world 'in here'. The world (as experienced) is not constructed by the learner, nor is it imposed upon her; it is constituted as an internal relation between them. There is only one world, but it is a world that we experience. (Marton and Booth, p. 13)

Unsurprisingly then, ontological and epistemological assumptions underpinning phenomenography can be viewed as inter-related as the nature of existence and the acquisition of knowledge are viewed as non-dualist (Svensson, 1997). In phenomenography, there is development of a *second order perspective*, privileging the participants rather than the researcher's views. To clarify, with a first-order perspective a researcher might describe various aspects of the world or study reality; with a second-order perspective a researcher might state others' experience of various aspects of the world or study conceptions of reality (Dahlin, 2007; Marton, 1981). Similar to the focus of Ireland's (2011) study the use of a framework that offers a second order perspective is advantageous in addressing the main research question for this study with the aim being to document conceptions as a way of investigating the broader relationship between GBA understanding and teachers' experiences of using GBAs to teach games.

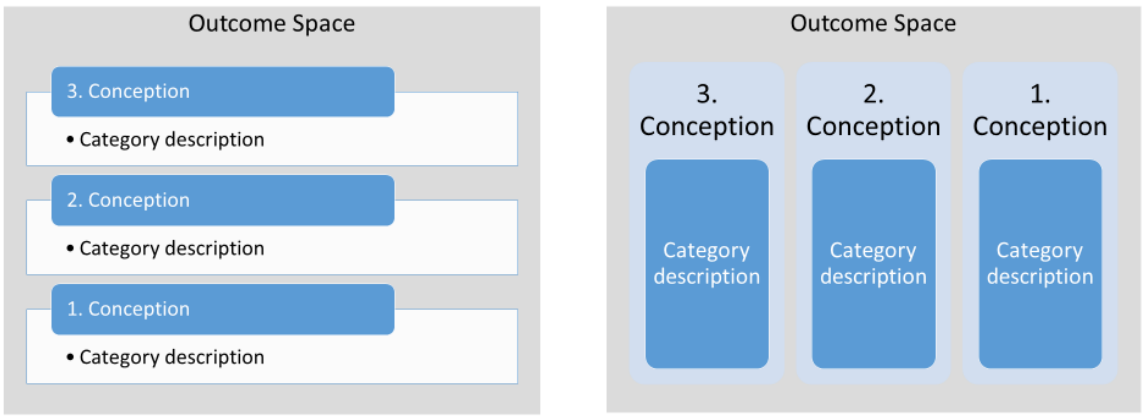
From the interview dialogue between interviewer and interviewee, similarities and differences are noted to produce a short list of 'categories of descriptions' (Entwistle, 1997; Marton, 1981; Marton & Booth, 1997; Svensson, 1997). These categories are a manifestation of the researcher's interpretations of the event/experience described to them. Each category contains a summary description (for this study I used composite narratives for summary descriptions) with "sufficient extracts [of the original data] to delimit the meaning of the category fully, and also to show, where appropriate, the contextual relationships which exist"

(Entwistle, 1997, p. 132). The initial categories are provisional and can alter through the analytical process and remain subjective interpretations (Entwistle, 1997). After this, relationships between the categories are then sought where the "meaning of each category [is related] to every other one, a consideration of individual variations in the ways each category is exemplified by individual respondents, and a thorough logical analysis of meanings of these differences" (Entwistle, 1997, p. 133). This process is aided by a focus on the structure of awareness

Therefore, the categories of description are then logically ordered in an outcome space (Marton & Booth, 1997). This then produces a logical hierarchy (which may become a diagram) with categories depicting few features of the phenomenon to categories describing richer or deeper capacities of seeing/experiencing the phenomenon (Thune & Eckerdal, 2009). Thus, the ordering could be horizontal or vertical as a final outcome (Barnard, McCosker & Gerber, 1999; Entwistle, 1997; Marton, 1981). Figure 3.1 represents my interpretations of an outcome space.

Figure 3.1

Conceptualisations of an "outcome space"



Note: **Both examples above depict the outcome space as a diagrammatical representation of how categories might relate to each other.**

With global use of GBAs not being as well accepted by physical education teachers as it has academics (Stolz & Pill, 2014) the use of phenomenography provides a valid framework to order, and brings meaning to, a range of teachers' GBA experiences so that pedagogy (and learning) in physical education might be improved (Almond, 2010).

3.3.1 Criticisms of phenomenography.

> By making qualitative research *scientifically respectable*, researchers may be imposing themes of interpretation on the social world that simply do not fit that world as it is constructed and lived by interacting individuals. (Denzin, 1988, p. 432)

The aforementioned quote from Denzin (1988) highlights the broader challenge researchers face when exploring research questions more suited to qualitative investigation. There indeed should be recognition of perceived shortcomings when utilising a phenomenographic framework, but not necessarily in response to outcries from predominantly positivist-focused researchers. More so there should be a focus on recognising the limitations of phenomenography with respect to the complex nature of data being investigated, which for this study is teachers' multifarious experiences. To that end Richardson (1999) provides a range of criticisms, none more damming than his belief that "phenomenographers have no basis for characterising other people's conceptions of the world because they themselves only have access to other people's verbal accounts" (p. 66). Yet Marton and Booth (1997, p. 113) counter such an argument by suggesting that, "we cannot describe a world that is independent of our verbal, written or acted descriptions or of us as describers." With the main function of phenomenographic analysis requiring the description and documentation of categories of experience as constituted from data, Saljo (1998) stressed that the identification of these categories was based on researchers' own

constructions and that other researchers might arrive at a different set of categorizations. This reliance on researcher value judgements indeed promotes variability within categorisation processes and can be influenced by researchers' own conceptions of the domain (Marton & Booth, 1997).

The role that context plays in influencing GBA-related teaching practice has been previously discussed (see Chapter 2.2.4). Yet, as Tan (2009) suggests, one of the unique aspects of phenomenographic research is that it examines and identifies phenomena influenced by a range of contexts and then presents different ways of experiencing that phenomena from a decontextualized perspective. This decontextualisation of experience associated with the documentation of collective meaning though should not be considered as meaning that is context free. As Schwandtz (1997) argues all meanings associated with complex phenomena are context specific so there can be no context-free meanings, even at a collective level. What this arguably enables then is the ability for readers from a variety of contexts to appreciate how a phenomenon may be experienced in different ways (Tan, 2008). This then leads into questions about generalizability. With an emphasis on subjectivity, description and interpretation the scope for generalisations able to be made through use of a phenomenographic framework are limited. It is not, however, the intention of this research study to generalise findings, only to identify, inquire into and describe human experience across a group of teachers (Loughland et al., 2002). Indeed, the concept of generalisation is not a key aspect of phenomenographic research. It is the transfer or application of understanding to another situation, context or point in time by the person reviewing the findings that is of greater importance (Rapp, 2011; Sin, 2010).

Reliability and validity of results is a key consideration in any qualitative research that uses interviewing as the primary source for data generation. Marton (1978) recognised the potential for phenomengraphic researchers to not necessarily describe the world as

experienced by people but instead to describe the world as described by people. To help mitigate against such occurrences consideration was given to a range of data generation scenarios and techniques with the use of elicitation interview technique (discussed later in this chapter) preferred. Further reassurance as to the reliability of phenomenographic research is offered by Sandbergh (1997) who suggested that interjudge reliability and member checking were unreliable verification methods as they "did not take into account the researcher's procedures for achieving fidelity to the individuals' conceptions investigated" (p. 203). Furthermore, by including reflexive accounts throughout the analysis of data (specifically during the category formation cycle) my aim is to make explicit my interpretative awareness and to acknowledge and highlight my subjectivity so that "reliability of results issues relating to objective reality fall outside the domain of interest" (Sandbergh, 1997, p. 209).

In relation to the aforementioned discussion about reliability and validity considerations of this study, it is incumbent on me to briefly reflect on statements of contention associated with the use of these terms within qualitative research. For example, Golafshani (2003) believes that within a qualitative study (such as this one), the terms validity and reliability should be replaced by use of concepts such as transferability and trustworthiness as these are better indicators of the strength of findings. Thus, although discussion in this section makes reference to literature that comments on and criticises validity and reliability protocols associated with phenomenographic research (e.g. Sandbergh, 1997), of importance to this study was my consideration of design and analysis protocols that reflected trustworthiness, transferability and rigour (hence my articulation of use of a step-by-step analytical framework to guide analysis).

To conclude, it is also important to highlight that even though use of a phenomenographic research framework aims to document different ways of experiencing

phenomena, according to Holmqvist, Lindgren, Mattisson, and Svarvell (2008) it traditionally offered "no indications of how to use this knowledge in a learning situation"(p. 87). Thus, more recently a theory of learning was developed by Marton and Booth to bridge this gap, namely the variation theory of learning.

3.3.2 Variation theory.

With the intention of phenomenographic research being to document the range of conceptions held of a specific phenonema, associated learning was seen as a move from one conception to another based on an individual's capacities for experience (Dahlin, 2007). Yet prior to 1997 an absence of theory existed as to how learning was made possible. Thus, the variation theory of learning developed by Marton and Booth (1997) quickly become popular as a theory for making learning possible (Hella & Wright, 2008; Lam, 2013).

Central to the theory is the importance of the *experience of variation* insofar as to discern a specific element of an experience we have to experience variation in that element (Lam, 2013). Bowden and Marton (1998) put it simply by suggesting that without variation there is no discernment and therefore no learning. Discernment, thus, is the necessary condition of learning (Marton & Pang, 2006). Hella and Wright (2008) provide two examples to help explain the relationship between variation and learning. The first example highlights the role of discernment, which is "to discern the air temperature on a particular day as cold, you must have previous experience of variation in air temperature" (Hella and Wright, 2008, p. 59). The second forthcoming example highlights the role of variation as an influence on learning. Specifically, the example below highlights a snowballing effect whereby the greater the experience of variation, the greater the potential for deeper understanding (or learning):

> According to variation theory, Lutherans studying Islam should develop a deeper understanding of Islam. However, because they approach Islam from a Lutheran perspective they will also develop a deeper understanding of the

> relationship between Islam and Lutheranism, and hence also a deeper understanding not only of Lutheranism itself but also of their identities as Lutherans. Therefore, by learning about Islam the student will also learn from Islam more about themselves. (Hella & Wright, 2008, p. 60)

In essence then, this study utilises phenomenography and variation theory to ascertain and then investigate participants' abilities to discern various elements of a teaching experience, that being their use of GBAs. The sharing of these discernments will highlight variations in experiences that will inform the outcome space, specifically the category descriptions for each conception (which are presented as composite narratives). That being said, phenomenography and variation theory offer an alternative to other research approaches (e.g. discourse analysis) by examining "the variation within rather than the differences between" (Tan, 2009, p. 95) experiences. This subtle but important difference in focus acknowledges the complex nature of individual experience by keeping the experience itself at the heart of analysis.

3.3.3 Rationale for use of phenomenographic methodology.

At its core the focus of this study is to investigate and analyse the collective meaning participants give to experiences of using a GBA to teach games, in recognition of the personal and subjective nature of teaching. According to Watkins and Bond (2007) "meanings exist through the way individuals' experience situations" (p. 291) thus a phenomenographic approach was chosen to explore research questions that inherently focused upon variations in meaning offered through the reliving of teachers' experiences of using a GBA (Marton & Booth, 1997). The stated research questions for this study demand that the teachers' experiences of GBAs remain the focus of exploration/discussion which provides further justification for the use of a research approach that can gain adequate insight into the nature and meaning of experience (Watkins & Bond, 2007). A phenomenographic

approach implies that the 'object of the research is the variation in ways of experiencing phenomena' and its use implies an interest in "revealing and describing variation, especially in an educational context" (Marton & Booth, 1997, p. 111). In phenomenography the description and analysis of experience at a collective level is the focus, thus providing appropriate recognition of context and its influence on teachers' experiences of GBAs when teaching games. Furthermore, phenomenography is based on the understanding "that individuals' capabilities for acting in relation to phenomena are related to how they have learned to experience the meaning of phenomena they are acting toward" (Watkins & Bond, 2007, p. 291). For this reason an interview programme devoted to providing participants with opportunities to relive their teaching experiences whilst simultaneously investigating the meanings they associate with their experiences was central to this study's design.

3.3.4 Elicitation interview technique.

> Conceptions of reality are not just psychological entities somehow residing in the minds of individuals. Rather, they represent discursive practices that are used as resources in particular communicative encounters. For the phenomenographic researcher, they are apparent most obviously in the communicative encounter of the research interview, although this in itself is a distinctive situation which demands that the participants exhibit a peculiar kind of discursive practice. Indeed, these various discursive practices originate and are constituted in the contributions that people make to situated discourse in daily life. This suggests that phenomenographic researchers might pay more attention in the future to the accounts given by their participants in real-life situations. (Richardson, 1999, p. 72)

The final statement in Richardson's aforementioned quote has informed the design of this research study, specifically a focus on data generation through the communicative

encounter known as elicitation interview which targets the sharing of participants' conceptions of *real-life situations.*

Developed in the late 1980's by the cognitive psychologist Pierre Vermersch, l'entretien d'explicitation, referred to as explicitation interview in initial English translations (Mouchet, Harvey & Light, 2014), was developed to help gain access to subjective, lived experience in a regulated manner (Gouju, Vermersch & Bouthier, 2007; Mouchet, 2014; Vermersch, 1999), to "render explicit what was only implicit in description" (Cahour et al., 2005, p. 2) with the use of *elicitation interview* now growing (Mouchet, 2013). This is because it highlights the true focus of the interview technique, which is to elicit and verbalize the reliving of experience as well as improve the practice of introspection and to "make use of first person data" (Vermersch, 1999, p. 18).

Improved introspection and understanding of experience was a critical motivation in the development of elicitation interview technique and Vermersch (1999), contended that we must find ways of "getting past the difficulty connected with the means of access" (p. 22). The difficulty Vermersch eludes to here relates to the interview process itself and gaining access to what Cahour et al., (2005) describe as the "explicit apprehension of content that was present in the experience but not yet apprehended" (p. 2). Thus, the essence of elicitation interview is to go beyond activity description offered within reflected consciousness and to access a pre-reflected level of consciousness obtained through various and precise interview techniques (Cahour et al., 2005; Vermersch, 1994).

The interview technique engages both the interviewer and interviewee in the 'reliving' of experience through verbalisation of a past and specific situation (Vermersch, 1994). Through the questioning of sensorial context (e.g. the asking of questions that focus on and utilise the often faster and stronger association of bodily senses with event memory) it is posited that experiential detail held within 'moments of knowing' can be actively explored,

thus providing deeper insights to the subjective experience of a given phenomenon (Mathison & Tosey, 2009; Urquhart, Light, Thomas, Barker, Yeoman, Cooper et al., 2003). For this study my aim was to help in the "unfolding of the internal act making possible access to the lived experience which features as the point of reference and then to guide the process of verbalisation" (Vermersch, 1999, p. 22). Thus, interviewees were pressed to explore their own experiences of a given activity and were guided into a state of evocation (e.g. interviewee is in contact with his own experience of a particular situation), which has the potential to provide insights for both themselves and the interviewer (Urquhart et al., 2003). This state of evocation is essential to the success of the elicitation interview. According to Urquhart et al., (2003) it is this state of evocation that "makes the detailed account, and the reflection that accompanies it, possible" (p. 8).

As a psycho-phenomenological approach for data generation (i.e. an approach intended to investigate actions from the perspective of what a practitioner was more or less aware of in a situation or "attentional window" [Gouju et al., 2007, p. 177]), elicitation interview has the potential to extend understanding of GBAs past the limitations of reflection and the description of experience and into a world relived (e.g. consciousness in action; Vermersch, 1994). Semi-structured interviews are typically the workhorse of qualitative research and dominate as a data generation method in research on GBAs, but their use in research on experiences of teaching physical education does not provide for a "view from the inside" required for a full understanding of experience (Light, 2008, p. 5). Arguably this is due to limited mindfulness of validating interview techniques that are aimed at ensuring "verbalization indeed relates to the situation and not to a construction subsequent to the interview context" (Gouju et al., 2007, p. 177). The use of conversations stimulated through visual methods moves closer toward gaining a view from the inside i.e. a subjective

understanding (see for example, Light & Quay, 2003) but is limited in its ability to capture lived experiences of teaching required in a phenomenographic approach.

3.3.5 Rationale for use of elicitation interview.

Typically, data for a phenomenographic study is generated via interviews with individuals (Thune & Eckerdal, 2009). Use of elicitation interview corresponds with an emphasis on interview use within phenomenography because it focuses on an individual's view or lifeworld in order to reveal their beliefs, values, illusions, reality, feelings, and experiences of a specific phenomenon (Barnard, McCosker & Gerber, 1999). This enables participants to reflect on their meaning of experience rather than merely describing their experience (Ashworth & Lucas, 2000), which is a common feature of GBA research. For this study utilisation of the elicitation interview promoted the ability of a trained interviewer to assist the interviewee in reliving (and sharing) a specific teaching experience, making public what is generally conceived as private. This is especially important as Richardson (1999) points out insofar as the interview itself being representative of a quasi-therapeutic situation within which specific strategies might need to be adopted to break down (or bypass) interviewees' conscious or nonconscious unwillingness to share conceptions of teaching practice.

This interviewing technique requires a guiding framework like that offered by phenomenography that recognises interviewing as a preferred method of data generation as well as holding variation in experience as the object of research to be analysed (Lindner & Marshall, 2003). With phenomenography focusing on understanding the "collective instances of *a way* of experiencing" (Lindner & Marshall, 2003, p. 272), such a research design is well positioned to be used for this study, to offer a 'deep' exploration of the qualitatively different number of ways PE teachers can experience using GBAs to teach games.

According to Marton and Booth (1997) “the only route we have into the learner’s own experience is that experience itself as expressed in words or acts” (p. 16). Such a statement offers rational support for the use of elicitation interview as a tool for in-depth analysis of teaching experience. Furthermore, according to Hella and Wright (2009) a deep understanding of a phenomenon requires an awareness of a variety of contested accounts of the phenomenon. As teachers’ experiences of using GBAs are both contextual and subjective (Jarrett & Harvey, 2014) use of a discovery method that focuses upon deep exploration of subjective awareness is arguably a logical match.

There are, however, some documented shortcomings of using interview as the sole means of data generation. Specific to use within a phenomenographic framework, Sin (2010) notes that a reliance on interviews to provide accurate accounts of self or the world is problematic due to the contextual factors that influence both account formation and sharing. A reliance on researcher judgement associated with the analysis of transcripts is also described as problematic (Hammersley, 2007). Other concerns include interviewers’ use of prompts during interviews whereby the interviewees’ comments are railroaded away from their desired focus of discussion (Francis, 1993; Kvale, 1996) and the challenges of associating language with meaning (Mishler, 1991) or the fact that some experiences are difficult to or cannot be expressed (Barnacle, 2005). In response to these shortcomings and challenges there is an inherent need for me, as the researcher, to recognise my presence within and throughout the life of this research study. Sin (2010) states:

> The researcher is not indifferent to the phenomenon or the elements of the overall research. The researcher’s voice in reporting the findings is, therefore, inevitable. That is why it is important that there is a commitment to reflexivity throughout the research process, including the reporting of findings. (p. 315)

Thus, to provide evidence of my reflexivity and place within and throughout the study I have endeavoured to capture and share *My Voice* at relevant stages of analysis and discussion. These written snapshots of thinking sit alongside analysis and discussion both figuratively and in reference to text positioning in the hope that they will act not only as a means to mitigate against some of the aforementioned limitations but also as a means to recognise my place within the research.

3.4 Participants

> Participants in a phenomenographic study should be selected based upon their appropriateness to the purpose of the research study, that is, they have experience of the phenomenon being explored. (Yates et al., 2012, p. 103)

A criterion based sample of participants were selected from two different sites: Site 1 consisted of in-service PE teachers from secondary schools in southeast England (n = 6); site 2 consisted of in-service PE teachers from secondary schools in southeast Australia (n = 6). The distinct site locations (England and Australia) were purposively selected to reflect 1) the growing global interest in and use of GBAs, 2) the breadth of research into GBAs emanating from both sites, and 3) my past experiences of teaching at schools and tertiary institutions in each location. Five schools at each site were identified (based on existing contacts I had at each school) and contact was made with relevant gatekeepers (e.g. Head of PE Department, Head of Middle School) at each school. Once permission to 'engage' staff at each school was granted (i.e. four schools in southeast England and two schools in southeast Australia gave permission) an initial questionnaire (see Appendix A) was sent out via email to teachers within each school's PE department. The questionnaire asked three questions with answers used to ascertain each individual's use of GBAs in their teaching:

1. I have heard of GBAs but have never used one.

2. I have tried using a GBA in my teaching but it didn't work so I no longer use it.

3. I use a GBA in my teaching all the time.

The initial questionnaire also indicated that those electing to respond would automatically be demonstrating a willingness to be involved in the study. Respondents indicating that *I have heard of GBAs but have never used one* were not selected as participants for this study. Four respondents (i.e. two respondents from two separate schools in southeast England and two respondents from two separate schools in southeast Australia) indicated *I have tried using a GBA in my teaching but it didn't work so I no longer use it* and were chosen as participants for the study. Eight respondents (i.e. four respondents from schools at each site) indicated *I use a GBA in my teaching all the time* and were all chosen as participants. Thus, whilst there is no prescriptive sample size associated with a phenomenogrphic study (Yates, Partridge & Bruce, 2012) a total of 12 participants were selected for this study. Both Trigwell (2000) and Dahlgren (1995) suggest that ten to fifteen participants are sufficient in phenomenographic research as it offers a reasonable chance of finding variation within meaning.

Anonymised details of participants from each site are included as Appendix B. As a measure of verification prior to their first interview each participant completed a prototype questionnaire relating to their understanding of GBAs (see Appendix C). The questionnaire also served to gain an understanding of the number of years each participant had been teaching (ranging between one and thirty-three years) as well as the number of years they believed they had been utilising a GBA in their teaching (ranging less than one year to twenty years).

3.5 Procedure

To facilitate participants' sharing of *deeper responses* associated with exploring personal meanings (Loughland et al., 2002), two 40-60 minute interviews were conducted with each participant at a time of their choosing and typically in their office or an unused classroom to minimise disruption. Interview one, a more *standard* interview, focused on establishing a shared level of communication trust between interviewee and interviewer and to help each interviewee become more acquainted with me in my role as the interviewer. The focus of this interview was on the sharing of interviewees' teaching and learning beliefs as well as providing each participant with an opportunity to reflect upon and share their perceptions of their journey into teaching (see Appendix D for an overview of interview programme questions). This opportunity for recognition and acceptance of each participant's teaching background was designed to help prepare them for their second interview within which an elicitation interview technique was utilised to gain *genuine access to previous experience* (Cahour et al., 2005, p. 2). The main focus of interview two (scheduled at least a week after interview one) was to engage participants in the reliving of a past experience of using GBAs through the achievement of a state of evocation. Effective use of elicitation interview technique requires interviewees to recall as vividly as possible the embodied discourse of lived experience (Maurel, 2009; Vermersch, 1994) thus the type of questions and the flow of questioning required are quite unique.

Figure 3.2 *My Voice (1)*

Striving to access a participant's pre-reflected level of consciousness is a complex if not daunting undertaking. I first became aware of the virtues of using elicitation interview technique whilst attending a research seminar run by Prof Alain Mouchet. This introduction to the technique intrigued me to the point of considering its use within this study and engaging in subsequent one-to-one master classes with Alain. Through further seminar and workshop attendance I continued to practice using the technique with the primary goal of developing enough confidence as an interviewer to help justify its use within this study.

To help guide each interviewee towards an embodied speech position reminiscent of elicitation interview technique (Vermersch, 1994) I adopted a range of interview techniques to help *foster an environment in which evocation is dominant* (Urquhart et al., 2003, p. 10). The first was to avoid sitting directly opposite the interviewee to help avert any perception of dominance or initiation of challenge. My choice of seating position was explained to each participant prior to the start of their second interview. Vermersch (1999) stated that "gaining access to subjective events of short duration requires a slowing down, a temporal dilation of the moment which has been lived" (p. 25). Thus, I became very conscious of the rhythm of my questioning which I slowed to "help the subject to take the time to become open to the appropriate form of expression" (Vermersch, 1999, p. 25). I also made use of sensorial questions to help interviewees remain in the present (e.g. "What are you attentive to right now?" instead of "What were you attentive to?"). This was designed to help steer interviewees away from making reflective generalisations, which are symptomatic of a non-evocative state. As much as possible I endeavoured to use interviewee's own words as well as Ericsonian language (i.e. indirect language patterns used in the field of hypnosis to bypass conscious resistance associated with verbal communication and increase the interviewers capacity to engage interviewees in conversation [Stevens-Guille & Boersma, 1992]) to structure my questions in the hope that it would help prompt further responses. For example, "Perhaps you see or hear or sense something or perhaps not?"

Table 3.1 is an extract from an interview completed during the study with specific attention given to eliciting sensorial aspects of lived experience as well as helping the interviewee *stay in the now* and remain in a state of evocation.

Within each interview it was also important that I tried to avoid judgement questions that typically begin with *Why* as rationalisations and justifications for GBA-related thinking and practice were not part of the foci of the research design (Urquhart et al., 2003). Indeed, further to this, with

Table 3.1

Transcript Highlighting Questioning Unique to Use of Elicitation Interview Technique

Me	***I want you to think about an occasion when you are using a games based approach in your teaching [pause]. Tell me where you are right now and what you are doing.***
Interviewee	*I am walking around the outside of the field watching each group as they set up their game.*
Me	***What time of day is it?***
Interviewee	*It is mid-morning, second lesson I think.*
Me	***And what is the weather like right now?***
Interviewee	*It is sunny; there is a slight breeze but it shouldn't affect game play too much.*
Me	***So you are walking around the field watching each group set up. What are you attentive to right now?***
Interviewee	*I am looking to see if students are communicating appropriately and working together. I want them to begin their game quickly.*
Me	***So you are focusing on students' communication as they set up… Perhaps you are seeing or hearing or sensing something or perhaps not?***
Interviewee	*I remember seeing one group….* ***[interjection]***
Me	***What are you seeing right now?***
Interviewee	*I can see a group has set up their game already and can hear them talk about the rules of the game. This is what I want. I am walking over to them and say 'well done, good organization, positive communication, this is what I want'.*

Note: **Examples of sensorial questions used in the transcript above include "What is the weather like right now?" and "What are you seeing right now?" The pace at which the above questions were asked was also deliberately slower and lower in volume than more conventional verbal exchanges to help foster an environment of evocation (Urquhart et al., 2003).**

participants required to select their own past experience of using a GBA to teach games, the fidelity of GBA experience they chose to *relive* within their elicitation interview experience was an issue.

During initial research design discussions with my supervisor consideration was given to including observation of teaching practice as a means to verify participants' GBA understanding and the meanings they attribute to that understanding. However it was decided that the focus of research was on the collective meanings associated with teachers'

experiences of GBA teaching, not a verification of teaching practice or authenticity of GBA use. Thus observation of practice was deemed unnecessary.

3.6 Data Analysis

In accordance with phenomenographic research analysis material collected from participant interviews formed a pool of meaning pertaining to both them as individuals as well as the collective (Marton & Booth, 1997). Marton and Booth (1997) describe this pool as being made of "the same stuff, of course, but it can be viewed from two different perspectives" (p. 132). Material from the pool was inspected against two contexts: 1) the context of the individual interview and 2) the context of other interview extracts viewed collectively in relation to each other (Åkerlind, 2005, 2008; Marton & Booth, 1997). With the object of research being an experience of GBA use, key extracts and/or utterances relating to GBA-related teaching experiences became the blueprint for categorisation reflecting the utilisation of analytic induction to analyse interview transcripts.

In 1999 Richardson suggested that there was an "absence of published guidance on the analytic procedures that were involved in 'doing phenomenography'" (p. 70). Since then, however, a number of resources have been developed and made available to guide researchers considering *doing phenomenography*. Yet as Booth (2008) contends the very nature of analysing phenomenographic data should remain unprescribed as it reflects a process whereby data from transcripts should be viewed as "an issue of working with wholes and parts of wholes, decontextualising and recontextualising parts to form new wholes that tell a different story from the original whole" (p. 453). She further observes:

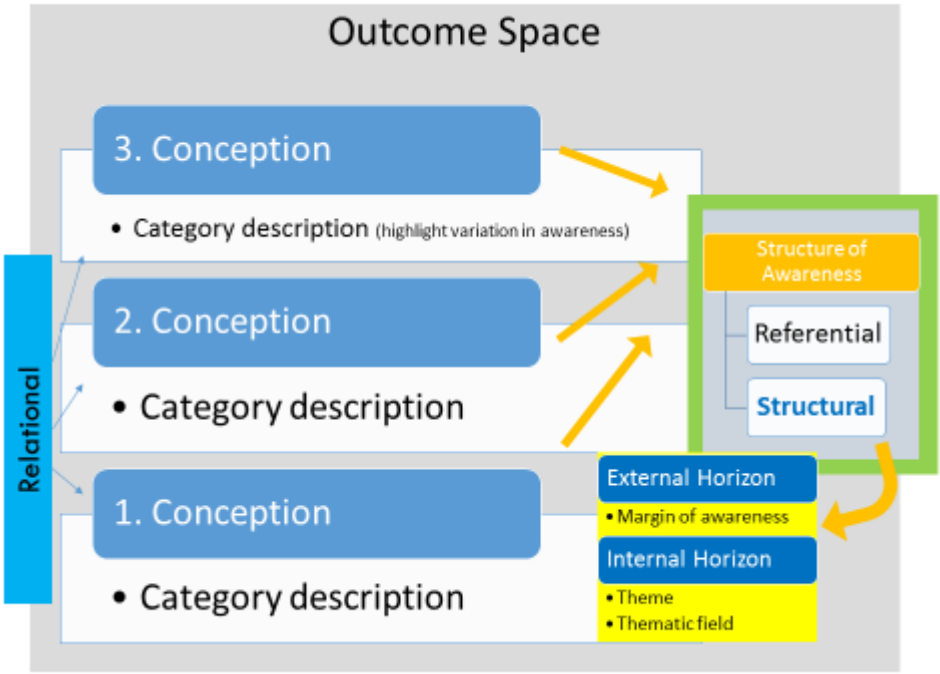
> The process is not algorithmic in the sense that there is a given way to handle the parts and the whole; the researcher rather has to derive their own heuristic in

accordance with the data available and the research question it is intended to illuminate. (Booth, 2008, p. 453)

Thus, I engaged with a range of phenomenographic data analysis guidance (e.g. Booth, 1997; Larsson & Holmstrom, 2007; Sin, 2010; Sjöström & Dahlgren, 2002; Yates, Partridge & Bruce, 2012) to help shape the analysis process. This engagement resulted in my conceptualisation of the framework outlined in Figure 3.3:

Figure 3.3

Conceptualisation of the Framework That Guided Analysis



Note: **Conceptualisation of the outcome space detailing how each conception of awareness relates to and is constituted by structures of awareness.**

Within the conceptualisation above I want to draw attention to my inclusion of the structure of awareness as an analytical framework utilised to aid determination of each conception of awareness. When conducting phenomenographic research Cope (2004) proposes that "the task of establishing validity and reliability can be made simpler if all

aspects of the research have been underpinned with the analytical framework of a structure of awareness" (p. 7). Thus, for this study the determination of the referential and structural aspects associated with each conception of awareness and each dimension of variation was a central feature of the transcript data analysis process. The referential aspect refers to the global meaning of an individual object with the structural aspect being the "combination of features discerned and focused upon by the subject" (Marton & Pong, 2005, p. 336). Cope (2004) offers the following account of the key elements that make up the structural aspects of awareness:

Figure 3.4 *My Voice (2)*

I was acutely aware of the importance of not forming opinions about conceptions at this stage (Sin, 2010) so was happy to find out upon preliminary analysis that over a dozen different highlight colours and short scribbles had been used to mark transcripts.

> Awareness is made up of three overlapping areas: the margin, the thematic field and the theme. When contemplating some phenomenon in the world at a particular time and in a particular context, an individual's awareness is likely to consist of aspects of the phenomenon triggered by the context. These aspects will be simultaneously present in awareness and are known collectively as the thematic field. The individual will also be aware in a less focussed sense of other aspects of the world not considered to be related to the phenomenon. These non-related aspects of the world make up the margin of awareness. Out of all the aspects making up the thematic field, a number of related aspects of the phenomenon will emerge and become the focus of awareness. These related aspects are known as the theme of awareness. (p. 8)

The process of transcript analysis began with step one and the reading and reading of all transcripts (both interview 1 and interview 2) in their entirety. Sjöström and Dahlgren (2000) refer to this as the *familiarisation* stage with time spent reacquainting oneself with the

data helping to ensure that comments are read in context (Bowden, 2000). This also providing me with opportunities to make notes and highlight (with a range of different coloured highlight markers and short hand scribbles) key utterances or meaning statements made that could then be linked to utterances made in other transcripts.

The second step was to focus on participants' responses emanating from the elicitation interview portion of data generation as ultimately their reliving of GBA-related teaching experience was the object of research for this study from where collective meaning of experiences would be construed. I paid particular attention to note the similarities and differences in comments made about GBA-related teaching experience. This then enabled the grouping of similar responses and a reduction in the expanse of transcript data I needed to keep focus on. I was then in position to look for key aspects in the data, namely the referential and structural aspects. Specifically I was looking at the overall meaning being attributed to their GBA-related teaching (referential) as well as what participants' focus of attention was on (structural) (e.g. what element of teaching practice they were focused on). The latter was also informed by identifying specific elements associated with participants' focus of attention, namely the internal horizon (i.e. the *theme* of attention and the *thematic field* or context surrounding that theme) and the external horizon (i.e. objects in the *margin of awareness* that are unrelated to the theme, but that coexist with

Figure 3.5 *My Voice (3)*

Willig (2012, p. 156) states the "the researcher needs to be open to being changed by the encounter with the text". Thus, prior to beginning my analysis of interview transcripts it was important that I reminded myself of the boundaries that would guide my analysis. For example, Marton & Saljo (1984) stressed that any category of description should emerge from comparisons conducted within the data "rather than defined in advance and imposed on the data" (Richardson, 1999, p. 70). How could I do this faithfully when I already had informed notions of *likely* category descriptions based on my previous experiences of working with preservice and in-service PE teachers to develop their GBA-related pedagogical knowledge? Thus, the boundary I created was the strict adherence to the process of transcript analysis as I felt this was paramount in allowing me to subdue any premature desire I had to formulate categories of description.

it). As I began to consider the presence of different categories now beginning to emerge through my analysis my focus remained on whether or not themes within grouped utterances were present in all emerging categories. In essence I was looking for threads of attention that ran through and might link each category. A thread or dimension of variation (Marton & Booth, 1997) was determined if present *throughout* (e.g. multiple individuals' utterances) each category, not just *within* (e.g. an individual's utterance). This was important since the main aim of phenomenographic research is to share collective understanding and meaning.

Figure 3.6 *My Voice (4)*

Although a step-by-step process is outlined here my investigation of transcript data was by no means linear, insofar as one step following the other, but more helical reflecting constant return to comments made within transcripts to inform the building of a better understanding of meaning associated with each participants' comments or utterances.

This ushered in the third step of the analysis process, which enabled me to formulate a draft set of descriptive categories. This preliminary grouping of conceptions was at first numerous (i.e. approximately 10), but as a result of continual comparison of aspects within each conception (e.g. some conceptions were linked and amalgamated into a specific category and others were disregarded as utterances were deemed too ambiguous to determine the focus of attention with any great assurance) the number of categories was reduced.

The fourth step was the initial development of the outcome space, with particular attention to the finalisation of categories and category descriptions. Category descriptions were formulated from selected utterances (e.g. quotes from transcripts) and presented as composite narratives with Marton and Booth's (1997) three key criteria observed: 1) the first being that each category should be distinct in how the phenomena in focus (e.g. teaching using a GBA) is experienced, 2) categories are logically related (e.g. categories reflect an awareness of capabilities and meaning attributed to the experience of GBA teaching), and 3)

the relationship between categories (e.g. similarities and differences) is outlined within category descriptions.

The fifth and final step was to assign a name, or metaphor (Larsson & Holmstrom, 2007), to each category that was constituted from category specific utterances as well as to view and review the outcome space in its entirety. Rechecking similarities and differences offered within category descriptions against each thread was used to help determine each category. In essence I was focused on checking the internal relationships between each category that by their very nature helped define each category. Assigning a metaphor to each category of description also helped to guide my development of composite narratives that were devised to not only assist readers of this thesis to engage with the idea of there being "multiple stories" that encompass teachers' experiences of using GBAs, but also reflect a verbatim description of experience.

3.5.1 Composite narratives.

> Lived experiences can be translated into rich narrative stories. (Rushton, 2004, p. 65)

The presentation of composite narratives created with extracts from participants' interviews are included to highlight aspects of variation and collective meaning held throughout collective experiences of GBA-related teaching. Thus, similar to Bell (2003) I use the term "narrative" to refer to broader social patterns of meaning instead of just personal GBA-related teaching experiences of research participants. Webster and Mertova (2007) support the use of narratives to address issues of complexity and subtlety in human experience. Their use in educational research is supported by the view that "education is the construction and reconstruction of personal and social stories" (Connelly & Clandinin, 1990, p. 2). Support for the use of narratives in sport and physical education research is also provided by Groves and Laws (2003), Armour (2006), Sykes (2003), Oliver (1998), Dowling, Fitzgerald and Flintoff (2012) and within a body of work completed by Carless and

Douglas (i.e. 2008; 2009). More recently, Stolz and Pill (2014) used a fictional narrative approach to present an exploratory conversation about GBAs between an in-service PE teacher and a preservice PE teacher. However, research incorporating the use of narrative inquiry to explore the beliefs of physical education teachers is limited and mainly found in published dissertations and conference proceedings (e.g. Chan, 1999; Rose, 2008; Schaefer, 2010). Of relevance though is Rossi et al.'s (2007) use of composite narratives to frame Singaporean teachers' views of the mandated practice of GCA use in school PE settings, which is a research theme of obvious significance (and similarity) to this study.

Each composite narrative was constructed from an analysis of utterances (e.g. stories) provided by participants at each site. Each narrative was made up entirely, and only, from utterances contained within transcript data that reflected similar conceptions of awareness. The intended use of such narrative methods was to provide special insights into the complexity of meaning attributed to GBA teaching experience over and above more familiar ways of sharing research findings (Riley & Hawe, 2004). Composite narratives were also used as category descriptions as the use of quotes from transcript data best serves to illustrate how categories differ from each other (Bowden, 2000). Furthermore, Clandinin and Connolly (2000) suggest that the use of composite narratives to *retell* stories of meaning provides opportunities for continued growth and change in related fields. In this instance it is hoped that the use of composite narratives to retell stories of meaning derived from GBA-related teaching can help to develop overall pedagogical practice in physical education as well as perceptions of the field itself.

3.6 Ethical Considerations

Qualitative research methods often require the building of rapport between the participant and researcher to elicit the sharing of participants' experiences and their meanings

(Hennick, Hutter & Bailey, 2011). The sharing of teaching experience and the reliving of potentially painful memories or events can be difficult - both for the participant and the researcher. Careful consideration was required to avoid *harm* with recorded interviews and interview transcripts remaining secured and anonymized respectively throughout and beyond the life of the study. Thus, participant and researcher access to counselling was made available on an individual needs basis and communicated to participants as a part of consent form completion.

Participant permission was required prior to involvement in the study and information pertaining to the nature of participants' involvement and structure of the research design was provided within study information documents. Participants were allowed to cease involvement at any stage up to the final point of dissertation submission. All participants were sent final copies of their transcribed interviews and offered an opportunity to add, retract or change any transcribed comments. As a researcher conducting one-on-one interviews it was important that I minimise the potential for personal harm relating to participants' expectations of the interview process. Thus, careful consideration went into the planning of interviews including when and where interviews were conducted. A list of interview questions was also used as a guide to help focus question asking within interviews and to keep interviewer-interviewee discussions within study-relevant expectations. Ethical clearance for this study was attained from Federation University Australia (where I began my candidature before transferring to University of Canterbury) after completion of my confirmation of candidature presentation and submission of research design documentation.

Chapter 4 - Findings

4.1 Introduction

This chapter provides an overview of findings derived from my analysis of transcript data. As phenomenographical research requires, the determination of the outcome space is the final act in the analysis process and is formulated "when data remain in a stable condition" (Stamouli & Huggard, 2007, p. 185). The outcome should then represent a "comprehensive expression of the researched phenomenon" (Ireland et al., 2009, p. 10). Thus, although traditionally it is the end product of phenomenographic analysis, this chapter begins with the presentation of the outcome space as a means to provide readers with a *destination beacon* from which light will be cast back on the analysis process I adopted.

Utterances within transcript data informed the development of three separate dimensions of variation and three categories of description were formulated to describe the qualitatively different ways participants experienced GBA-related teaching. Each conception of awareness or category is described with aspects of each category's structure of awareness detailed. Composite narratives are also presented as an introductory means to view each conception of awareness as well as engage readers with the idea of analysis that focuses on collective meaning.

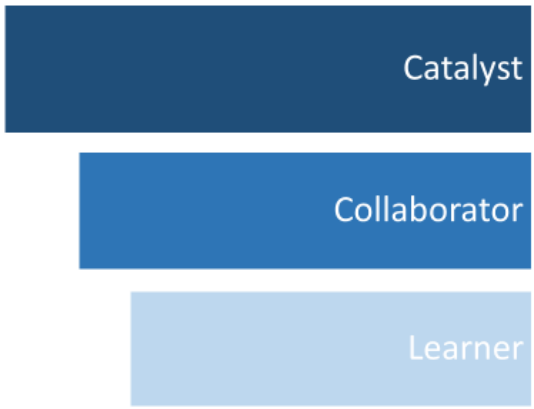
4.2 The Outcome Space

As Larsson and Holmstrom (2007) suggest the outcome space within a phenomenographic study describes the "different ways the phenomenon can be understood" (p. 56). My understanding of the logical ordering of categories constituted from transcript analysis is presented in Figure 4.1 whereby the outcome space depicted represents both the phenomenon of GBA-related teaching experience as well as the various ways in which the phenomenon was experienced (Yates et al., 2012). Three conceptions of awareness or

categories are presented; the *Learner*, the *Collaborator*, and the *Catalyst*. Briefly, the *Learner* category represents the view that teachers using GBAs are required, first and foremost, to be *learners* with conceptions of experience reflecting a more operational understanding (e.g. GBA teaching that reflects a focus on the process and/or act of teaching within a preconceived learning sequence). The *Collaborator* category represents the view that a focus on using GBAs requires engaging pupils in *collaborative* learning endeavours with teachers delegating responsibility for learning. And finally, the *Catalyst* category represents the view that through purposeful and collaborative design and action teachers using GBAs can be *catalysts* for pupils' learning and development beyond the curriculum. A more in depth discussion of each category is provided in Chapter 4.5.

Figure 4.1

The Outcome Space as Represented by the Logical Ordering of Categories



Note: **The vertical ordering, ascending size increase and colour grading of each category depiction is intended to highlight a richer or deeper capacity to experience GBAs e.g. the larger the size and deeper the colour, the greater the capacity for experience.**

With respect to Laurillard's (1993) distinction of three different types of outcome space the outcome space constituted from the data is reflective of an inclusive hierarchy with

categories subsumed within higher ordered categories (i.e. as part of a collective of participants those who experienced GBA-related teaching as a *Collaborator* also experienced the phenomenon as a *Learner*, those that experienced GBA-related teaching as a *Catalyst* also experienced the phenomenon as a *Collaborator* and a *Learner*). As a hierarchy this group of conceptions reflects a parsimonious ordering of the qualitatively different ways participants perceived their GBA teaching experience. As also discussed by Ireland et al., (2009) it is my intention that the hierarchy reveals participants' increasing awareness of the phenomenon (i.e. the experience of teaching using a GBA) as well as participants' capacities to experience the phenomenon (from a collective analysis perspective). The development of categories was informed by the search for dimensions of variation (or threads of attention) that ran through and linked each category. Three dimensions of variation were construed from the data and are presented in the next section.

4.3 Dimensions of Variation

The three dimensions of variation identified were participants' *learning intentions*, *focus of attention*, and the *purpose of dialogue* between teacher and pupil. The similarities and differences between attributes discovered within and throughout transcript data were the building blocks to each dimension of variation, which in turn then helped to both link and distinguish each category. An overview of the outcome space as informed by attributes within each dimension of variation is offered in Table 4.1.

The determination of each dimension of variation required a thread of participants' attention to be apparent through each possible category, not just within one specific category. Thus, each dimension of variation was derived from the analysis of utterances held within and throughout transcript data (see Appendix E for an overview of all utterance analysis that led to the determination of each dimension of variation and category of conception). This

Table 4.1

The Outcome Space as Informed by Attributes Within Each Dimension of Variation

		Dimensions of variation		
		Learning intentions (LI)	***Focus of attention (FA)***	***Purpose of dialogue (PD)***
Categories of conception	***Catalyst***	To enlighten (holistic development of pupil) (LI-E)	On the learning environment (FA-LE)	To promote reflexive thinking (PD-R)
	Collaborator	To focus on pupil development (LI-PDe)	On pupils and their learning (FA-L)	To develop understanding (PD-U)
	Learner	To clarify instruction and action (LI-CI)	On self as the teacher (FA-S)	To provide answers (PD-A)

Note: **The attributes detailed above were constituted from relational elements within utterances which in turn helped to identify each dimension of variation along with its logical ordering.**

analysis, of course, recognises the fact that as researcher I am the instrument of interpretation. Therefore, the thinking behind my identification and interpretation of utterances that informed utterance grouping (and in turn each thread of attention) requires some explanation.

As detailed in Figure 3.6 my analysis of transcript data reflected a helical process of constant return to transcripts (and over time specific utterances) to help build a better understanding of meaning. My initial identification of specific utterances within transcripts was based on my recognition of statements that offered a snapshot of purpose, clarity or justification whilst also summarising an aspect of relived experience. For example, the section of transcript below includes within it a selected utterance that I identified as offering a summary of relived experience:

> They are a mixed class and I'm always conscious of getting them to change who they work so when I've stopped them to get their attention and instruct them to change partners they are things going through my mind and at the same time I get them to stop to turn behind and have a look at the new playing corridors that have been created and I guess *I just want to bring it to the students attention then and there* um… and I didn't want it to disrupt different groups down the track if they weren't aware the area had changed so I wanted to check for understanding and at the same time I'd like them to move on a find a new partner. (Utterance 74 [in italics] as identified within Transcript IB)

The utterance selected in the transcript above (utterance 74) reveals a relived experience that identifies the act of instruction. The identification of this statement as an utterance, though, did not happen in isolation. Categorisation of this statement as an attribute (within a dimension of variation) was only completed after an analysis of similarities and differences amongst other statements I identified as having a similar attention of awareness. For example, the section of transcript below includes within it a selected utterance that I identified as offering a similar attention of awareness (e.g. the act of instruction):

> As they played on a little bit they go a little bit better, but wasn't quite what I wanted them to do, so I stopped them, blew the whistle, and *I brought them in around me and described to them exactly why we were doing this*. (Utterance 15 [in italics] as identified within Transcript C2)

Along with the focus of attention of each utterance (e.g. Utterance 74 and 15), both of these utterances were also considered in terms of their referential aspect or overall meaning. In this instance both utterances were considered to reveal similar meanings of experience and thus were grouped together (further discussion of referential and structural elements of

grouped utterances can be found in Chapter 4.4.). This process of analysis in turn helped to inform development of the three distinct threads of attention that I will now outline.

The *learning intentions* (LI) thread was constituted from a range of utterances that reflected one of the following attributes; 1) to *clarify instruction and action (LI-CI)* (e.g. meaning statement 2: "it was that kind of games teaching session rather than a lacrosse session"), 2) to focus on *pupil development (LI-PDe)* (e.g. meaning statement 6: "I wanted them to work it out for themselves"), and 3) to *enlighten (holistic development of pupil)* (LI-E*)* (e.g. meaning statement 73: "I'm thinking about the social interaction as well, they are a mixed class and I'm always conscious of getting them to change who they work with").

To remain faithful to Marton and Booth's (1997) category development criteria, which in turn relates to the development of each dimension of variation, I was conscious of the need to find difference in dimension description. Thus, the *focus of attention* (FA) thread is distinct from the *learning intentions* thread by way of its focus on specific elements of pedagogy (e.g. the *self as teacher* [FA-S], the *pupils and their learning* [FA-L], and the *learning environment* [FA-LE]) rather than overall intended learning focus. For example, the following utterance offers a distinct focus on self as teacher with attention centred on self and awareness of perceived pedagogical limitation:

> A feeling of slight helplessness from the point of view that obviously it was something I've not done a lot with the boys before because you always hope that the GBA that it… the outcomes are going to be there and I'm not always sure that they are. (Utterance 10)

The third dimension of variation identified reflects a thread of attention keenly associated with the phenomenon in focus; that being the *purpose of dialogue* (PD). As opposed to the two other threads of attention already discussed, this thread focuses on a specific pedagogical feature of GBAs, which is the importance of effective questioning to

generate dialogue (Light, 2012). Of significance here is that productive and generative questioning has already been identified in the literature as an area of particular concern for GBA implementation (see Light & Harvey, 2015) with the range of utterances shared in this study potentially supporting such concern. For example, very few utterances relating to *purpose of dialogue* were identified as being designed to *promote reflexive thinking* (PD-R), an exception being utterance 97; "I bring them in and get them into their groups. I say coaches, get them to talk, 'how did that feel?'" A majority of utterances relating to *purpose of dialogue* were seemingly offered to *develop understanding* (PD-U) with some utterance still very much designed to *provide answers* (PD-A) (e.g. utterance 16 "I explain to them obviously the need for ball speed").

Adding to Laurillard's (1993) notion of an inclusive hierarchy (i.e. that participants who experienced GBA-related teaching as a *Catalyst* also experienced the phenomenon as a *Collaborator* and as a *Learner*) I include an example (see Table 4.2) of how one participant's capacity for experience in relation to their *focus of attention* (FA) ranged through each category of awareness.

In summary, from the analysis of utterances and determination of key attributes three dimensions of variation were constituted from transcript data which in turn helped to inform the development of the overall outcome space. Furthermore, the recognition and development of attributes that helped define each dimension of variation was underpinned by the same analytical framework used to develop the categories of conception. Thus, the following section provides an overview of how the formulation of a structure of awareness was utilised to provide validity and reliability (or trustworthiness and quality) to outcome space development.

Table 4.2

One Participant's Capacity for Experience in Relation to Their "Focus of Attention" (FA) Across Each Category of Awareness

		Dimension of variation	
		Purpose of dialogue (PD)	***Quotes***
Categories of conception	***Catalyst***	To promote reflexive thinking (PD-R)	we'll try to get you guys to find out the answers through the practise so that during the game you can answer those questions physically on the court (24)
	Collaborator	To develop understanding (PD-U)	how… what was it you were trying to achieve (27)
	Learner	To provide answers (PD-A)	I ask them what is it that a press is trying do that… what are they going to try to do to us? (26)

Note: **Each conception of awareness detailed above (e.g. *Learner, Collaborato*r and *Catalyst*) reflects a different capacity for experience as constituted from a single participant's utterances.**

4.4 Structure of Awareness

Central to this study's analysis of transcript data was use of an analytical framework, namely the structure of awareness. To recap, the way we experience a given phenomenon can be characterised by the structure of our awareness of it (Linder & Marshall, 2003) within which referential and structural aspects relating to the phenomenon are required to be recognised. From the transcript data three referential aspects were recognised with respect to all utterances, 1) *a teacher focused endeavour* (TF), 2) *a teacher and pupil focused endeavour* (TPF), and 3) *a pupil and "their world" focused endeavour* (PWF). These three aspects relate to the particular meaning associated with participants' experiences of GBA-related teaching. For example, when the utterance "that's why I think it's TGfU because … we didn't have to play lacrosse rules" was analysed within the context of the experience being shared (and in relation to all other GBA-related experiences presented across participant interviews), I viewed the meaning associated with this experience as being

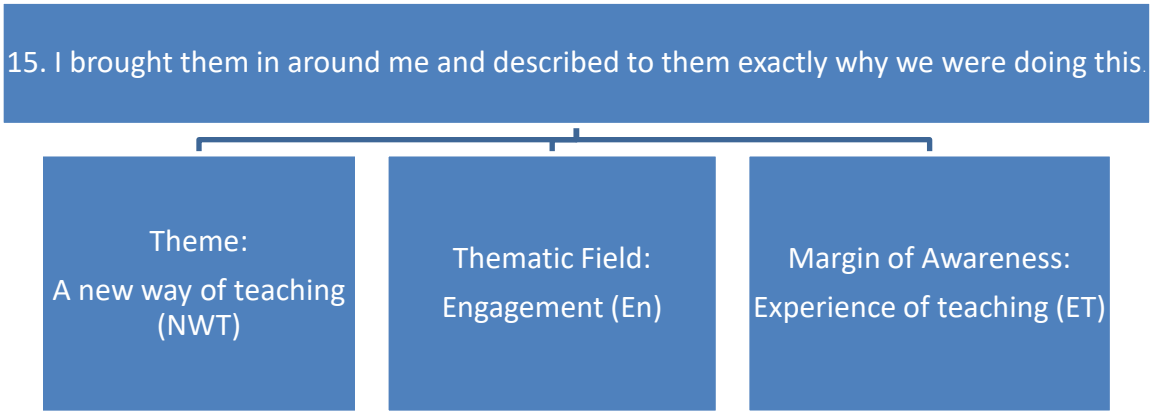
reflective of a more *teacher focused endeavour* (TF) … a focus on the *what* as opposed to the *for whom* or the *why* which characterise the other two referential aspects.

From a structural perspective (i.e. the features of a GBA-related teaching experience that were discerned and focused upon across participant interviews) a way of experiencing a given phenomenon depends on "which constituent parts are discerned and appear simultaneously in the learner's focal awareness, and which parts or aspects recede into the background" (Linder & Marshall, 2003, p. 273). This then requires recognition of a theme, thematic field/s, and a margin of awareness as "to experience something in a particular way, not only do we have to discern it from its context, but we also have to discern its parts, the way they relate to each other, and the way they relate to the whole" (Marton & Booth, 1997, p. 87). Figures 4.2 and 4.3 provide two examples of the theme, thematic field, and margin of awareness associated with two select utterances. To illustrate both the collective analysis requirement of phenomenographic research (i.e. that utterances are analysed collectively in relation to each other) as well as how I viewed aspects of similarity and difference amongst utterances to inform analysis and the 'coding' of that utterance, a second utterance and its analysis has been included.

Within Figures 4.2 and 4.3 it is important for me to explain why a more 'overarching feel' for the theme exists i.e. *a new way of teaching* (NWT). It could be argued that the theme should be very specific in identifying the aspect of an experience being brought into an individual's focal awareness. Indeed Linder and Marshall (2003) state that the theme is dependent upon which aspect in the thematic field is being focused upon and that different aspects might be brought into focal awareness by an individual at any given time. In determining my more "overarching" themes I have been literal in my application of the phenomenographic requirement of collective analysis of participants' experience to the point where a collective understanding of focal awareness should by its very nature have a more

Figure 4.2

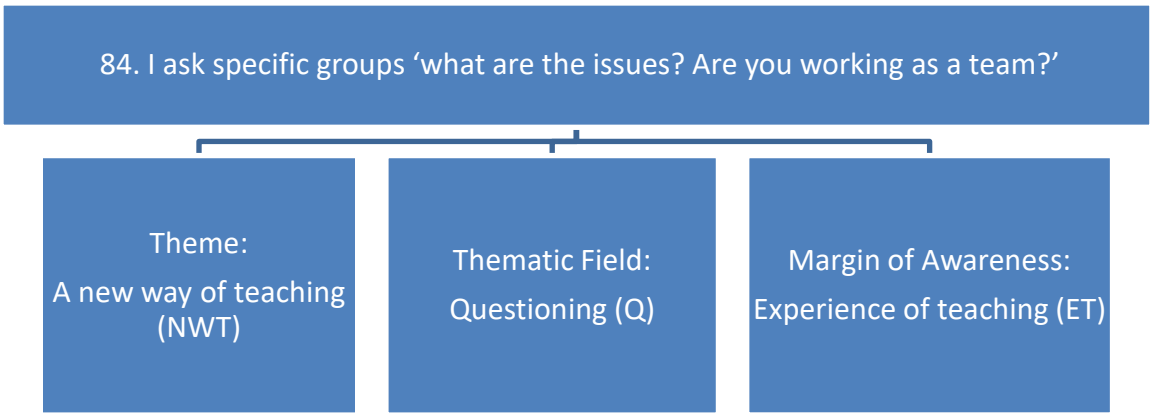
First Example of the Theme, Thematic Field, and Margin of Awareness that Formed the Structural Analysis of Two Participants' Utterances



Note: **The utterance in Figure 4.2 describes the deliberate act of engaging listeners through instruction. This recognition of participant's awareness (e.g. Engagement [En]) then forms the thematic field.**

Figure 4.3

Second Example of the Theme, Thematic Field, and Margin of Awareness that Formed the Structural Analysis of Two Participants' Utterances



Note: **The utterance in Figure 4.3 provides a distinct focus on the act of questioning. This recognition of participant's awareness (e.g. Questioning [Q]) then forms the thematic field.**

"overarching feel". For example, at various times throughout my analysis of transcripts different themes were identified as being the focus of awareness such as questioning, engagement, or the design of the game. This discernment of a specific aspect of experience differed across participants' interviews whilst also changing within a single participant's interview. Thus, as a means to represent this changing focus of awareness three overarching themes were constituted from the transcript data: 1) A *new way of teaching* (NWT), 2) *engaging the learner* (EnP), and 3) *extending the learner* (ExP). An example of each and its alignment to a specific utterance is included in Table 4.3.

As briefly unveiled in Figures 4.2 and 4.3, a range of foci informed the thematic field with five aspects identified: 1) *Questioning* (Q), 2) *Design of game* (DG), 3) *Decision making* (DM), 4) *Engagement* (En), and 5) *Development opportunity* (DO). An example of each thematic field and its alignment to a specific utterance has also been included in Table 4.3. Aspects of awareness that remained on the periphery but that were associated with experience informed the margin of awareness and included: 1) *Other ways of teaching* (OWT), 2) *Curriculum content* (CC), 3) *Pedagogical content knowledge* (PCK), and 4) *Experience of teaching* (ET). Once again, examples of the margin of awareness and the specific utterance each was matched with are included in Table 4.3.

The completion of this analysis process produced an awareness of variation in participants' conceptions about their GBA-related teaching experience. This then informed the formation and description of three categories of conception: 1) The *Learner*, 2) the *Collaborator*, and 3) the *Catalyst*.

Table 4.3

Examples of Themes, Thematic Fields, Margins of Awareness and Associated Utterances

Internal Horizon **Theme**	**Extending the learner** (ExP)	We'll try to get you guys to find out the answers through the practise so that during the game you can answer those questions physically on the court (24)
	Engaging the learner (EnP)	I [am] listening to the conversations off the court (28)
	A new way of teaching (NWT)	I'm a bit nervous about not really understanding what we're doing because this isn't how I've kind of learnt my own sport (1)
Internal Horizon **Thematic Field**	**Questioning** (Q)	What are they doing different to the (*sic*) you guys? (48)
	Design of game (DG)	I am modifying the game so it is not as wide as the proper pitch length or width. (94)
	Decision making (DM)	I wanted them to work it out for themselves (6)
	Engagement (En)	I start off with learning outcomes, what we are aiming for in the lesson (41)
	Development opportunity (DO)	I'm sensing whether or not some students know how to verbalise what it is they are doing (77)
External Horizon **Margin of Awareness**	**Other ways of teaching** (OWT)	We have just had a conversation about what they will do as a class (36)
	Curriculum content (CC)	there are conversations about what the nature of the game we are doing (64)
	Pedagogical content knowledge (PCK)	I've acknowledged he is out there and he has found the space but not saying anything about it (43)
	Experience of teaching (ET)	I am looking to see whether they have responded (45)

Note: **Themes, thematic fields, and margins of awareness are constituted from participant utterances and are the main elements that form the structure of awareness for each conception (i.e. *Learner*, *Collaborator*, and *Catalyst*).**

4.5 Categories of Conception

The three composite narratives that follow are made up entirely from utterances contained within transcript data that reflect a similar conception of awareness, that being the

experience of GBA teaching as related to a *Learner*, a *Collaborator*, or a *Catalyst*. Each narrative is a storied invitation to help readers engage with the collective awareness and meaning of participants' experiences of teaching games with a GBA. The bolding and non-bolding of text has been used to separate and highlight the coming together of utterances from different transcripts, but each narrative should be read as one continuous story.

4.5.1 Category description for the *Learner.*

The first composite narrative in Figure 4.4 highlights the experience of GBA teaching as a *Learner* and presents an introductory means to view collective meaning as constituted from transcript data.

Figure 4.4

Composite Narrative for the Learner

The first lesson is me instructing… it was that kind of games teaching session rather than a lacrosse session… **I'm a bit nervous about not really understanding what we're doing because this isn't how I've kind of learnt my own sport…** I explain some modified rules for them… emphasising the key things we have been working on in previous weeks and that I would like to see them utilise them well in this game… **that's why I think it's TGfU because… we didn't have to play lacrosse rules…** So I have given them a clear instruction about how close they are allowed to be to any other person on their own team at any time…. **there are kids that are still barrelling in on top of the ball just like before… to be honest there… they just want to play with the ball and aren't that bothered where they should be…** ultimately I do get the response I am hoping for which is we need to space out

---

more… **I ask specific groups 'what are the issues? Are you working as a team?'**… Maybe that's it – maybe what I've associated as being TGfU is so far removed from what you [the interviewer] are expecting…

Note: **This composite narrative was created by using extracts from participants' interviews, all of which reflected a *Learner's* conception of awareness.**

The collective analysis of utterances (or meaning statements) from transcript data revealed that from a phenomenographic research perspective participation in the teaching of games using a GBA can be experienced as a *Learner*. Use of the term *Learner* as the metaphor to describe this collection of GBA teaching experiences offers a description of experience very much in line with one of the key epistemological assumptions of phenomenography, that being the focus on knowledge as a relation between the learner and the learned (Booth, 2008). Use of the term here as a category descriptor describes a teacher who is "finding out about a subject or how to do something" (Oxford Learner's Dictionary, 2015, para. 1). The term is also taken directly from transcript data:

> It was something new and for the boys it was certainly kind of… there was an element of it being uncomfortable to start with at least and us being out of our comfort zone could have made us kind of have to really concentrate… to be learners of these new things we were doing. (Transcript A2)

Furthermore, this category of conception within the outcome space represents the view that teachers using GBAs are required, first and foremost, to be *learners* with conceptions of experience reflecting a more operational understanding (e.g. GBA teaching that reflects a focus on the process and/or act of teaching within a preconceived learning sequence). This is illustrated in the following table of quotes (Table 4.4) which

were used to inform the development of the dimensions of variation present within this category of conception:

Table 4.4

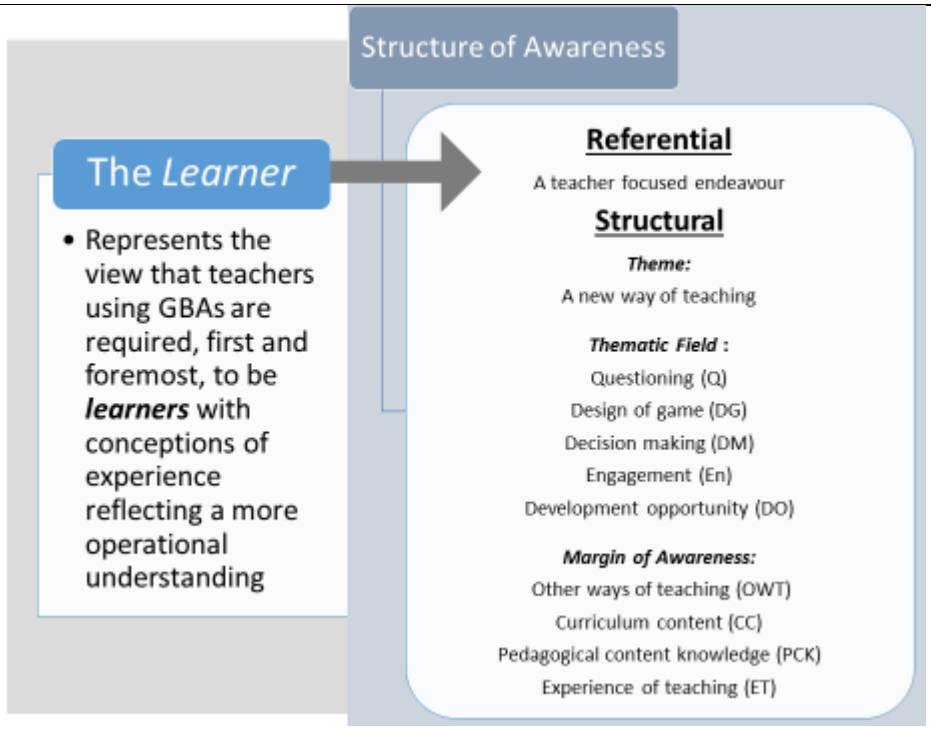
Transcript Quotes Informing the Learner Category of Conception

		Dimensions of variation		
Category - *Learner (L)*		***Learning intentions (LI)*** To clarify instruction and action (LI-CI)	***Focus of attention (FA)*** On self as the teacher (FA-S)	***Purpose of dialogue (PD)*** To provide answers (PD-A)
	Example quote	it was that kind of games teaching session rather than a lacrosse session (2)	there are kids that are still barrelling in on top of the ball just like before… to be honest there… they just want to play with the ball and aren't that bothered where they should be (40)	So when it comes to finish after a couple of minute I bring them in for about a minute and say this is what we are doing well and this is what we need to focus upon (93)

To summarise the key attributes from which this category of conception was constituted a diagrammatic representation of this category's structure of awareness is offered in Figure 4.5.

Figure 4.5

An Overview of the Structure of Awareness for the Learner



Note: **This figure is a diagrammatic representation of this category's structure of awareness detailing both referential and structural elements that informed the development of this category.**

4.5.2 Category description for the *Collaborator.*

The second composite narrative in Figure 4.6 highlights the experience of GBA teaching as a *Collaborator* as constituted from transcript data.

Figure 4.6

Composite Narrative for the Collaborator

Without too much instruction I just say 'game on' and I sit back and watch the girls probably for 5 minutes…I wanted them to work it out for

themselves**… I'm hearing a bit more voice than I expected to hear I think. A lot more communication…** it was quite nice in a way and it made me feel a lot more confident with what I was doing with them and it was good to know they were getting something from me and I was giving something to them… **I spoke to them again about how they thought they had improved… what were they doing better… had they improved… were they effective?...** right guys we are going to play a game of 4 goal here… bibs, you will be defending these two goals, non-bibs you will be defending these two goals… and normal hockey rules, away you go… **I've acknowledged he is out there and he has found the space but not saying anything about it…** They just scored from a live turnover, so what are we going to agree as a team as our rule? **I questioned more than told because I wanted to understand exactly what they knew and how I could best help them.**

Note: **This composite narrative was created by using extracts from participants' interviews, all of which reflected a *Collaborator's* conception of awareness.**

This category of conceptions as logically structured within the outcome space is that of GBA-related teaching being experienced as a *Collaborator*. The etymology of collaborator relates to the Latin *collaborates*, meaning to "work with" (Online Etymology Dictionary, 2015) with use of this term as a category descriptor reflecting experience of GBA teaching described as a collaborative effort of teacher *working with* their pupils. The transcript extract below highlights recognition of collaboration as a feature of GBA teaching as mentioned when discussing an understanding of GBA development and use in physical education:

It's changing a mentality that has existed for decades which is the "I'm the teacher, you are the student... I know everything, I will explain and do and you will copy". It is now more of a collaboration. (Transcript B2)

This category of conception within the outcome space represents the view that a focus on using GBAs requires engaging pupils in *collaborative* learning endeavours with teachers delegating responsibility for learning. This is illustrated in the following table of quotes (Table 4.5) as used to inform the development of the dimensions of variation present within this category of conception.

Table 4.5

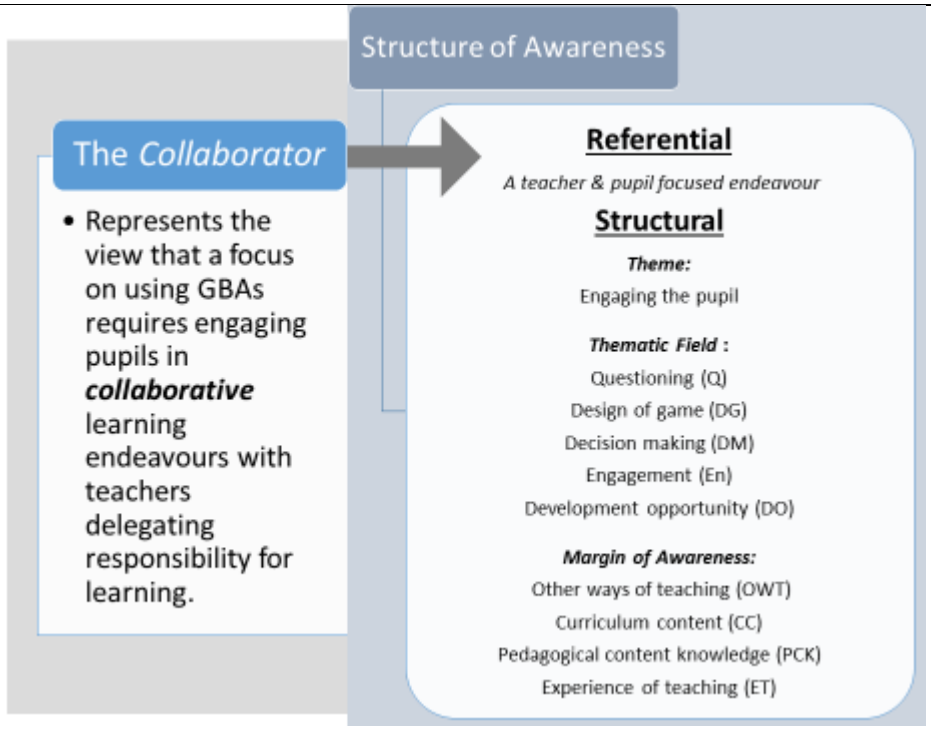
Transcript Quotes Informing the Collaborator Category of Conception

		Dimensions of variation		
Category – *Collaborator (C)*		***Learning intentions (LI)*** To focus on pupil development (LI-LD)	***Focus of attention (FA)*** On pupils and their learning (FA-L)	***Purpose of dialogue (PD)*** To develop understanding (PD-U)
	Example quote	I wanted them to work it out for themselves (6)	I listened to the conversations off the court (28)	I spoke to them again about how they thought they had improved… what where they doing better… had they improved… were they effective? (19)

To summarise the key attributes from which this category of conception was constituted, a diagrammatic representation of this category's structure of awareness is offered in Figure 4.7.

Figure 4.7

An Overview of the Structure of Awareness for the Collaborator



Note: **This figure is a diagrammatic representation of this category's structure of awareness detailing both referential and structural elements that informed the development of this category.**

4.5.3 Category description for the *Catalyst.*

The third and final composite narrative in Figure 4.8 highlights the experience of GBA teaching as a *Catalyst* as constituted from transcript data.

Figure 4.8

Composite Narrative for the Catalyst

I'm still looking closely at how the allocated space is shaping the play …
I'm thinking about the social interaction as well, they are a mixed class and
I'm always conscious of getting them to change who they work with**… after**

10 minutes I'll pull the pupils back in and Q each player i.e. you're going to talk to the group about that, you're going to talk about that… I feel that when pupils feel that they have got the answer that they've discovered it um… that they feel more comfortable talking and demonstrating it… I bring them in and get them into their groups. I say coaches, get them to talk, 'how did that feel?'**… Can they tell me or identify or have that awareness of what they are actually doing in that 1 on 1 situation…** 'Miss, can we take this line of cones out here, it is too hard'**… No one seems to notice the cold.**

Note: **This composite narrative was created by using extracts from participants' interviews, all of which reflected a *Catalyst's* conception of awareness.**

The final category of conception as logically structured within the outcome space is that of GBA-related teaching being experienced as a *Catalyst*. What was noticeable within this category of relived GBA teaching experience was encouragement from teachers for pupil progression and/or change at a more holistic level. For example, the following quote from transcript data highlights the act of game creation as a catalyst for pupils to identify their own learning and development needs which in turn allows for more expansive thinking by pupils as to how the learning episode might relate to them and their needs as an individual:

> Coming up with a modified version of the game that is a catalyst for students to focus on a particular need that they have identified or you've identified.
>
> (Transcript I2)

This category of conception represents the view that through purposeful and collaborative design and action teachers using GBAs can be *catalysts* for pupils' learning

and development beyond the curriculum. This is illustrated in the following table of quotes (Table 4.6) as used to inform the development of the dimensions of variation present within this category of conception.

Table 4.6

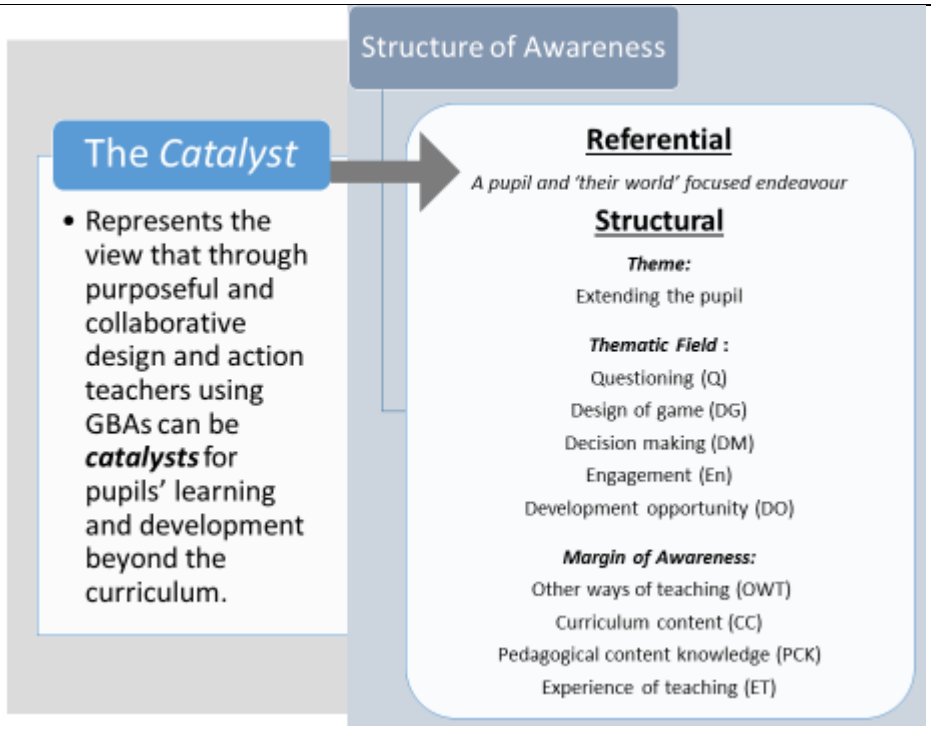
Transcript Quotes Informing the Catalyst Category of Conception

		Dimensions of variation		
		Learning intentions (LI) To enlighten (holistic development of learner) (LI-E)	***Focus of attention (FA)*** On the learning environment (FA-LE)	***Purpose of dialogue (PD)*** To promote reflexive thinking (PD-R)
Category - *Catalyst (Cat)*	***Example quote***	I'm thinking about the social interaction as well, they are a mixed class and I'm always conscious of getting them to change who they work with (73)	I am attentive to… for the first five minutes I am swallowing my whistle and trying not to talk too much and I'm just walking around through them and just watching and watching positioning and what they are doing off the ball. I'm watching who is talking, how are the backs setting up everyone else?… I am not so concerned about the ball carrier and what they are doing, it is more looking at their vision. (96)	we'll try to get you guys to find out the answers through the practise so that during the game you can answer those questions physically on the court (24)

To summarise the key attributes from which this category of conception was constituted, a diagrammatic representation of this category's structure of awareness is offered in Figure 4.9.

Figure 4.9

An Overview of the Structure of Awareness for the Catalyst



Note: **This figure is a diagrammatic representation of this category's structure of awareness detailing both referential and structural elements that informed the development of this category.**

4.7 Chapter Summary

In summary, the outcome space associated with participants' collective experiences of teaching game using a GBA held within it three logically ordered categories of conception, 1) the *Learner*, 2) the *Collaborator*, and 3) the *Catalyst*. Three threads of expanding awareness, known also dimensions of variation, running through each category were also identified as being participants' 1) *learning intentions*, 2) *focus of attention*, and 3) the *purpose of dialogue* between teacher and pupil. The referential and structural elements of utterances (or meaning statements) selected from transcript data were also presented to support validity and reliability protocols associated with

transcript analysis. This also helped to determine similarities and differences evident within meaning statements to inform category finalisation and description. A diagrammatical summary of elements that formulated the outcome space is offered in Figure 4.10.

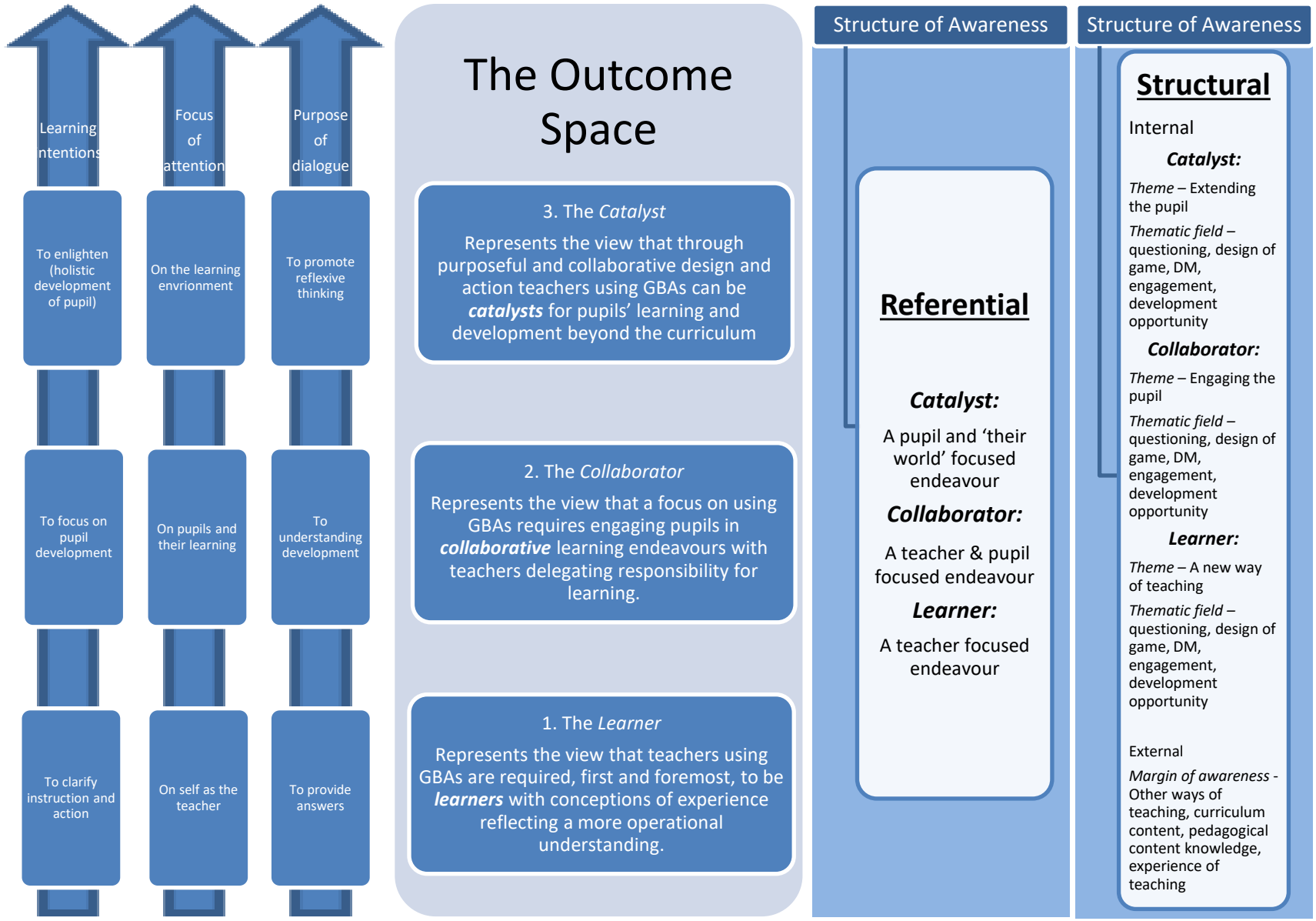


Figure 4.10 - A Summary of Elements that Formulated the Outcome Space

Chapter 5 - Discussion

5.1 Introduction

The findings comprise the analysis of collective meaning associated with secondary physical education teachers' experiences of teaching games using a games based approach (GBA). The different ways in which GBA-related teaching was experienced by participants is ordered with three categories of conception constituted from transcript data; 1) the *Learner*, 2) the *Collaborator*, and 3) the *Catalyst*. Reflective of a phenomenographic analysis framework these three categories formed a hierarchy of qualitatively different ways that the phenomenon of GBA-related teaching can be experienced. This outcome space is informed by three themes of expanding awareness or dimensions of variation that highlight key difference and similarity in elements of experience. Thus, categories reflect participants' capabilities of experiencing the phenomenon that are both inclusive in nature (e.g. those that experienced the phenomenon with a more complex understanding also offered conceptions of awareness of the phenomenon at a less complex level) as well as parsimonious in structure.

This chapter draws together and discusses research findings in response to the research questions that informed this study and explains the meaning of findings with respect to related literature and the implementation and understanding of GBAs as a whole. The importance of the findings is framed within discussion about the nature and meaning of teaching experience. Limitations and implications of findings will inform discussion at the conclusion of this chapter with further research suggestions relating to the theme of this study also offered.

5.2 Overview of Findings

The primary research question for this study is: *What are the qualitatively different ways in which secondary school teachers of physical education experience game based approaches when teaching games?* As stated the findings of this study outline three

qualitatively different ways that teachers experience GBAs when teaching games. This aligns with Marton and Booth's (1997) understanding of phenomenographical research outcomes whereby a limited number of categories are presented to reflect a collective description of variation. Each category is discussed with consideration given to the nature of experience as informed by the variations of meaning that exist within and through each category.

5.2.1 The *Learner* as a way to experience GBA teaching.

The *Learner* category represents the view that teachers using GBAs are required, first and foremost, to be *Learners* with conceptions of experience reflecting a more operational understanding. This operational understanding was a prominent feature of participants' relived accounts of GBA-related teaching practice with a clear focus on the actions of self as teacher. For example:

> Ultimately I do get the response I am hoping for which is we need to space out more. (Utterance 35)

Utterance 35 suggests a focal awareness on individual action and desire specific to the act of GBA teaching. The focus on "I" in this context indicates the capacity to view the act of teaching and learning as a teacher focused endeavour. Thus, in essence, those who experience GBA teaching in this capacity experience the phenomenon predominantly as a *Learner*. To elaborate on this further requires a review of the category attributes within each dimension of variation (or thread of awareness). To briefly recap these are 1) to *clarify instruction and action (LI-CI),* 2) a focus on *self as the teacher (FA-S),* and 3) to *provide answers (PD-A).* These three attributes link to the overall nature and meaning of GBA teaching experience through the association of elements attributable to a teacher focused endeavour. From a Deweyan perspective the teacher, learner and content should be given equal importance in learning suggesting that teachers' instruction offers just "*a starting point* [emphasis added] to be developed into a plan through contributions from the experience of all engaged in the

learning process" (Dewey, 1938, p. 755). Thus, with the theme of teacher focused teaching linking experiences throughout this category, and with the term teacher focused teaching itself often being used in literature to describe indicative practice of a novice or *learner* teacher (Confait, 2015; Long, Hall, Conway & Murphy, 2012), the association between teacher focused teaching and teacher as *learner* in the context of this study is appropriate. Hence, use of the term *Learner* in this study as a category metaphor as it describes and gives prominence to the experience of GBA teaching as being a relatively new practice. Arguably, the predominance of a teacher focused endeavour synonymous with this category of experience still offers pupils the opportunity for constructivist informed learning commensurate with GBA philosophical underpinnings as Utterance 81 indicates:

> The first lesson is me instructing. (Utterance 81)

The inference here is that with any new pedagogical approach being utilised there will usually be a period of adjustment, a realignment of teacher and pupil expectations relating to the learning environment and what it holds. As Pajares (1992) states it may not be a straightforward process to change incumbent teaching styles but the act of trying, if based on sound reasoning, can bring with it mutual benefits to those involved in the teaching and learning equation. Thus, Utterance 81 provides an indication of awareness of (and arguably requirement for) change in teaching practice. Another example of this awareness of change in teaching practice is Utterance 60:

> I'm giving a few instructions. I… get them into teams and to chat about and think about having 2 set people up forward, 2 in midfield and 2 down back just so we get a bit more structure…

Utterance 60 indicates an awareness of two forms of teaching practice; a desire to incorporate discussion opportunities within the environment of learning, yet also a desire to maintain control of pupils' learning journeys through teacher-focused

instruction methods. It is important as well to note though that specific utterances should not be viewed in isolation. Thus, when considering the overall context in which both Utterance 81 and Utterance 60 are made and when relating these to other utterances placed within and across categories, there exists a genuine desire from the teacher to engage pupils and help them make sense of learning experiences. This desire, as previously stated by Light and Georgakis (2007), is a key element of GBA teaching as underpinned by constructivist perspectives on learning.

Furthermore, when utilising a GBA there still exists on occasion the requirement for teachers to function as an instructor, to facilitate teacher focused teaching as a component of pedagogical practice utilised to help students work towards and achieve formal and informal learning outcomes. However, such utterances also provide an insight into the shaping of teaching practice based on an individual's capacity for experience, which in this case is more operational. For the *Learner* this means experiencing the phenomenon at a less complex level with fewer elements of the phenomenon being discerned. The practical implication of this as outlined by Lam (2013) is that teachers would then be limited in their capacities to structure the learning experiences of pupils in such ways that the pupils themselves might be restricted in the development of their capacities to discern the critical aspects of the object of their learning (e.g. taking advantage of a 3 versus 2 situation in a game of basketball).

To conclude discussion on this category it is important to reflect upon the meaning of experience based on its worth as a component of education. If experience is a precursor to expertise as Hattie (2003) suggests and if Dewey's (1938) belief that education must engage with and enlarge experience holds truth then the opportunities that teachers have to be *Learners* with regards to GBA teaching should be embraced as fundamental to improving overall teaching practice and the achievement of *expertise*. As a category existing in an inclusive hierarchy the assumption already exists that teachers at some stage in their GBA-

related teaching practice will be a *Learner*. Thus, in this context the worth of experience as a *Learner* to overall achievement of pupils' education goals is important insofar as it is a stepping stone to the further expansion of capacities of awareness relating to improved GBA teaching practice.

5.2.2 The *Collaborator* as a way to experience GBA teaching.

The *Collaborator* category represents the view that a focus on using GBAs requires engaging pupils in collaborative learning endeavours with teachers delegating responsibility for learning. One of the key variations within this category (in contrast to the *Learner* category) is the reliving of teaching experience that depicts a *teacher and pupil focused endeavour*:

> There is a ball, you have all the space, see you later… one demo with a group of three then go. (Utterance 92)

Utterance 92 offers an insight into experience through greater awareness of more complex elements within the learning and teaching equation. In essence it reflects recognition of a learning dynamic that depicts not just the teacher as instructor, but also the pupil as contributor to learning. The utterance makes it apparent that there is no longer sole reliance on the teacher for learning. Thus the suggestion here is that the meaning of experience relates to a *teacher and pupil focused endeavour*.

Dewey (1938) explains that the challenge for teachers does not reside with the adding of new facts to the lesson but more so the problem of "inducing a vital and personal experiencing" (p. 198) for the pupil. To that end a focus on the teacher *and pupil* is required. Thus, by recognising the pupil within the focal awareness of experience a more complex understanding of GBAs is presented. This expansion of awareness can be seen when attributes from different categories within the same dimension of variation are considered. For example, within the *purpose of dialogue (PD)* dimension Utterance 84 is reflective of

experience as a *Learner*: “I ask specific groups ‘what are the issues? Are you working as a team?’” The purpose of dialogue in this example is primarily for pupils to provide answers relating to the actions of self and teammates. Moving from a *Learner* to *Collaborator* perspective, a greater capacity to experience GBA teaching is required, thus utterances relating to the *purpose of dialogue (PD)* dimension become more complex, for example: “What are they doing different to you guys?” (Utterance 48). The variation within both these utterances relates to the different elements required to be discerned, specifically what the requirements are for pupils to be able to answer each question. The purpose of Utterance 48 is to engage the pupil in reflexive thought. To do this successfully they are required to discern elements associated with self and teammates as well as the game being played and the experiences of others. Thus, the teacher in this scenario has arguably induced a meaningful and personal experience for the pupil through a greater capacity of awareness associated with question asking.

As a *Collaborator* experiences of GBA-related teaching begin to more accurately “focus on the game and locate learning within modified games that emphasize questioning to stimulate thinking and interaction” (Light & Mooney, 2013, p. 2). For example:

> So they are playing little small sided games and because they are small groups in a big area there is limited opportunity for them not to get involved. (Utterance 32)

Utterance 32 gives indication of two distinct elements of pupil engagement. The first is engagement in modified games played as “little small sided games”. The second is the focus on the game so “there is limited opportunity for [pupils] not to get involved”. This increase in awareness of the elements of GBA teaching can provide teachers with opportunities to respond earnestly to the responsibilities they have to develop our pupils.

Dewey (1938) suggests we do this through the shaping of actual experience which is not just about what we *do* as teachers, but also about what we *don't do*. For example:

> No, I want to savour that moment and if I call everyone in then you lose the visual example… freeze, nobody move. (Utterance 44)

A real sense of pupil centeredness permeates through the attention given to *how* learning might unfold in Utterance 44. The *savouring* of a moment through the teacher's instruction to freeze, scan then listen is clearly intended to promote pupil development whilst simultaneously representing both a *teacher and pupil focused endeavour*. Having an awareness of what not to do (e.g. avoiding interrupting too dramatically the authentic context of learning) also relates to the development of a more complex understanding of GBA teaching (Light et al., 2014). Thus, the practical implications for this appear mutually beneficial for teachers and pupils alike in so much as the collaborative nature of learning helps pupils contribute towards each other's understanding whilst subsequently developing the teacher's capacity (and effectiveness) to shape learning experience.

Discussion on this category is concluded with reflection upon the meaning of experience based on its worth as a component of education. To experience GBA teaching as a *Collaborator* holds with it much to be celebrated. I say this with an eye to Dewey's (1938) questioning of traditional educational experience whereby he asks "How many students were rendered callous to ideas, and how many lost the impetus to learn because of the way in which learning was experienced by them?" (p. 26). In light of the challenges associated with the context of learning and teaching (Northcote, 2009) as well as the tacit resistance that often accompanies the idea of pedagogical innovation (Bell et al., 2015), teachers' willingness to develop and maintain an expanding awareness of elements attributable to improved GBA teaching holds significant meaning both for the profession as a whole and for pupil development.

5.2.3 The *Catalyst* as a way to experience GBA teaching.

This category represents the view that through purposeful and collaborative design and action, teachers using GBAs can be catalysts for pupils' learning and development beyond the curriculum. Teaching experience relived as a purposeful endeavour to offer learning opportunities beyond the constructs of curriculum provide the main variation within this category with self, collaborative and contextual aspects of experience prominent elements in focal awareness:

> Can they tell me or identify or have that awareness of what they are actually doing in that 1 on 1 situation? (Utterance 78)

Utterance 78 illustrates a focus of attention (within the *purpose of dialogue* dimension of variation) on the element of *awareness* which suggests a capacity to seek and have knowledge fuelled by curiosity and "inquiry in order to know" (Chapman, 2015, p. 317). This type of reflective awareness can be associated with Dewey's (1933) perspective on reflective thinking which involves "an active, persistent, and careful consideration of any belief or supposed form of knowledge in the light of the grounds that support it and the further conclusions to which it tends" (p. 9). I have likened this association between awareness and reflective thinking to the *promote reflexive thinking (PD-R)* attribute within the *purpose of dialogue (PD)* dimension of variation due to its focus on the promotion of complex understanding. More than just demonstrating the capacity to become the object of one's own attention (Morin, 2011) Utterance 78 suggests the teacher's desire to develop within their pupils a more complex understanding of experience, thus demonstrating a more complex understanding of experience themselves. Furthermore, from the teacher's perspective Utterance 78 involves them "seeing something in [their] experience that is or could be different from what one already knows and results in questioning/inquiry to understand it" (Chapman, 2015, p. 317) by virtue of offering pupils choice in how they might demonstrate

understanding. To highlight the development of a more complex understanding of experience from a collective perspective two further examples are highlighted below:

> I am still looking closely at how the allocated space is shaping play. (Utterance 67)
>
> You could see them picking up each concept as we worked through the different game situations. (Utterance 23)

Both utterances above reveal, at a collective level, meaning aligned to a *pupil and "their world" focused endeavour (LWF)* through attention being offered to the environment as part of pupils' *world* at that specific point in time and also to the holistic development of the pupil through development of conceptual and strategic understanding. The quote by Chapman (2015) below has been used to offer an insightful overview of how a teacher with a more complex understanding of experience, a *Catalyst*, performs at this level:

> Teachers with knowledge of reflective awareness think about what is happening in their classrooms rather than merely reacting by jumping to conclusions or blindly accepting the situation. They ask questions to understand, to check their thinking and students' thinking, and to consider alternative interpretations of an event or behaviour. (p. 317)

Indeed, the practice of such teaching behaviours as it relates to utilisation of a GBA supports comments by Rovegno et al., (2001) and Harvey (2009) who suggested that through the appropriate structuring of the game pupils could offload their cognition onto the environment in order to use technical skills to overcome complex tactical problems. This offloading of cognition represents an outcome that relates to all three threads of awareness (dimensions of variation) as experienced by a *Catalyst*, namely learning intentions designed to *enlighten* the pupil *(LI-E)*, having a focus of attention on the *learning environment (FA-LE)*, and promoting pupils to engage in *reflexive thinking (PD-R)*.

To conclude discussion on this category I will once again reflect upon the meaning of experience based on its worth as a component of education. To experience GBA teaching as a *Catalyst* is the intention of GBA-related teaching practice and reflects Dewey's (1915, p. 198) desire for teachers to be concerned "not with the subject-matter as such, but with the subject-matter as a related factor in a total and growing experience." The practical implications of this for the pupil are that a teacher's more complex understanding of the phenomenon of GBA teaching should provide them with more opportunities to achieve a bigger range of game play development and performance outcomes as well as a more engaging learning experience to stimulate holistic development. Ultimately, with reference to the experience of GBA teaching as a *Catalyst,* I believe a response to Dewey's (1938, p. 27) questioning of types of learning "so foreign to the situations of life outside the school" that they would limit "power of judgement and capacity to act intelligently in new situations" is being offered.

5.2.4 The *Learner, Collaborator* and *Catalyst* as an inclusive hierarchy.

With the outcome space being representative of an inclusive hierarchy it is important to consider the relationship between each of the categories and what can be learned from their logical ordering. To recap, an inclusive hierarchy relates to some categories of conception further up the hierarchy being inclusive of previous or lower categories, meaning that experience of a phenomenon with a more complex understanding is in some way linked to previous experience of the phenomenon with a less complex understanding. Thus, the outcome space of this study reveals an interconnectedness of experience, from a *Learner's* developing awareness of GBAs, right through to a *Catalyst's* increased awareness of and capacity to experience all aspects of GBAs. One way to view this interconnectedness is through a focus on the *potential* and the *capacity* that each category lends itself to. For example, as a *Learner* there is a clear focus on *self as the teacher* (FA-S) when *focus of*

attention (FA) is investigated, however a *Collaborator* demonstrates the capacity to expand their attention to include not just them self as teacher but also *pupils and their learning* (FA-L). The potential for capacity building highlighted here supports the notion of an inclusive hierarchy existing as it demonstrates an internal logical relationship between potential (what might happen in the future, for say, a *Learner*) and capacity (what is happening in the present, for say, a *Collaborator* or a *Catalyst*).

5.3 Experience of Variation

Drawing on the ideas of Dewey (1938), Piaget (1970) and Vygotsky (1978) a teacher's capacity for experiencing GBA teaching is informed by the breadth of previous experiences as a teacher and of the environmental conditions (e.g. the culture and context) that shaped those experiences. Thus, the nature of teachers' GBA teaching experiences are complex, as is the consideration of how teachers' increasing awareness of the phenomenon (i.e. the experience of teaching using a GBA) influences their capacity to experience the phenomenon. The presence of three categories within the outcome space is suggestive of this growth of awareness as the constitution of categories (and their description) is based on variation in how elements of the experience are discerned. Thus, the categories of *Learner*, *Collaborator*, and *Catalyst* reveal not just participants' increasing awareness of the phenomenon (e.g. as pedagogical choice defined by experience) but also their capacity to experience the phenomenon (e.g. the meaning associated with a GBA-related teaching experience).

An analysis of the differences between experiences at an individual level is not a feature of phenomenographical research, instead a part of the analysis framework directs analysis to be focused upon the differences between category meanings. Three distinct but inclusive meanings (each meaning associated with one specific category of experience) are

presented in Table 5.1 followed by consideration of each category in relation to variation in the range of aspects discerned.

Table 5.1

Categories and their associated meaning

Categories of conception	Referential (Meaning) aspect
Catalyst	A pupil and "their world" focused endeavour (PWF)
Collaborator	A teacher and pupil focused endeavour (TPF)
Learner	A teacher focused endeavour (TF)
Note: **The three referential aspects depicted above refer to the meaning recognised within and amongst all shared utterances.**	

In Chapter 4.3 it was stated that the determination of each dimension of variation required teachers' attention on discernible elements of the phenomenon to be apparent not just within a single category but *through* every category. To recap, the three threads of expanding awareness were teachers' *learning intentions (LI), focus of attention (FA),* and the *purpose of dialogue (PD)* between teacher and pupil (Table 4.1 provides an overview of the three threads of attention constituted from transcript data as well as the collective attributes specific to each category of each thread). Thus, to investigate any difference in the nature and meaning of categories the range of themes discerned become important features of experience.

5.3.1 Experience of variation as a *Learner.*

As a *Learner* experiencing GBA teaching there was a range of elements discerned across all three threads of expanding awareness (e.g. all five themes of *Questioning [Q]*, *Design of game [DG]*, *Decision making [DM]*, *Engagement [En]*, and *Development opportunity [DO]* that comprise the thematic field were discerned). Further analysis of this range, however, reveals limited focus of attention on arguably (from a literature perspective) the two most important elements of GBA teaching – the *Design of game (DG)* and effective

Questioning (Q). With regards to the *Design of game (DG)* Harvey (2009, p. 7) stressed the importance of "getting the game right" as a fundamental feature of GBA-related teaching practice so that pupils "think more about, and within, the game". This importance should not be under-valued as numerous scholars have attested (see Hopper & Kruisselbrink, 2002; Light, 2014; Pearson & Webb, 2008;). There is an art to designing meaningful and purposeful games that provide pupils with opportunities to achieve specific learning outcomes (Webb, Pearson & Forrest, 2006), yet without it being a prominent focus of attention for teachers their GBA-related teaching will be experienced predominantly as a novice with a limited understanding of the nuances associated with GBA teaching. The same can be said with regards to an absence of attention on the element of *Questioning (Q)*. Effective questioning strategies are a central component of the teacher's role in GBA teaching (Hubball, Lambert & Hayes, 2007), yet lower-order questioning that focuses on knowledge recall, such as the questioning strategies evident in the study by McNeill et al., (2008) into preservice PE teachers implementation of a GBA on practicum, helps to define GBA teaching experience within the *Learner* category.

Reflecting comments by Light and Harvey (2015) who identified the two areas of game design and effective questioning as being of particular concern for current GBA teaching practice, the findings of this study, particularly within the *Learner* category, expose a similar understanding of experience. Thus, the relationship between these two elements, that being the effect of game design on effective questioning and vice versa, appears synergistic. Pearson and Webb (2008, p. 1) highlight this point through their discussion of a process for effective question construction:

> For *questioning* to be effective, it needs to be planned and specific to the outcomes that the teacher requires from the participants… The process involves the teacher analysing the categories of games (invasion, striking/fielding, net/court and target

games) and then choosing a sport from one of these categories. Following this the teacher determines the elements to be an effective player using the subcategories: technical, tactical/strategic, cognitive, and rules. *Games* are then *designed* around one of the subcategories or a combination. *Questions* are then designed in each of the subcategories listed above. [emphasis added]

5.3.2 Experience of variation as a *Collaborator.*

As a *Collaborator* experiencing GBA teaching there was an even focus of attention on all five themes across all attributes. Of prominence was the greater number of meaning statements (utterances) that were recognised as being attentive to pupil *Decision making (DM)* as opposed to the *Learner* category. Thus, with a more even attention being given to key components of GBA teaching, it could be suggested that teachers experiencing the phenomenon as a *Collaborator* maintained a developing appreciation of the importance that different GBAs place on learning tactics alongside skills. In reference to Rovegno et al., (2001) such evenness of attention supports the notion that a *Collaborator* has the capacity to experience GBA teaching with an understanding of the interdependence of motor skill execution and decision making as relational characteristics of game play. This is an important development in relation to how teachers experience GBA teaching as it reveals a developing confidence in pedagogical content knowledge. Furthermore, with *Pedagogical content knowledge (PCK)* being one of four aspects of awareness associated with the margin of awareness (e.g. an aspect of awareness that remains on the periphery but still affecting experience) its growing presence as an element of awareness within this category (as opposed to the *Learner* category) suggests an increasing influence on how a teacher's thematic field and theme of attention is structured. This developing confidence in pedagogical content knowledge is affirmed by Utterance 18 below:

It was quite nice in a way and it made me feel a lot more confident with what I was doing with them and it was good to know they were getting something from me and I was giving something to them. (Utterance 18)

5.3.3 Experience of variation as a *Catalyst.*

As a *Catalyst* experiencing GBA teaching there was a distinct focus of attention on the experience of providing pupils with *Development opportunities (DO).* Evidence of what and how those development opportunities were experienced by teachers can be found in the form of pupil question asking as relived by the teacher:

Miss, can we take this line of cones out here? It is too hard. (Utterance 68)

Utterance 68 provides an insight into GBA teaching as experienced by a *Catalyst* insofar as the focus of attention remains on the act (and product) of reflexive thinking. The experience here of listening to a pupil suggests an appreciation of pupil voice as a meaningful act of learning. But this experience is more than just a focus of attention on the pupil as the act of providing pupils with a voice gives recognition of their perspective and *their world* as a valid source and focus of learning. Utterance 68 also demonstrates evidence of a pupil "making or creating their own games" (Quay & Stolz, 2014, p. 23). The significance of this, as discussed by Quay and Stolz (2014), is that there is a shift in the pupil's learning experience beyond that of the confines of the GBA. By providing an opportunity for the pupil to change the game broadens their environment "beyond that of a focus on tactical awareness, decision making and skill execution, to involve the game itself" to enable "game appreciation to be achieved at a deeper level" (p. 23). Thus, associated with GBA teaching being experienced as a *Catalyst* is the recognition of experience as being a *pupil and "their world" focused endeavour (PWF).* Utterance 24 highlights this focus again through attention being placed upon a collective endeavour:

We'll try to get you guys to find out the answers through the practise so that during the game you can answer those questions physically on the court. (Utterance 24)

Light (2013) has stated that one of the main features of effective Game Sense teaching is the provision of opportunities for collaborative formulation of ideas/solutions that are tested and evaluated. Utterance 24 speaks directly of this provision as a collaborative approach has been adopted (e.g. "We'll try…") to formulate ideas (e.g. "…find the answers through the practise…") that are then tested in context (e.g. "…you can answer those questions physically on the court").

As a *Catalyst*, the experience of having a priority focus on providing *Development opportunities (DO)* for pupils varies considerably from the *Learner* who experiences GBA teaching with limited recognition of the importance of *game design (DG)* and *Questioning (Q).* Yet as an inclusive hierarchy suggests, there is potential to develop a more complex understanding of GBA teaching as evidenced by a change in what becomes the predominant focus of attention as well as an expansion of awareness of elements associated with the theme, thematic field, and margin of awareness of specific phenomena.

5.3.4 A summary of what can be learned about games teaching practice from discerned elements within and across each category.

As a *Learner*, the uneven spread of attention across discerned elements of GBA teaching experience, specifically a lack of focus on key elements such as the *Design of Game (DG)* and *Questioning (Q),* suggests a more teacher focused meaning to GBA teaching experience. And when coupled with a fewer number of elements being discerned, it could be expected that the experience or practice of games teaching from this perspective reflects a less complex understanding of the nuances of GBA teaching. From an existing literature perspective, Stolz and Pill (2014) suggest that teachers new to using GBAs may indeed view

nuances associated with GBA teaching as lacking significance and distinction within their overall game teaching practice. Thus, as Pill (2011) suggests with many teachers already teaching in a manner not too far removed from the beginnings of a GBA (e.g. use of small-sided games), *Learner* experiences of GBA teaching may indeed be blighted by a different path up the same mountain perfunctory feel (Mitchell, 2005).

As a *Collaborator*, the even spread of attention across discerned elements of GBA teaching experience highlights a growing confidence in not only self as a developing pedagogue but also self as being engaged with pupils and their learning. The experience of GBA teaching as a *Collaborator* may also be suggestive of a more supportive community of practice at work which reflects Groundwater-Smith's (1992) suggestion that teaching is a social practice. Furthermore, D'eon, Overgaard and Harding (2000, p. 151) have also stated that "the communal aspect of teaching means, among other things, that the prevailing social norms [of the department/school] have a large role to play in the shaping of teaching practice." Such a perspective then gives rise to the presence and influence of organisational socialisation on GBA teaching practice. As Wright et al., (2004, p. 51) suggest: "Teachers who wish to use [a GBA to teach games] should get the support of at least one of their physical education colleagues. That support is most likely given when teachers in schools are also educated about the approach." If such support is in place then teachers' experiences of GBA teaching are indeed *collaborative* in nature with the framework in place to develop a more complex understanding of the phenomenon.

As a *Catalyst*, the focus of attention across discerned elements of GBA teaching experience was on arguably a more complex element of GBA teaching – that being the facilitation and promotion of *Development Opportunities (DO)*. Such a focus of attention suggests the experience of GBA teaching relates to a *pupil and "their world" focused endeavour (PWF)* which requires a capacity to recognise "the *nowness* of the teaching

context" (McLaughlin, 1991, p. 69). According to Lawrence and Lentle-Keenan (2013) such a capacity can give indication of institutional policies at play as these can dictate "the kinds of teaching that are privileged" (p. 4). Thus, experiences of GBA teaching as a *Catalyst* and the discernment of a range of complex *Development opportunities (DO)* arguably shapes games teaching practice in a manner supported by both individual agency (Curry & Light, 2014) as well as positive perceptions of curricula and pedagogical innovation from an institutional perspective. Such a perspective reflects Light and Fawns (2003) argument that teaching cannot be separated from social and material contexts. It could also be argued then that the experience of GBA teaching as a *Catalyst* reflects Dewey's (1916) notion of education through occupations. Thus, as a provider of authentic and productive forms of occupation for pupils found through participation in activities that are meaningful to them (Quay & Seaman, 2013), a *Catalyst* demonstrates a capacity for complex understanding endeared to promoting or indeed *catalysing* learning.

5.4 The Influence of Context on Experiences of GBA Teaching

Dewey (1938) suggests that the nature of lived experience cannot be separated from the context in which it occurs. Thus, for this study it is important to once again recognise the contextual influences (e.g. personal, social, and institutional beliefs and practices) that no doubt shaped, and continue to shape, GBA teaching experience. I am drawn here to comments by Curry and Light (2014) relating to Curry's longitudinal study investigating a department-wide change to the practice of GBA teaching. Specifically, I am intrigued by the identification of how contextual factors impeded implementation success of GBA-related teaching practice rather than facilitated its success. It was not the focus of this study to analyse such influences on participants' experiences of GBA teaching, however I would like to reflect on participants' comments held within transcript data that hint at the severity or

geniality of contextual influence. Thus, from an organisational socialisation perspective the following quote was symptomatic of influence on a *Learners'* experience of GBA teaching:

> The Head Teacher at school was quite a role model in terms of the way he did things … he was a significant influence in terms of shaping my style of teaching, my way of teaching when I was kind of in that formative 2 or 3 years when you leave University – and he didn't use them [GBAs] so I kind of probably subconsciously followed the kind of style of what he was doing and I guess the further I got from University, the more comfortable I got with the success we were having and the way it was working with the boys. (Transcript A2)

Symptomatic of influence on *Collaborators'* experiences of GBA teaching (and also related to acculturalisation influences) was the presence of a mentor or a colleague to inspire and/or guide the development and understanding of GBA-related teaching:

> My experiences as a young person and having met up with a very proficient basketballer who was coaching in the country… his words resonate with me, he said "we do a lot of stuff that we like to do when we are at training" meaning that you do a lot of simulated game situations because you enjoy that and he said "look… we want to have fun" and that kind of resonated with me… [Thus] I think I used GBAs without even knowing what it was in that you try to get through the game even though the kids have no understanding of what is going on. (Transcript G1)

And finally, the key contextual influence on *Catalysts'* experiences of GBA teaching related to a sustained period of focus on understanding and implementing this form of pedagogy during preservice teacher education experiences (or the professional socialisation phase):

This does go back to university and studying the PE teaching side of things. When we were presented with the Play Practice model it was the model that all student teachers should all try and adopt. I guess the more I learnt about it… it made a lot of sense to me. It wasn't always straight forward as to how you might apply that in your lessons but the more I learnt about it and the more examples that the lecturers provided us with and then gave us situations to go out into schools and put it into practice… I think I developed a real appreciation for that and I could see the benefit in using that particular teaching model… It made me feel like a teacher rather than a sport coach. (Transcript I1)

Figure 5.1 *My Voice (5)*

Coincidently, the adjacent quote gives reference to the same tertiary programme and lecturer that influenced me and my experiences of GBA teaching. What assumptions about findings that this may influence will be discussed in Chapter 5.5.

Curiously though, Curtner-Smith et al., (2008) label the professional socialisation phase as the least influential of the three socialisation phases. Thus, the power and influence of a *sustained* programme of effective GBA-related induction appears vital to GBA teaching as experienced as a *Catalyst*. Such an understanding is also reflected in the literature with Pill's (2011) study into teacher engagement with a GBA suggesting that "an absence of experience with, and exposure to [GBAs] was a constraint on [teacher] ability to design and enact this type of teaching" (p. 119).

From a location perspective, that is experiences of GBA teaching in either southeast England or southeast Australia, the phenomengraphical research design prohibits a showcasing of contextual difference relating to each site as there is a focus on a collective understanding of experience (Thune & Eckerdale, 2009). What was apparent though throughout transcript data was the lack of distinction made as to which GBA was being

relived (e.g. whether or not a TGfU approach was being utilised by teachers in southeast England [identified by one participant only] or a Game Sense approach was being utilised by teachers in southeast Australia as reflective of each approaches' country of origin). With the understanding that there are similarities and differences between GBAs, in relation to the focus and design of this study it is debateable whether or not this lack of distinction is important to overall understanding of experience of GBA teaching. This distinction may be important, however, as a mechanism to drive the professional development of teachers and their pedagogical content knowledge as outlined by Jarrett and Harvey (in press).

Figure 5.2 *My Voice (6)*

For me, Chapter 5.5 supports the essence of findings from this study as comments focus away from GBA teaching experience in relation to use of either a TGfU approach or a Game Sense approach, but instead comment relates more to teaching experience based on participants' overall capacities to experience and understand the GBA concept as a whole.

5.4.1 The experience of GBA teaching in southeast England and southeast Australia.

The purposive recruitment of participants from southeast England and southeast Australia was designed, amongst other reasons, to allow for the possibility of difference to emerge in GBA teaching experience based on influences relating to social, cultural, and material contexts. The overall analysis of transcript data from a collective level, however, uncovered no overt difference in the experience of GBA-related teaching from a site specific perspective. Thus, this similarity in experience within and across categories by teachers at distinctly different contextual sites suggests a global phenomenon of experience. And although it is important to recognise that the very nature of phenomenographic research precludes analysis of individuals' differences in experience, even at a collective level the analysis of experience provided insight into similar contextual influences at play. For

example, from the experience of GBA teaching as a *Learner* Transcript A2 offers recognition of contextual influence relating to the issue of GBA mentor access:

> To use it [GBAs] in school now I would want to do it in a way that I knew would work by learning from somebody that knew how to teach it properly. (Transcript A2)

In addition to the recognition of contextual influence outlined above, Transcript I2 offers awareness of a similar recognition of influence, yet this experience of GBA teaching as a *Catalyst* occurred at a different site:

> Professionally it is always interesting to engage with other staff members about their particular approaches in lesson and… I guess there are some staff members here that utilise that approach more than others and I find it really interesting to speak to those staff who do use this approach and just hearing about their experiences with their classes… its really good for my development because I constantly think "What do I do?" and "Oh, that is a good idea" or 'How might I make that an option in the future?" or "If I can assess the students' needs that might work"… I guess in that sense it is that professional sharing [that] is of real benefit to my teaching and my sort of planning and enjoyment that I would get from the lessons. (Transcript I2)

The recognition of similar contextual influences on GBA teaching experience at different sites has implications for both teachers and teacher educators and is discussed in Chapter 6.

5.5 Limitations

As with all qualitative research studies there are assumptions made about the nature of findings being indicative and suggestive. Based on comment from Watkins and Bond (2007)

one assumption of this study was the degree of commonality across category meanings being based on participants' similar experience contexts (e.g. teaching in a secondary school physical education setting). With observation of teaching practice deemed unnecessary for this study (as the focus was on investigation of the collective meanings associated with teachers' GBA experiences and not a verification of authentic use) the reliving of teaching practice forged from similar experience contexts is a supposition of this study. Hammersely (2011, p. 36) also suggests that any research activity "involves presuppositions on which it necessary relies – without which it could not be pursued." Such comment leads to recognition of the myth of the apolitical objective researcher (Griffin, 2004). To paraphrase Willig (2012) the interpretation required within this study contains something that belongs to me as well as something that belongs to the text. By providing evidence of my reflexivity and place within and throughout the study (through a number of *My Voice* snapshots) I accept the presence of my own subjectivity as part of this study, although some would consider this a limitation to findings (see Hammersley, 2011).

Also, a number of research design aspects should be considered when discussing limitations of this study. For example, use of a single research framework (that being the second order perspective gained from phenomenography) limits understanding that might be gained from use of a different approach, such as a psycho-phenomenological approach, which is designed to explore first order understanding of experience.

Another limitation comes from the context of the research setting. Although participants taught in two English-speaking countries, there were no participants from non-English speaking countries where GBAs are used to teach games. Additionally, although comment was provided in Chapter 5 as to the potential for GBA teaching experience to influence student outcomes, the research design prevents any definitive claims being pursued. Furthermore, with an emphasis on subjectivity, description and interpretation the concept of

Figure 5.3 *My Voice (7)*

Following on from comment made in Figure 5.1 *My Voice (5)*, no assumed significance was assigned to the coincidence of having one of the study's participants complete the same tertiary PETE programme as me. The fact that there may be similarities of GBA induction experience does not relate to the focus of this study. Indeed, knowledge of the participant's GBA experience background was only discovered within Interview 1 with no assumptions about teaching capabilities made before or after this fact was known.

generalisation is not a key aspect of phenomenographic research. The transfer or application of understanding by teachers to other situations is the intention of this study, yet the limited generalisability of findings is still a limitation of findings.

From a methods perspective a limitation could relate to whether or not a past experience of GBA could be considered precise enough to be the focus of discussion within an elicitation interview? Vermersch (2008) states that elicitation interview requires the focus on a past and singular situation, yet it could be argued that using a GBA to teach games represented a series or connection of situations to facilitate learning. In response I offer my belief that the use of guiding questions asked during elicitation interviews can and did help to focus verbalisation of lived action on a specific situation, thus helping the interviewee to remain in a state of evocation surrounding a singular experience. Yet the act of question asking and guiding the interviewee in itself can be problematic. Vermersch (1999) refers to this as the limitations of the mediator himself. What Vermersch recognises is that the act of facilitating introspection is difficult; it is a technique that demands an apprenticeship and requires the progressive development of genuine expertise. Bridges (2003) also discusses the need for technical competence when enquiry is conducted.

Figure 5.4 *My Voice (8)*

Striving to access a participant's pre-reflected level of consciousness is a complex if not daunting undertaking. Even though I engaged in a series of seminars and one-to-one workshops to practice and develop confidence when using elicitation interview technique, some discussion within interviews was more 'activity description' than 'activity reliving'.

As an extension of this premise I became aware when reviewing interview transcripts that elicitation interviews that I conducted later in the interview programme contained a higher percentage of interviewee time spent in the desired state of evocation. Griffin (2004) suggests that certain limitations around interview technique training and experience can influence the integrity of research findings.

Other than the understanding that interview technique was a barrier to participants accessing and remaining in a state of evocation, it became apparent that another barrier was participants' consistent reconciliation with their own understanding of GBAs. This uncovering of variance and doubt in participants' own understanding of what GBAs were may or may not be viewed as a limitation of this study (e.g. if this variance and doubt aligns to help investigate the main research question of this study), but what it does suggest is a requirement for further consideration of teachers' initial experience of GBAs – a recommendation from this study to be discussed further in Chapter 6.

5.6 Chapter Summary

This chapter provided detailed investigation of the different ways in which GBA-related teaching was experienced by study participants as well as discussion about the meanings associated with experiences as they were logically ordered. Three categories of conception constituted from the transcript data were investigated (e.g. the *Learner*, the *Collaborator*, and the *Catalyst)* with a focus of discussion on the experience of variation in what and how elements of the phenomenon of GBA teaching were discerned. A summary of what can be learned about games teaching was presented in relation to each category and the influence of context was also discussed with reference to aspects of socialisation as critical to teacher experience. Evidence of epistemological and personal reflexivity was also offered within discussion of study limitations.

Chapter 6 – Conclusion

6.1 Introduction

The findings of this study relate to teachers' categorisation of GBA teaching experience as being that of a *Learner*, a *Collaborator*, or as a *Catalyst*. The collective meaning of experience associated with each category reflects teachers' capabilities for experiencing GBA teaching. Within and across GBA teaching experience variations in *what* and *how* the phenomenon can be experienced were evidenced through a range of discerned elements. Thus, for each category the nature of experience was contextual, inclusive and reflective of capabilities associated with experiencing phenomenon nuances with a range of complexity. The capabilities mentioned here were deemed to be influenced by aspects of socialisation; specifically occupational socialisation for the *Learner*, acculturalisation influences for the *Collaborator*, and professional socialisation influences for the *Catalyst*. Therefore, findings are suggestive of the presence of varying degrees and forms of social influence restricting or expanding teachers' capacities to experience and understand the GBA concept as a whole.

Findings from this study, though, detail more than just a blanket understanding of the influences on GBA teaching experience. Indeed, the nature of teachers' GBA teaching experience also relates to key aspects of teaching that teachers may or may not be focussing upon when using a GBA. These aspects of teaching relate to what teachers are actually aware of (and the level of importance they place on such awareness) when experiencing GBA teaching. For the *Learner*, it is limited focus on questioning and the design of games, which is reflective of a more teacher focused teaching endeavour. For the *Collaborator* it is greater awareness of and focus on pupil decision-making as part of a teacher and pupil focused endeavour. And for the *Catalyst* it is a heightened focus on providing pupils with development opportunities as part of a pupil and "their world" focused endeavour that places

holistic education of the pupil as a high priority. It is this understanding of GBA teaching experience that provides the most salient addition to contemporary GBA-related teaching literature; that being teachers' likely experiences of GBA teaching.

6.2 GBA Teaching Experience

This study shows that teachers' GBA teaching experiences vary considerably which is demonstrated by the capacity to experience GBA teaching as a *Learner*, a *Collaborator*, and as a *Catalyst*. Specific GBA teaching experience in relation to each category, however, was similar in different parts of the world suggesting that the nature of GBA teaching experience had limited site specific significance. This perspective still recognises the influence of social, cultural, and material context on teaching experience, yet the strength of contextual influence varies not in relation to site but in determining teachers' capacities to experience GBA teaching.

So what does this say about GBA teaching experience? If Dewey's view of education is considered, that being a desire to instil in people a will to change their methods and views (Nebeker, 2002), then the overall nature of GBA teaching experience (regardless of any difference in capacities to experience GBA teaching) suggests engagement by the teacher "not simply in the training of individuals, but in the formation of the proper social life" (Dewey, 1897, p. 80). This idea is evidenced in this study through teachers' awareness (and active or passive acceptance) of the complex learning theories that underpin their GBA teaching experience. Teachers' willingness to experience GBA teaching and as such their willingness to include pedagogical variation in their teaching (e.g. to use a GBA to teach games) reflects Dewey's own willingness for pedagogic innovation as described by Nebeker (2002):

> In 1891, [Dewey] tried something revolutionary in one of his courses; he allowed free discussion. So bemused was the University community that the *Michigan Daily* reported “No lectures are given, the subject being developed entirely by discussion among members of the class, stimulated occasionally by questions from the Professor". (p. 15)

Thus, GBA teaching experience reflects an attitude to teaching (and learning) that has been around since well before the evolution of contemporary GBAs some three decades ago. The manifestation of this attitude, though, varies depending upon teachers’ capacity for GBA teaching experience. For example, a *Catalyst* is more likely to reflect and seek opportunities to share GBA teaching experience in order to develop teaching practice, whereas a *Learner*, although open to the concept and philosophy of GBA teaching, is less likely to embrace the potential of curriculum (as offered through the experience of GBA teaching), but instead act more as its delegate (Nebeker, 2002). *Collaborators* and *Catalysts* also have a better awareness than *Learners* of what and how contextual *baggage* can influence teaching experience. Thus, if a range of GBA teaching experiences are being accumulated then it is more likely that the experience of GBA teaching will become more effective as well as more habit forming. The importance of habit was not foreign to Dewey (1938, p. 35) either:

> The basic characteristic of habit is that every experience enacted and undergone modifies the one who acts and undergoes, while this modification affects, whether we wish it or not, the quality of subsequent experience.

An understanding of these likely experiences of GBA teaching in turn has implications for teachers and their teaching practice as well as for teacher educators.

6.3 Implications for Practice

The findings of this study have implications for teachers and for teacher educators. Firstly, I will discuss implications for in-service PE teachers and their GBA teaching practice. Following this I will discuss implications for teacher educators with a focus on the structure and provision of induction and development opportunities within PETE courses.

6.2.1 Teachers.

There are four main implications of findings for in-service PE teachers and their GBA teaching practice. The first implication relates to the meaning of GBA teaching experience insofar as those who experience GBA teaching as a *Learner,* with a less advanced capacity to experience the phenomenon, may exhibit continued reluctance towards it use. This lends support to contemporary GBA literature suggesting a reluctance by teachers at a *Learner* level to accept and use GBAs as part of their teaching repertoire (Stolz & Pill, 2014). From a *Learners* experience perspective, the discord in current capacity and desired capacity (e.g. capacity that is associated with experiences of GBA teaching as a *Catalyst*) implies that an often basic, less complex standard of current teaching practice is being offered with potentially significant effects on pupils' achievement potential.

The second implication relates to the overall environment and context that shapes and influences teaching practice insofar as the roles that colleagues and education institutions play in supporting GBA teaching. Experiences of GBA teaching as a *Collaborator* and a *Catalyst* suggest opportunities are available to engage in a supportive community of practice whereby reflexive practice is valued and coveted. Indeed, an absence of such environments whereby teachers feel socially disengaged may make facing the complexities of teaching 21st century students that much more difficult (Dewey, 1938; Montiel-Overall, 2005), especially for those that experience GBA teaching as a *Learner*. Yet there is much to be admired in how teachers from all categories experience GBA teaching as no doubt there are circumstances of GBA teaching practice that continue in the absence of supporting communities of practice.

The third implication relates to the idea of teachers' perceptions of GBA-related teaching practice. In chapter 2.3.3 the connection between perception and experience was discussed with the focus being that one does not exist in isolation from the other. It is important then to once again consider the literature on how in-service PE teachers have perceived GBA teaching and relate this knowledge to how the perceptions of teachers involved in this study may have influenced their GBA teaching experience. To preface discussion I begin with the findings from Casey and Dyson's (2009) study whereby a seasoned in-service PE teacher's own experiences of GBA teaching were investigated. Despite fifteen years of teaching experience pre-unit feelings (or perceptions) of insecurity and apprehension felt by the teacher were reported as being well founded as "lesson one turned out to be a disaster!" (Casey & Dyson, 2009, p. 185). Yet as the experience of GBA teaching progresses it becomes evident that the teacher in Casey and Dyson's study actually demonstrates more than just a capacity to experience GBA teaching as a *Learner*:

> The conceptual shift that I made as a teacher and as a learner to vacate my central role and my dominant position in the classroom and relinquish these to my pupils was one of the important outcomes. (Casey & Dyson, 2009, p. 191)

The aforementioned quote undoubtedly demonstrates a capacity to experience GBA teaching with a more complex understanding of the intended role of the teacher, yet if perceptions and experience are considered to be mutually interdependent there exists a chance that initial perceptions of GBA teaching could dominate experience preventing further trialling of GBA teaching. I raise this point in light of comments recorded in this study highlighting perceptions of GBA teaching apprehension and the barriers these perceptions could be placing around experience of GBA teaching with a more complex understanding. As the following extract from transcript data reveals there is apprehension surrounding the

perceived function of GBA teaching to the point where perceptions are being played out through teaching practice:

> The problem with it, and it was the first lesson, I have had to stop that drill and go back to a straight partner kick to kick… this is how you have to hold the ball… so that is where the games based model falls over, particularly early days within the unit because you cannot expect a kid… it is almost negligent of me to not give any instruction on how to kick the ball when there are difficult coordination issues… when they are moving… that is when I have to pull them back to the start and the stationary kicking and getting them to do some straight out demos and teaching. (Transcript K2)

The danger associated with this scenario is that it is now a common feature of GBA teaching literature with instances of teachers "doubting their own pedagogical expertise and knowledge" (Rossi et al. 2007, p. 378) as a result of initial GBA teaching experiences presenting a concerning trend. The implication here for novice and *Learner* teachers is that the journey to developing a more complex understanding of GBA teaching reflective of a *Collaborator* or *Catalyst* must initially contend with sometimes damning perceptions of GBA teaching experience.

The fourth implication relates to the presence of similar contextual influences on GBA teaching experience at different sites (e.g. in southeast England and southeast Australia). Similarities in socialisation experiences and mentor access, for example, suggest that although there are historical and contextual links to the development of different GBAs (e.g. TGfU in England [see Bunker & Thorpe, 1982] and Game Sense in Australia [see den Duyn, 1996]), teachers considering implementation of a GBA can benefit from engagement with a range of GBA literature and workshop/professional development opportunities from around the world to help inform their practice. I say this though with a degree of caution as I

am mindful of comments made by Rossi et al. (2007) in their study relating to teachers' perceptions of a GBA-related training programme. A fictional narrative describing teachers' experiences within a GBA-related professional development programme highlighted confusion associated with the presentation of "multiple perspectives" (p. 100). In essence, the focus of the training programme was the development of knowledge surrounding the mandated GBA practice of Game Concept Approach (GCA) although resources presented as part of the programme often referred to implementation of a TGfU approach. As a consequence teachers "came away from the in-service unsure of whether there was a 'right' or 'wrong' way to go about the GCA" (p. 101). This confusion presents implications for teacher educators as well with recommendations offered later in this Chapter that consider the structure of GBA induction opportunities within PETE programmes.

6.2.2 Teacher educators.

The justification for outlining the differences and similarities of two specific pedagogical approaches in Chapter 2 (namely TGfU and Game Sense) relate to my desire to recognise the historical and contextual influences of pedagogical approach development. I also deemed it appropriate to include such discussion as each approach related, in part, to the geographical location of participants of this study as well as anecdotal and literature evidence (see Harvey & Jarrett, 2014; Pill, 2011, 2013, 2014a) that each approach was the predominant GBA being used by teachers at that location. However, a reality of findings from this study indicate the experience of GBA teaching as relived by participants had little to do with *a specific* approach insofar as a lack of approach-specific comment was made within the reliving of teaching experience. Possible reasons for this are varied (e.g. a conflicted understanding of what separates and defines different approaches or a reluctance to expose limited understanding of a specific approach). What I can comment on though are the potential implications of this for teacher educators.

Other than remaining with the status quo, two options for teacher educators are apparent with both at either ends of the "what can be done" spectrum. The first reflects a movement away from emphasizing a "new approach" or "paradigm shift" focus within PETE programmes when offering GBA induction and teaching experiences. As suggested by Pill (2011, p. 120) "many teachers already teach in a manner not too far removed from a TGfU-GS approach" so that by highlighting starting points for a TGfU-GS approach that are already evident in teaching practice the refinement of existing practice may give the practice of GBA teaching more traction. The second takes heed of Kirk's (2011) suggestion that continual modification and slippage away from truer versions of approaches may undermine pupil achievement. Such a perspective gives rise to the need within PETE programmes to focus on developing a practical and philosophical understanding of a variety of approaches to help preservice PE teachers develop an appreciation for the requirements of more informed pedagogical content knowledge. If we consider the implementation of a longer more intense GBA-related induction within PETE programmes, then there is scope within such programmes to focus on nuanced understanding of a range of approaches (e.g. TGfU *as well as* Game Sense).

Furthermore, from my perspective I don't want the next generation of physical education teachers to have the same initial and ongoing experiences of confusion as I did when implementing a GBA. Further opportunities to experience and develop teaching practice and knowledge through the trialling of GBAs also links to quality teaching in other areas as it relates to a focus on the empowering of pupils and an ability to influence broader educational debates. For example, a broader educational debate might be the provision of learning within PETE programmes relating to the implementation of the new Australian Curriculum in southeast Australia, or the influence on teaching practice of changes by Ofstead to the education inspection framework (Gov.uk, 2015) in southeast England.

Another implication of study findings relates to teacher educators' utilisation of awareness of teachers' differing experiences of GBA teaching. The implication here is that there is a lack of awareness from teacher educators (and deliverers of in-service PE teacher professional development opportunities) based on the limited evolution of GBA-related learning and development opportunities within PETE (and in-service professional development) programmes. This lack of awareness provides further justification for the nature and focus of this study, but it also leads to a set of specific recommendations derived from study findings.

6.4 Recommendations

In this section I draw on the findings of this study to make recommendations for teacher and teacher educator practice as well as further research in the field.

6.4.1 Recommendations for practice.

To help teachers experience the phenomenon of GBA teaching with a more complex understanding, a range of recommendations from this study's findings can be made in relation to both the teacher and the teacher educator. Firstly, by making teachers aware of each of the categories associated with the experience of GBA teaching they may engage in reflexive thought as to their own categorisation of experience. This in turn has the potential to bring aspects of GBA teaching practice into view when previously those aspects may have been unnoticed or avoided. Such an exercise in personal reflexivity relating to GBA teaching experiences and pedagogical content knowledge in general may also make teachers more aware of their own and colleagues' thinking and practice around teaching. This may also create the impetus to disrupt entrenched practices if appropriate/required. The highlighting and showcasing of experience at a collective level may also help teachers within and across institutions to locate mentors and/or colleagues to support future GBA teaching practice in

line with recommendations from Wang and Ha (2012b) and Aguiar and Light (2015). The development and administration of professional GBA-related communities of practice is already in vogue at an international level (e.g. the TGfU Special Interest Group - http://tgfuinfo.weebly.com/) but the convening of communities at a more local level administered by regional education authorities/school district zones should also be seen as an important addition to raising the standard of teachers' PCK. As an extension of this premise the development of and engagement with such communities in southeast England and southeast Australia is a recommendation for teachers involved in this study.

It is also incumbent on teacher educators to help preservice PE teachers to experience variation in the way they conceptualise GBA teaching. Thus, when reflecting on the GBA teaching experiences relived as part of this study, Kirk's (2011) comments on the need within PETE programmes to focus on developing a practical and philosophical understanding of a variety of approaches presents as a more suitable inclusion within PETE programmes. A considered and progressive PETE programme that develops knowledge of a variety of approaches and conceptualisations will also help teacher educators avoid a "dip in and out" approach to GBA induction practices that may restrict continuity of development.

Such varied conceptualisations make the task of engaging with nuanced literature on GBAs (e.g. nuanced by means of literature focusing on either TGfU, or Game Sense, or other types of GBAs) more accessible and readily available to develop a more complex understanding of GBA teaching experience. Yet resources accessible to teachers that showcase varied conceptualisations of different GBAs are limited. Jarrett and Harvey (in press) offer four separate lesson/session outlines in the one article as a means to highlight similarities and differences between TGfU and Game Sense in both teaching and coaching settings, but additional resources for teachers are warranted. The showcasing of effective GBA teaching as experienced by a *Catalyst* is also recommended as both a hook for teachers

considering the use of GBAs as well as teachers with existing experiences of GBA teaching seeking to develop a more complex understanding of their own GBA practice. Such showcasing should also be a feature of learning within PETE programmes through the pairing of preservice PE teachers from different year group cohorts (e.g. a 1st year student being mentored by a 4th year or Masters level student) so that observation, trialling and discussion of practice becomes a key feature of GBA induction practice. Including stand-alone units/modules within PETE programmes that focus on development of knowledge and teaching experience specific to TGfU and/or specific to Game Sense should also be considered. Such units or modules would require the design of teaching opportunities that bring to the fore a focus on *questioning* and *game design* which will also help the expansion of capacities to experience GBA-related teaching. The length of time and volume of opportunities to develop and trial *questioning* and *game design* practice will vary amongst institutions but the GBA teaching experiences relived within this study suggests a longer and more focused period of induction is required. Such development and trialling opportunities should also be afforded to in-service PE teachers with the inclusion of micro-teaching opportunities within in-service teacher professional development days. Such opportunities act as a starting point for the trialling of new pedagogical approaches whilst simultaneously promoting the idea of reflexive thinking. This brings into view the potential need for further research to inform the development of innovative and contextual professional development programmes to enhance in-service PE teachers experiences of GBA teaching.

6.4.2 Recommendations for research.

Aligned with epistemological reflexivity processes, I have given consideration to recommendations relating to the design of this research study. With phenomenography focusing on understanding the "collective instances of a way of experiencing" (Lindner & Marshall, 2003, p. 272), and elicitation interview technique providing a sustained focus on

reliving past personal experience, the research design utilised in this study is arguably well positioned to be used to explore meaning within other educational settings. For example, pupils' experiences of GBA teaching, or analysis of a sole aspect of teacher behaviour (e.g. *questioning).* Furthermore, use of the research design utilised in this study has the potential to extend the scope and type of GBA-related research questions to be investigated. For example, Åkerlind states that "phenomenography is most effectively used to inform teaching design decisions" (2008, p. 638), thus research questions targeting the design of tertiary GBA courses might benefit from the application of such a research framework.

As a psycho-phenomenological approach for data generation, elicitation interview technique was used in this study to capture detail surrounding individuals' own experience in a lived situation. As Gouju et al. (2007, p. 175) state such an approach "insists that only the participant alone can really express her relation to her specific universe, thus making her point-of-view indispensable in collecting data on the action." Thus, it is arguable that use of elicitation interview technique and other psycho-phenomenological approaches (e.g. phenomenological narrative approach) have the potential to extend understanding of GBA-related teaching and learning past the limitations of reflection and description of experience and into a world relived and/or re-storied. Such insights into teaching and learning experience provided by use of elicitation interview technique, and indeed the showcasing of stories of meaning by way of composite narratives, could be the impetus required to develop and enhance future GBA-related pedagogical practice within school-based physical education (e.g. the development and use of hybrid GBAs to better cater for pupil achievement).

Further research recommendations related to this study include the use of a similar research design to investigate preservice PE teachers' experiences of GBA teaching/learning. For example, an outcome space informed by variation in discerned aspects of GBA teaching/learning experience offered within a PETE programme has the potential to expand

knowledge of professional socialisation issues influencing preservice PE teachers at that crucial stage of teacher development. Such a study, done within and across PETE programmes from a range of tertiary institutions, could also include investigation of preservice PE teachers' awareness of teacher educator proficiency as facilitators of GBA-related induction practices. Pupils' experiences of GBA teaching could also be studied through both a cross-sectional and longitudinal research design with emphasis placed on the meaning that participation in GBA-related learning holds for them.

6.5 Concluding Remarks

For me there is objective importance in how the findings of this study are utilised to inform teacher education programmes. In order to raise the profile of physical education in schools and develop practice across the profession, collective understanding and development of research-informed practice is a central requirement. The findings of this study offer such an opportunity whereby insight into the collective experiences of GBA teaching obtained through empirical research can be used to inform the teaching practices of the next wave of physical education teachers in schools. This is important because the place of physical education in the curriculum is at a cross roads (O'Sullivan, 2015). Experiences of physical education in the school curriculum - by teachers, pupils and other stakeholders in the school community - will play a significant role in the subjects continued inclusion in the school curriculum with the findings of this study bringing further attention to the need for reflexive consideration of PCK development opportunities within current PETE programmes.

Thus, it goes without saying that the need for reflexive consideration on practice also extends to me in my current role as a deliverer of PETE and my own GBA teaching practice. At the beginning of this thesis I shared beliefs and perspectives relating to my own experiences of GBA teaching within which I had reason to question my craft. Lingering

feelings of pedagogical uncertainty were at the heart of my personal early teaching practice and it holds true that to a certain extent this uncertainty has remained throughout all of my subsequent experiences of GBA teaching. Thus, from a collective analysis perspective (such as the one offered throughout this study), it can be argued that my experiences of GBA teaching *are* similar to the experiences of others investigated in this study. And although a range of beliefs, assumptions and contextual differences underpin experiences of GBA teaching (and teaching in general), the understanding of collective meaning associated with mine and others' GBA teaching experiences to date offers significant benefit to future practice. That benefit comes in the form of a knowledge-base from which teachers and teacher educators alike can begin to disrupt any likelihood of the current GBA teaching outcome space being present in the future.

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Appendix A: Initial ‘3-question’ questionnaire

Extract from Initial Questionnaire

Please circle the appropriate response to each of the questions below:

1	Have you ever tried using a game based approach (GBA) in your teaching? A GBA reflects a more student centred learning orientation and aims to develop awareness of technical and tactical game play knowledge simultaneously through appropriate game construction, question asking and opportunity for reflection. Which from of GBA have you used (please tick): • Teaching Game for Understanding (TGfU) • Game Concept Approach (GCA) • Tactical Games Model (TGM) • Game Sense (GS) • Other……	YES / NO
2	Do you currently use a GBA to teach games?	YES / NO
3	Are you prepared to be a participant in a study (e.g. complete two interviews)? If YES, please include your name and email address below and return this completed questionnaire. NAME……. Email Contact…….	YES / NO

Appendix B: Anonymised details of participants

	Location of Teaching	No. of years teaching experience	How personally familiar are you with the term GBA? (7 point scale)	Which of these GBAs do you recognise?	What are the aspect/s that (might) influence your preparation/ planning a lesson based on a GBA?	What thing/s do you feel prevent you from applying a GBA within games teaching?
Participant A	Southeast England	10+	0 (not at all)	TGfU	• Pupils' age • Pupils' abilities • How often you teach that class	• Understanding • Experience • Structure/lesson planning
Participant B	Southeast England	5-10	3	TGfU GCA	• Pupils' age • Pupils' abilities • Access to resources • How often you teach that class	• Understanding • Type of game • Knowledge of game • Confidence • Student resistance • Structure/lesson planning • Negative judgements/ verdicts from higher authorities
Participant C	Southeast England	1-5	4	TGfU TGM	• Pupils' age • Pupils' abilities • How often you tech that class	• Understanding • Experience • Type of game • Knowledge of game
Participant D	Southeast England	5-10	4	TGfU GCA	• Pupils' age • Pupils' abilities • Access to resources • Time (length of unit)	• Knowledge of game • Confidence • Facilities
Participant E	Southeast England	5-10	4	TGfU	• Pupils' age • Time (length of unit)	• Understanding • Experience
Participant F	Southeast England	0-1	3	TGfU PP GS	• Pupils' age • Time (length of unit) • Other: Pupils' behaviour	• Confidence • Facilities • Negative judgements/ verdicts from higher authorities • Need to stick to a certain curriculum
Participant G	Southeast Australia	10+	5	TGfU PP GS	• Pupils' age • Pupils' gender • Pupils' abilities • Access to resources • Time (length of unit) • How often you teach that class	• Nothing
Participant H	Southeast Australia	1-5	4	TGfU TGM GS TDLM GCA	• Pupils' abilities • Access to resources	• Type of game • Knowledge of game
Participant I	Southeast Australia	5-10	4	TGfU GS PP	• Pupils' abilities	• -
Participant J	Southeast Australia	10+	6 (highly familiar)	TGfU GS IGCM	• Time (length of unit)	• Type of game

Participant K	Southeast Australia	10+	4	TGfU GS	• Pupils' age • Pupils' abilities • Access to resources • Time (length of unit)	• Knowledge of game • Confidence
Participant L	Southeast Australia	5-10	0 (not at all familiar)	GS	• Pupils' age • Pupils' abilities	• Knowledge of game • Negative judgements/ verdicts from higher authorities • Need to stick to a certain curriculum

Appendix C: Prototype GBA questionnaire

GBA Questionnaire

Instructions:
Please circle the most appropriate answer
Some questions may invite more than one answer
Please indicate if further clarification of question is required
If unable to answer certain questions please move on to the next question
There are 20 questions and answering them should take no longer than 5 minutes

1. **How many years of PE teaching experience do you have?**
   0-1 years 1-5 years 5-10 years 10+ years

2. **How many schools have you taught at?**
   1 school 2 schools 3 schools 4+ schools

3. **How personally familiar are you with the term GBA?**
   Not at all 1 2 3 4 5 Highly familiar

4. **Where did you learn about GBAs?**

   I have never heard of GBAs
   During teacher training (placement)
   At university (module/unit)
   During an educational course
   At a conference
   From a colleague
   From a student teacher
   Reading literature
   Social networking/media (e.g. facebook, twitter)
   Internet or practitioner website

5. **Which if these game based approaches do you recognise?**

   Teaching Games for Understanding
   The Tactical Games Model
   Play Practice
   Game Sense
   The Tactical-Decision Learning Model
   The Ball School
   The Games Concept Approach
   The Invasion Games Competence Model

6. **How many hours in total would you say that you have spent learning about GBAs?**

   Never learned A few hours 5-10 hours 10-15 hours 15+ hours

7. **How often do you currently use a GBA in your teaching?**

   Never Occasionally Regularly

8. **What would you say is your personal level of expertise using GBAs?**

   None 1 2 3 4 5 Expert

9. **Give a rating of how confident you are using GBAs:**

   Not confident 1 2 3 4 5 Very confident

10. **Has the amount of GBAs you apply in your games teaching increased or decreased since you first began using GBAs?**

    Decreased 1 2 3 4 5 Increased

11. **Identify which aspect/s you personally associate with GBAs:**

    Modified/conditioned games
    Competition
    Fitness
    Developing game performance
    Developing knowledge of games
    Personal/social development
    Student-centred learning
    Tactical development
    Skill development
    Small sided games
    Holistic learning
    Training drills
    Opportunity for pupil interaction/discussion
    Other (please specify_____)

12. **Indicate which aspect/s you associate with students learning within a lesson based around a GBA:**

    Fun/excitement
    Excitement
    Motivation
    Inspiration

Boredom
Off-task behaviour
Quality learning
Personal development
Performance improvement
Task mastery
Other (please specify_____)

13. Indicate the primary role/s of a teacher utilising a GBA:

Organiser
Monitor
Performance coach
Motivator
Critical question asker
Engagement prompter
Abdicator (from the learning exchange)
Constant constructor
Other (please specify_____)

14. Indicate which aspect/s of pupil development that you associate with the use of a GBA to teach games:

Strategic game knowledge
Technical skills
Physical ability
Social enhancement
Physical literacy
Mental well-being/health
Fitness
Other (please specify_____)

15. Give a rating of how ineffective/effective you think a GBA is in promoting the development of technical skills:

Ineffective 0 1 2 3 4 5 Effective

16. Give a rating of how ineffective/effective you think a GBA is in promoting the development of tactical skills:

Ineffective 0 1 2 3 4 5 Effective

17. Give a rating of how ineffective/effective you think a GBA is in promoting the development of social skills:

Ineffective 0 1 2 3 4 5 Effective

18. 'I have used a GBA when teaching the following games…'

Invasion games
Target games
Net/wall games
Balling/fielding games

19. What are the aspect/s that (might) influence your preparation/planning of a lesson based on a GBA?

Pupils' age
Pupils' gender
Pupils' ability
Access to resources
Time (length of unit)
How often you teach that class
Other (Please specify_____)

20. What thing/s do you feel prevent you from using GBAs within games teaching?

Your age
Your understanding
Your experience
Type of game
Knowledge of game
Confidence
Student resistance
Facilities
Structure/lesson planning
Negative judgements/verdicts from higher authorities (e.g. HoD, colleagues)
Your need to apply/stick to a certain curriculum

Appendix D: Overview of interview programme questions

Interview (1)	**Interview (2)**
Focus: *Exploration of background* ***Journey into teaching*** • Tell me about yourself? What were your experiences of school, of teachers and of learning? • What do you remember about your experiences of physical education and playing sport? • Was playing sport important to you? Was it important to your friends? • Was success in physical education/sport important? • Were your parents supportive of you playing sport? • When did you start thinking about becoming a teacher? ***Beliefs about teaching and learning*** • Why did you become a teacher? • What is important to you when you are teaching? ***Analysis and interpretation of 'a specific event' to explore beliefs/ assumptions about teaching*** • Describe an event that has had a major impact on how you teach. • Describe a relationship that has had a major impact on how you teach. • Describe what it is like to be a successful teacher.	**Focus:** *Experiences of GBA use* ***Exploration of knowledge/interest/use of GBA pedagogy*** • What is your understanding of GBAs? • How useful have they been in helping to achieve set learning outcomes? ***Past experience of use (elicitation interview)*** • I want you to think about an occasion when you are using a games based approach in your teaching [pause]. I want you to take your time and tell me where you are right now. • What you are doing at this moment? • To what are you attentive to? What are you doing/thinking/feeling/seeing? • Perhaps you are feeling/seeing/sensing something? Or perhaps not? • Right now when you hear/feel/see this, what are you thinking? • What barriers or challenges are you overcoming right now? ***Factors affecting implementation*** • What is/was its appeal? • What barriers still exist? • Why did it fail?/ What shapes this failure? • Why continue with it?/ What shapes its continued use? • How have others influenced your use of GBAs?

Appendix E: Analysis of transcript data

	Utterances identified as meaning statements
1	I'm a bit nervous about not really understanding what we're doing because this isn't how I've kind of learnt my own sport
2	it was that kind of games teaching session rather than a lacrosse session
3	that's why I think it's TGfU because… we didn't have to play lacrosse rules
4	Maybe it's not TGfU at all [laughs] maybe it's ummm – but I guess that's not… is that not… do you think it sounds really unlike TGfU [laughs].
5	Maybe that's it – maybe what I've associated as being TGfU is so far removed from what you're expecting…
6	I wanted them to work it out for themselves
7	The students… I handed over to them and let them make decisions
8	I ask students to argh… decide on whether they had made a good decision, what was working for them, what was not working and they gave all sorts of feedback and different people gave feedback
9	they were taking charge which was working and then when they went back into it the outcomes were very different
10	a feeling of slight helplessness from the point of view that obviously it was something I've not done a lot with the boys before because you always hope that the GBA that it the outcomes are going to be there and I'm not always sure that they are
11	No one seems to notice the cold.
12	right guys we are going to play a game of 4 goal here… bibs, you will be defending these two goals, non-bibs you will be defending these two goals… and normal hockey rules, away you go…
13	they didn't really understanding what they were trying to achieve but that is what I wanted…
14	because they are not quite understanding what is going on… I want to stop it but I want it to keep going to see if slowly they pick up what is going on
15	I brought them in around me and described to them exactly why we were doing this.
16	I explain to them obviously the need for ball speed
17	I questioned more than told because I wanted to understand exactly what they knew and how I could best help them.
18	it was quite nice in a way and it made me feel a lot more confident with what I was doing with them and it was good to know they were getting something from me and I was giving something to them.
19	I spoke to them again about how they thought they had improved… what where they doing better… had they improved… were they effective?
20	They are liking the group discussion I suppose… so they are sort of saying they were doing this, they were doing that… and I think this and I think that…
21	Instead of having 2 goals you have one goal to focus on now, normal hockey, right way you go
22	What are we doing well, what so we need to improve on? Someone said we are going very direct, we want to go at the goal… there is only one goal now we just want to get it in there… good, so what can we do to make this better and they said well in the last drill we spread the game wide and I said 'perfect' so I set up the same goals on the 25 and said this time you have to make sure you go through one of the goals on the side line before you can score a goal in the middle and it just took off from there.
23	you could see them picking up each concept as we worked through the different game situations
24	we'll try to get you guys to find out the answers through the practice so that during the game you can answer those questions physically on the court
25	... we started to delve into their understanding of what do I mean by pressure, what is the purpose of them doing a press. What are they trying to get out of it.
26	I ask them what is it that a press is trying do that… what are they going to try to do to us?

27	how… what was it you were trying to achieve
28	I am listening to the conversations off the court
29	after 10 minutes ill pull the pupils back in and Q each player i.e. you're going to talk to the group about that, you're going to talk about that… I feel that when pupils feel that they have got the answer that they've discovered it um.. that they feel more comfortable that talking and demonstrating it
30	they struggled with the task but it was probably most beneficial out of the 3 cause id ask why are you struggling, what was going wrong
31	They just scored from a live turnover, so what are we going to agree as a team as our rule?
32	so they are playing little small sided games and because they are small groups in a big area there is limited opportunity for them not to get involved
33	keeping my fingers crossed that when I spoke to them next they would say the same thing that I would like them to say about what has gone wrong in the games.
34	I have given them some time in their 4 little teams to think for themselves about what they think they were doing well as a team and what they think they need to do better as a team
35	ultimately I do get the response I am hoping for which is we need to space out more…
36	we have just had a conversation about what they will do as a class
37	I have given them another couple of minutes to go back and weave what we have spoken about into their more conscious mind
38	So I have given them a clear instruction about how close they are allowed to be to any other person on their own team at any time.
39	It is having an effect on some of them but what is happening for most of them is that they are thinking about it, they are thinking about where they should be, but now they are thinking about it so much that they're not necessarily being useful in the game anymore.
40	there are kids that are still barrelling in on top of the ball just like before… to be honest there… they just want to play with the ball and aren't that bothered where they should be.
41	I start off with LO, what we are aiming for in the lesson
42	gradually they get an understanding…
43	I've acknowledged he is out there and he has found the space but not saying anything about it
44	No, I want to savour that moment and if a call everyone in then you lose the visual example, freeze, nobody move…
45	I'm looking to see whether they have responded…
46	Yes, eventually they start thinking about passing the ball…
47	others in his team are probably now thinking he is quite useful now and we can pass him the ball, he is scoring some tries for us…
48	'what are they doing different to the you guys'
49	I'm concentrating on the attackers and what they are doing in order to get themselves into a sensible space and I'm also watching what the ball, the person with the ball is doing, in terms of their DM as to when to release the ball.
50	I stop the game at that point because want to make um… a bit of a discussion about where the space is so then…
51	I'm saying exactly that, im saying when you are about to pass the ball where are you passing, that is my question 'where are you passing?'. Then they come up with 'well we are passing to a player', and I said 'well where can you throw the ball in order to pass to the player'
52	I then after saying where else is the space, then end up telling them is there space behind the player?
53	So I now am concentrating on really rewarding and highlighting the concept of moving to space in order to receive the ball.
54	so they are coming up with strategies to when to bounce the ball and when to throw the ball to their partner.
55	Their involvement in the game seems to be, they seem a bit more excited, a bit more um… comfortable but yet more competitive

56	I guess the motivation level starts to rise a bit.
57	there is a bit of enthusiasm around, im thinking it's the perfect opportunity to introduce them to a bit of a modified game that they can practice these skills that they have been developing over a few weeks.
58	I explain some modified rules for them… emphasising the key things we have been working on in previous weeks and that I would like to see them utilise them well in this game
59	a lot a kids have migrated towards the centre of the ground which is not what I had originally wanted at this stage, so im having to rethink a few things so we are going to start playing in a second and I have to start thinking on my feet and how I can change this and get them to be a bit more structured on the oval…
60	I'm giving a few instructions. I… get them into teams and to chat about and think about having 2 set people up forward, 2 in midfield and 2 down back just so we get a bit more structure…
61	I'm hearing a bit more voice than I expected to hear I think. A lot more communication
62	I'm trying to picture as I planning to put the cones down what is going to be an effective grid area
63	Whilst thinking large number overall I'm also thinking how it will break down to individual groups, the area that I allow in that space, so that it can hopefully create that competitive 1 on 1 situation to give the attacker enough room if they are successful in making that quick change of direction they can actually get past the defender.
64	there are conversations about what the nature of the game we are doing
65	what they are doing in accordance to the instructions I have given.
66	I offer praise and encouragement in the context of what has just happened…
67	I'm still looking closely at the how the allocated space is shaping the play
68	'Miss can we take this line of cones out here, it is too hard'
69	I'm thinking good, you are thinking about this
70	then I'm thinking to myself how can we quickly alter this situation without having students stand around too long…
71	how can I minimise time and disruption here
72	I use the opportunity to actually get students to rotate and to find a new partner
73	I'm thinking about the social interaction as well, they are a mixed class and I'm always conscious of getting them to change who they work
74	I just want to bring it to the students attention then and there
75	so I wanted to check for understanding
76	I say to them what strategies are you finding successful here in trying to run past your opponent?
77	I'm sensing whether or not some students know how to verbalise what it is they are doing
78	Can they tell me or identify or have that awareness of what they are actually doing in that 1 on 1 situation
79	I'm saying 'yes, good', trying to instantly give him confidence to keep talking and keep explaining and keep sharing and he says that you need to make it believable
80	So now I am looking around and can see that a lot of the students can identify with that particular strategy… and im thinking, looking at the girls, perhaps your experience in basketball or netball I guess I'm sort of getting an appreciation that although their backgrounds are different they can relate to that idea…
81	the first lesson is me instructing…
82	All groups are doing their own thing, independent activities. There are some groups that are involved in a full on drill and very active and running and moving and being agile around the court…
83	Um… a lot of times there is no need for me to speak to the group as a whole

84	I ask specific groups ‘what are the issues? Are you working as a team?’
85	I’m conscious of it being a game based lesson…
86	We start with a little game of partner handball, with tackling…
87	I’m feeling that there are kids in this class that have never handballed before
88	ok, get a partner and get one ball between two and I want you to hand pass the ball and run anywhere you like in this designated area just hand balling back and forth to partner. There is no demonstration, the only rules are you must be jogging and stay in the area
89	similar to that we go into kicking… Again, no instruction on how to kick but kicking instead of handballing…
90	so that is where the games based model falls over, particularly early days within the unit
91	now we have an opponent and we kick to a lead and now we also have a defender
92	There is a ball, you have all this space, see you later… one demo with a group of three then go… that works quite well but there is huge variance with skill, but they understand what they are required to do and they are trying to do it…
93	So when it comes to finish after a couple of minute I bring them in for about a minute and say this is what we are doing well and this is what we need to focus upon.
94	I am modifying the game so it is not as wide as the proper pitch length or width.
95	Without too much instruction I just day ‘game on’ and I sit back and watch the girls probably for 5 minutes…
96	I am attentive to… for the first five minutes I am swallowing my whistle and trying not to talk too much and I’m just walking around through them and just watching and watching positioning and what they are doing off the ball. I’m watching who is talking, how are the backs setting up everyone else?… I am not so concerned about the ball carrier and what they are doing, it is more looking at their vision.
97	I bring them in and get them into their groups. I say coaches, get them to talk, ‘how did that feel?’
98	What I am seeing is not so much the coaches talking but pretty soon everyone in both teams have something to say…
99	I am seeing that they are all not happy with the way it is going, they think they can improve and that is not me saying it, I haven’t said anything yet
100	If you have the ball and are standing still it is easy for the opposition to pick up where you are passing so when dribbling dribble in angles so the defender has to move. These are the little steps that I am trying to implement to make the way that you play and the time that you have on the ball a lot easier and to help your decision making.’

Initial grouping of meaning statements (similar responses with similar attributes)	
1	I'm a bit nervous about not really understanding what we're doing because this isn't how I've kind of learnt my own sport
10	a feeling of slight helplessness from the point of view that obviously it was something I've not done a lot with the boys before because you always hope that the GBA that it the outcomes are going to be there and I'm not always sure that they are
35	ultimately I do get the response I am hoping for which is we need to space out more…
40	there are kids that are still barrelling in on top of the ball just like before… to be honest there… they just want to play with the ball and aren't that bothered where they should be.
56	I guess the motivation level starts to rise a bit.
57	there is a bit of enthusiasm around, im thinking it's the perfect opportunity to introduce them to a bit of a modified game that they can practice these skills that they have been developing over a few weeks.
59	a lot a kids have migrated towards the centre of the ground which is not what I had originally wanted at this stage, so im having to rethink a few things so we are going to start playing in a second and I have to start thinking on my feet and how I can change this and get them to be a bit more structured on the oval…
71	how can I minimise time and disruption here
81	the first lesson is me instructing…
83	Um… a lot of times there is no need for me to speak to the group as a whole
85	I'm conscious of it being a game based lesson…
90	so that is where the games based model falls over, particularly early days within the unit
2	it was that kind of games teaching session rather than a lacrosse session
3	that's why I think it's TGfU because… we didn't have to play lacrosse rules
5	Maybe that's it – maybe what I've associated as being TGfU is so far removed from what you're expecting…
15	I brought them in around me and described to them exactly why we were doing this.
33	keeping my fingers crossed that when I spoke to them next they would say the same thing that I would like them to say about what has gone wrong in the games.
58	I explain some modified rules for them… emphasising the key things we have been working on in previous weeks and that I would like to see them utilise them well in this game
74	I just want to bring it to the students attention then and there
79	I'm saying 'yes, good', trying to instantly give him confidence to keep talking and keep explaining and keep sharing and he says that you need to make it believable
84	I ask specific groups 'what are the issues? Are you working as a team?'
86	We start with a little game of partner handball, with tackling…
4	Maybe it's not TGfU at all [laughs] maybe it's ummm – but I guess that's not… is that not… do you think it sounds really unlike TGfU [laughs].
16	I explain to them obviously the need for ball speed
26	I ask them what is it that a press is trying do that… what are they going to try to do to us.
35	ultimately I do get the response I am hoping for which is we need to space out more…
38	So I have given them a clear instruction about how close they are allowed to be to any other person on their own team at any time.

52	I then after saying where else is the space, then end up telling them is there space behind the player?
60	I'm giving a few instructions. I… get them into teams and to chat about and think about having 2 set people up forward, 2 in midfield and 2 down back just so we get a bit more structure…
74	I just want to bring it to the students attention then and there
84	I ask specific groups 'what are the issues? Are you working as a team?'
93	So when it comes to finish after a couple of minute I bring them in for about a minute and say this is what we are doing well and this is what we need to focus upon.
100	If you have the ball and are standing still it is easy for the opposition to pick up where you are passing so when dribbling dribble in angles so the defender has to move. These are the little steps that I am trying to implement to make the way that you play and the time that you have on the ball a lot easier and to help your decision making.'
6	I wanted them to work it out for themselves
9	they were taking charge which was working and then when they went back into it the outcomes were very different
14	because they are not quite understanding what is going on… I want to stop it but I want it to keep going to see if slowly they pick up what is going on
13	they didn't really understanding what they were trying to achieve but that is what I wanted…
18	it was quite nice in a way and it made me feel a lot more confident with what I was doing with them and it was good to know they were getting something from me and I was giving something to them.
21	Instead of having 2 goals you have one goal to focus on now, normal hockey, right way you go
31	They just scored from a live turnover, so what are we going to agree as a team as our rule?
32	so they are playing little small sided games and because they are small groups in a big area there is limited opportunity for them not to get involved
37	I have given them another couple of minutes to go back and weave what we have spoken about into their more conscious mind
42	gradually they get an understanding…
43	I've acknowledged he is out there and he has found the space but not saying anything about it
44	No, I want to savour that moment and if a call everyone in then you lose the visual example, freeze, nobody move…
47	others in his team are probably now thinking he is quite useful now and we can pass him the ball, he is scoring some tries for us…
50	I stop the game at that point because want to make um… a bit of a discussion about where the space is so then…
70	then im thinking to myself how can we quickly alter this situation without having students stand around too long…
88	ok, get a partner and get one ball between two and I want you to hand pass the ball and run anywhere you like in this designated area just hand balling back and forth to partner. There is no demonstration, the only rules are you must be jogging and stay in the area
89	similar to that we go into kicking… Again, no instruction on how to kick but kicking instead of handballing…
91	now we have an opponent and we kick to a lead and now we also have a defender
92	There is a ball, you have all this space, see you later… one demo with a group of three then go… that works quite well but there is huge variance with skill, but they understand what they are required to do and they are trying to do it…
95	Without too much instruction I just day 'game on' and I sit back and watch the girls probably for 5 minutes…
7	The students… I handed over to them and let them make decisions
12	right guys we are going to play a game of 4 goal here… bibs, you will be defending these two goals, non-bibs you will be defending these two goals… and normal hockey rules, away you go…
20	They are liking the group discussion I suppose… so they are sort of saying they were doing this, they were doing that… and I think this and I think that…

25	... we started to delve into their understanding of what do I mean by pressure, what is the purpose of them doing a press. What are they trying to get out of it.
28	I listening to the conversations off the court
36	we have just had a conversation about what they will do as a class
39	It is having an effect on some of them but what is happening for most of them is that they are thinking about it, they are thinking about where they should be, but now they are thinking about it so much that they're not necessarily being useful in the game anymore.
41	I start off with LO, what we are aiming for in the lesson
43	I've acknowledged he is out there and he has found the space but not saying anything about it
45	I'm looking to see whether they have responded…
46	Yes, eventually they start thinking about passing the ball…
49	I'm concentrating on the attackers and what they are doing in order to get themselves into a sensible space and I'm also watching what the ball, the person with the ball is doing, in terms of their DM as to when to release the ball.
53	So I now am concentrating on really rewarding and highlighting the concept of moving to space in order to receive the ball.
54	so they are coming up with strategies to when to bounce the ball and when to throw the ball to their partner.
55	Their involvement in the game seems to be, they seem a bit more excited, a bit more um… comfortable but yet more competitive
61	I'm hearing a bit more voice than I expected to hear I think. A lot more communication
64	there are conversations about what the nature of the game we are doing
65	what they are doing in accordance to the instructions I have given.
69	Im thinking good, you are thinking about this
72	I use the opportunity to actually get students to rotate and to find a new partner
77	I'm sensing whether or not some students know how to verbalise what it is they are doing
80	So now I am looking around and can see that a lot of the students can identify with that particular strategy… and im thinking, looking at the girls, perhaps your experience in basketball or netball I guess im sort of getting an appreciation that although their backgrounds are different they can relate to that idea…
82	All groups are doing their own thing, independent activities. There are some groups that are involved in a full on drill and very active and running and moving and being agile around the court…
87	I'm feeling that there are kids in this class that have never handballed before
98	What I am seeing is not so much the coaches talking but pretty soon everyone in both teams have something to say…
99	I am seeing that they are all not happy with the way it is going, they think they can improve and that is not me saying it, I haven't said anything yet
8	I ask students to argh… decide on whether they had made a good decision, what was working for them, what was not working and they gave all sorts of feedback and different people gave feedback
17	I questioned more than told because I wanted to understand exactly what they knew and how I could best help them.
19	I spoke to them again about how they thought they had improved… what where they doing better… had they improved… were they effective?
22	What are we doing well, what so we need to improve on? Someone said we are going very direct, we want to go at the goal… there is only one goal now we just want to get it in there… good, so what can we do to make this better and they said well in the last drill we spread the game wide and I said 'perfect' so I set up the same goals on the 25 and said this time you have to make sure you go through one of the goals on the side line before you can score a goal in the middle and it just took off from there.
27	how… what was it you were trying to achieve

30	they struggled with the task but it was probably most beneficial out of the 3 cause id ask why are you struggling, what was going wrong
34	I have given them some time in their 4 little teams to think for themselves about what they think they were doing well as a team and what they think they need to do better as a team
48	'what are they doing different to the you guys'
51	I'm saying exactly that, im saying when you are about to pass the ball where are you passing, that is my question 'where are you passing?'. Then they come up with 'well we are passing to a player', and I said 'well where can you throw the ball in order to pass to the player'
75	so I wanted to check for understanding
76	I say to them what strategies are you finding successful here in trying to run past your opponent?
95	Without too much instruction I just day 'game on' and I sit back and watch the girls probably for 5 minutes…
11	No one seems to notice the cold.
62	im trying to picture as I planning to put the cones down what is going to be an effective grid area
63	Whilst thinking large number overall im also thinking how it will break down to individual groups, the area that I allow in that space, so that it can hopefully create that competitive 1 on 1 situation to give the attacker enough room if they are successful in making that quick change of direction they can actually get past the defender.
67	I'm still looking closely at the how the allocated space is shaping the play
73	im thinking about the social interaction as well, they are a mixed class and im always conscious of getting them to change who they work
94	I am modifying the game so it is not as wide as the proper pitch length or width.
96	I am attentive to… for the first five minutes I am swallowing my whistle and trying not to talk too much and Im just walking around through them and just watching and watching positioning and what they are doing off the ball. Im watching who is talking, how are the backs setting up everyone else… I am not so concerned about the ball carrier and what they are doing, it is more looking at their vision.
23	you could see them picking up each concept as we worked through the different game situations
29	after 10 minutes ill pull the pupils back in and Q each player i.e. your going to talk to the group about that, your going to talk about that… I feel that when pupils feel that they have got the answer that they've discovered it um.. that they feel more comfortable that talking and demonstrating it
62	im trying to picture as I planning to put the cones down what is going to be an effective grid area
63	Whilst thinking large number overall im also thinking how it will break down to individual groups, the area that I allow in that space, so that it can hopefully create that competitive 1 on 1 situation to give the attacker enough room if they are successful in making that quick change of direction they can actually get past the defender.
73	im thinking about the social interaction as well, they are a mixed class and im always conscious of getting them to change who they work
24	we'll try to get you guys to find out the answers through the practice so that during the game you can answer those questions physically on the court
29	after 10 minutes ill pull the pupils back in and Q each player i.e. your going to talk to the group about that, your going to talk about that… I feel that when pupils feel that they have got the answer that they've discovered it um.. that they feel more comfortable that talking and demonstrating it
66	I offer praise and encouragement in the context of what has just happened…
68	'Miss can we take this line of cones out here, it is too hard'
78	Can they tell me or identify or have that awareness of what they are actually doing in that 1 on 1 situation
97	I bring them in and get them into their groups. I say coaches, get them to talk, 'how did that feel?'

Determination of referential and structural aspects, dimensions of variation and key attributes, and categories of conception				Ref	Struc	DV	Att	Category
Referential: A pupil and 'their world' focused endeavour (PWF) A teacher and pupil focused endeavour (TPF) A teacher focused endeavour (TF)	**Structural: Internal Horizon** *Theme* – Extending the pupil (ExP) *Theme* – Engaging the pupil (EnP) *Theme* – A new way of teaching (NWT)	**Structural: Internal Horizon** *Thematic Field* – Questioning (Q) *Thematic Field* – Design of game (DG) *Thematic Field* – Decision making (DM) *Thematic Field* – Engagement (En) *Thematic Field* – Development opportunity (DO)	**Structural: External Horizon** *Margin of Awareness* – Other ways of teaching (OWT) Curriculum content (CC) Pedagogical content knowledge (PCK) Experience of teaching (ET)					Learner (L) Collaborator (C) Catalyst (Cat)
	Utterances/Meaning Statements		**Dimension of Variation (DV) –** Learning Intentions (LI)		**Attribute (Att) –** To clarify instruction and action (CI)			
2	it was that kind of games teaching session rather than a lacrosse session			TF	NWT-DO-ET	LI	CI	L
3	that's why I think it's TGfU because… we didn't have to play lacrosse rules			TF	NWT-DG-OWT	LI	CI	L
5	Maybe that's it – maybe what I've associated as being TGfU is so far removed from what you're expecting…			TF	NWT-DG-OWT	LI	CI	L
15	I brought them in around me and described to them exactly why we were doing this.			TF	NWT-En-ET	LI	CI	C
33	keeping my fingers crossed that when I spoke to them next they would say the same thing that I would like them to say about what has gone wrong in the games.			TF	NWT-Q-ET	LI	CI	L
58	I explain some modified rules for them… emphasising the key things we have been working on in previous weeks and that I would like to see them utilise them well in this game			TF	NWT-DM-CC	LI	CI	L
74	I just want to bring it to the students attention then and there			TF	NWT-En-ET	LI	CI	CAT
79	I'm saying 'yes, good', trying to instantly give him confidence to keep talking and keep explaining and keep sharing and he says that you need to make it believable			TF	NWT-En-ET	LI	CI	CAT
84	I ask specific groups 'what are the issues? Are you working as a team?'			TF	NWT-Q-ET	LI	CI	L
86	We start with a little game of partner handball, with tackling…			TF	NWT-DG-PCK	LI	CI	C
	Utterances/Meaning Statements		**Dimension of Variation (DV) –** Learning Intentions (LI)		**Attribute (Att) –** To focus on pupil development (PDe)			
6	I wanted them to work it out for themselves			TPF	EnP-DM-ET	LI	PDe	C
9	they were taking charge which was working and then when they went back into it the outcomes were very different			TPF	EnP-En-OWT	LI	PDe	C
14	because they are not quite understanding what is going on… I want to stop it but I want it to keep going to see if slowly they pick up what is going on			TPF	EnP-DO-PCK	LI	PDe	C
13	they didn't really understanding what they were trying to achieve but that is what I wanted…			TPF	EnP-En-ET	LI	PDe	C
18	it was quite nice in a way and it made me feel a lot more confident with what I was doing with them and it was good to know they were getting something from me and I was giving something to them.			TPF	EnP-DO-ET	LI	PDe	C
21	Instead of having 2 goals you have one goal to focus on now, normal hockey, right way you go			TPF	EnP-DG-PCK	LI	PDe	C
31	They just scored from a live turnover, so what are we going to agree as a team as our rule?			TPF	EnP-DM-ET	LI	PDe	CAT
32	so they are playing little small sided games and because they are small groups in a big area there is limited opportunity for them not to get involved			TPF	EnP-En-PCK	LI	PDe	L

37	I have given them another couple of minutes to go back and weave what we have spoken about into their more conscious mind	TPF	EnP-DM-ET	LI	PDe	L
42	gradually they get an understanding…	TPF	EnP-DM-ET	LI	PDe	C
43	I've acknowledged he is out there and he has found the space but not saying anything about it	TPF	EnP-DO-PCK	LI	PDe	C
44	No, I want to savour that moment and if I call everyone in then you lose the visual example, freeze, nobody move…	TPF	EnP-DO-PCK	LI	PDe	C
47	others in his team are probably now thinking he is quite useful now and we can pass him the ball, he is scoring some tries for us…	TPF	EnP-DOET	LI	PDe	C
50	I stop the game at that point because want to make um… a bit of a discussion about where the space is so then…	TPF	EnP-Q-PCK	LI	PDe	C
70	then I'm thinking to myself how can we quickly alter this situation without having students stand around too long…	TPF	EnP-DG-ET	LI	PDe	CAT
88	ok, get a partner and get one ball between two and I want you to hand pass the ball and run anywhere you like in this designated area just hand balling back and forth to partner. There is no demonstration, the only rules are you must be jogging and stay in the area	TPF	EnP-DG-PCK	LI	PDe	C
89	similar to that we go into kicking… Again, no instruction on how to kick but kicking instead of handballing…	TPF	EnP-DG-PCK	LI	PDe	C
91	now we have an opponent and we kick to a lead and now we also have a defender	TPF	EnP-DG-PCK	LI	PDe	C
92	There is a ball, you have all this space, see you later… one demo with a group of three then go… that works quite well but there is huge variance with skill, but they understand what they are required to do and they are trying to do it…	TPF	EnP-DO-PCK	LI	PDe	C
95	Without too much instruction I just say 'game on' and I sit back and watch the girls probably for 5 minutes…	TPF	EnP-En-ET	LI	PDe	C
Utterances/Meaning Statements	**Dimension of Variation (DV) –** Learning Intentions (LI)	**Attribute (Att) –** To enlighten (holistic development of pupil) (E)				
23	you could see them picking up each concept as we worked through the different game situations	PWF	ExP-DO-ET	LI	E	CAT
29	after 10 minutes I'll pull the pupils back in and Q each player i.e. you're going to talk to the group about that, you're going to talk about that… I feel that when pupils feel that they have got the answer that they've discovered it um.. that they feel more comfortable that talking and demonstrating it	PWF	ExP-DO-ET	LI	E	CAT
62	I'm trying to picture as I planning to put the cones down what is going to be an effective grid area	PWF	ExP-DG-PCK	LI	E	CAT
63	Whilst thinking large number overall 'm also thinking how it will break down to individual groups, the area that I allow in that space, so that it can hopefully create that competitive 1 on 1 situation to give the attacker enough room if they are successful in making that quick change of direction they can actually get past the defender.		ExP-DG-PCK	LI	E	CAT
73	I'm thinking about the social interaction as well, they are a mixed class and I'm always conscious of getting them to change who they work	PWF	ExP-DO-ET	LI	E	CAT
Utterances/Meaning Statements	**Dimension of Variation (DV) –** Focus of Attention (FA)	**Attribute (Att) –** On self as the teacher (S)				
1	I'm a bit nervous about not really understanding what we're doing because this isn't how I've kind of learnt my own sport	TF	NWT-DO-OWT	FA	S	L
10	a feeling of slight helplessness from the point of view that obviously it was something I've not done a lot with the boys before because you always hope that the GBA that it… the outcomes are going to be there and I'm not always sure that they are	TF	NWT-DO-ET	FA	S	C
35	ultimately I do get the response I am hoping for which is we need to space out more…	TF	NWT-Q-ET	FA	S	L

40	there are kids that are still barrelling in on top of the ball just like before… to be honest there… they just want to play with the ball and aren't that bothered where they should be.	TF	NWT-En-ET	FA	S	L
56	I guess the motivation level starts to rise a bit.	TF	NWT-En-ET	FA	S	L
57	there is a bit of enthusiasm around, I'm thinking it's the perfect opportunity to introduce them to a bit of a modified game that they can practice these skills that they have been developing over a few weeks.	TF	NWT-DO-ET	FA	S	L
59	a lot a kids have migrated towards the centre of the ground which is not what I had originally wanted at this stage, so I'm having to rethink a few things so we are going to start playing in a second and I have to start thinking on my feet and how I can change this and get them to be a bit more structured on the oval…	TF	NWT-DG-PCK	FA	S	L
71	how can I minimise time and disruption here	TF	NWT-En-ET	FA	S	CAT
81	the first lesson is me instructing…	TF	NWT-En-OWT	FA	S	L
83	Um… a lot of times there is no need for me to speak to the group as a whole	TF	NWT-En-ET	FA	S	L
85	I'm conscious of it being a game based lesson…	TF	NWT-DM-ET	FA	S	C
90	so that is where the games based model falls over, particularly early days within the unit	TF	NWT-DG-ET	FA	S	C
	Utterances/Meaning Statements	**Dimension of Variation (DV) –** Focus of Attention (FA)		**Attribute (Att) –** On pupils and their learning (L)		
7	The students… I handed over to them and let them make decisions	TPF	EnP-DM-OWT	FA	L	C
12	right guys we are going to play a game of 4 goal here… bibs, you will be defending these two goals, non-bibs you will be defending these two goals… and normal hockey rules, away you go…	TPF	EnP-DG-PCK	FA	L	C
20	They are liking the group discussion I suppose… so they are sort of saying they were doing this, they were doing that… and I think this and I think that…	TPF	EnP-En-OWT	FA	L	C
25	... we started to delve into their understanding of what do I mean by pressure, what is the purpose of them doing a press. What are they trying to get out of it?	TPF	EnP-Q-ET	FA	L	CAT
28	I listening to the conversations off the court	TPF	EnP-En-ET	FA	L	CAT
36	we have just had a conversation about what they will do as a class	TPF	EnP-DM-OWT	FA	L	L
39	It is having an effect on some of them but what is happening for most of them is that they are thinking about it, they are thinking about where they should be, but now they are thinking about it so much that they're not necessarily being useful in the game anymore.	TPF	EnP-DO-PCK	FA	L	L
41	I start off with LO, what we are aiming for in the lesson	TPF	EnP-En-CC	FA	L	C
43	I've acknowledged he is out there and he has found the space but not saying anything about it	TPF	EnP-DO-PCK	FA	L	C
45	I'm looking to see whether they have responded…	TPF	EnP-DM-ET	FA	L	C
46	Yes, eventually they start thinking about passing the ball…	TPF	EnP-DM-ET	FA	L	C
49	I'm concentrating on the attackers and what they are doing in order to get themselves into a sensible space and I'm also watching what the ball, the person with the ball is doing, in terms of their DM as to when to release the ball.	TPF	EnP-DM-ET	FA	L	C
53	So I now am concentrating on really rewarding and highlighting the concept of moving to space in order to receive the ball.	TPF	EnP-DO-ET	FA	L	C
54	so they are coming up with strategies to when to bounce the ball and when to throw the ball to their partner.	TPF	EnP-DO-PCK	FA	L	L

55	Their involvement in the game seems to be, they seem a bit more excited, a bit more um… comfortable but yet more competitive	TPF	EnP-En-ET	FA	L	L
61	I'm hearing a bit more voice than I expected to hear I think. A lot more communication	TPF	EnP-En-ET	FA	L	L
64	there are conversations about what the nature of the game we are doing	TPF	EnP-DG-CC	FA	L	CAT
65	what they are doing in accordance to the instructions I have given.	TPF	EnP-En-OWT	FA	L	CAT
69	I'm thinking good, you are thinking about this	TPF	EnP-DM-ET	FA	L	CAT
72	I use the opportunity to actually get students to rotate and to find a new partner	TPF	EnP-En-ET	FA	L	CAT
77	I'm sensing whether or not some students know how to verbalise what it is they are doing	TPF	EnP-DO-ET	FA	L	CAT
80	So now I am looking around and can see that a lot of the students can identify with that particular strategy… and I'm thinking, looking at the girls, perhaps your experience in basketball or netball I guess I'm sort of getting an appreciation that although their backgrounds are different they can relate to that idea…	TPF	EnP-DO-ET	FA	L	CAT
82	All groups are doing their own thing, independent activities. There are some groups that are involved in a full on drill and very active and running and moving and being agile around the court…	TPF	EnP-En-OWT	FA	L	L
87	I'm feeling that there are kids in this class that have never handballed before	TPF	EnP-DG-ET	FA	L	C
98	What I am seeing is not so much the coaches talking but pretty soon everyone in both teams have something to say…	TPF	EnP-DO-PCK	FA	L	C
99	I am seeing that they are all not happy with the way it is going, they think they can improve and that is not me saying it, I haven't said anything yet	TPF	EnP-DG-PCK	FA	L	C
	Utterances/Meaning Statements	**Dimension of Variation (DV) –** Focus of Attention (FA)	**Attribute (Att) –** On the learning environment (LE)			
11	No one seems to notice the cold.	PWF	ExP-DG-ET	FA	LE	C
62	I'm trying to picture as I planning to put the cones down what is going to be an effective grid area	PWF	ExP-DG-PCK	FA	LE	CAT
63	Whilst thinking large number overall I'm also thinking how it will break down to individual groups, the area that I allow in that space, so that it can hopefully create that competitive 1 on 1 situation to give the attacker enough room if they are successful in making that quick change of direction they can actually get past the defender.	PWF	ExP-DG-PCK	FA	LE	CAT
67	I'm still looking closely at the how the allocated space is shaping the play	PWF	ExP-DG-PCK	FA	LE	CAT
73	I'm thinking about the social interaction as well, they are a mixed class and I'm always conscious of getting them to change who they work	PWF	ExP-En-ET	FA	LE	CAT
94	I am modifying the game so it is not as wide as the proper pitch length or width.	PWF	ExP-DG-PCK	FA	LE	C
96	I am attentive to… for the first five minutes I am swallowing my whistle and trying not to talk too much and I'm just walking around through them and just watching and watching positioning and what they are doing off the ball. I'm watching who is talking, how are the backs setting up everyone else? I am not so concerned about the ball carrier and what they are doing, it is more looking at their vision.	PWF	ExP-DO-PCK	FA	LE	C
	Utterances/Meaning Statements	**Dimension of Variation (DV) –** Purpose of Dialogue (PD)	**Attribute (Att) –** To provide answers (A)			
4	Maybe it's not TGfU at all [laughs] maybe it's ummm – but I guess that's not… is that not… do you think it sounds really unlike TGfU [laughs].	TF	NWT-DO-OWT	PD	A	L

16	I explain to them obviously the need for ball speed	TF	NWT-En-ET	PD	A	C
26	I ask them what is it that a press is trying do that… what are they going to try to do to us?	TF	NWT-Q-OWT	PD	A	CAT
35	ultimately I do get the response I am hoping for which is we need to space out more…	TF	NWT-Q-ET	PD	A	L
38	So I have given them a clear instruction about how close they are allowed to be to any other person on their own team at any time.	TF	NWT-En-OWT	PD	A	L
52	I then after saying where else is the space, then end up telling them is there space behind the player?	TF	NWT-En-OWT	PD	A	C
60	I'm giving a few instructions. I… get them into teams and to chat about and think about having 2 set people up forward, 2 in midfield and 2 down back just so we get a bit more structure…	TF	NWT-En-OWT	PD	A	L
74	I just want to bring it to the students attention then and there	TF	NWT-En-ET	PD	A	CAT
84	I ask specific groups 'what are the issues? Are you working as a team?'	TF	NWT-Q-OWT	PD	A	L
93	So when it comes to finish after a couple of minute I bring them in for about a minute and say this is what we are doing well and this is what we need to focus upon.	TF	NWT-En-OWT	PD	A	C
100	If you have the ball and are standing still it is easy for the opposition to pick up where you are passing so when dribbling dribble in angles so the defender has to move. These are the little steps that I am trying to implement to make the way that you play and the time that you have on the ball a lot easier and to help your decision making.'	TF	NWT-En-OWT	PD	A	C
Utterances/Meaning Statements		**Dimension of Variation (DV) –** Purpose of Dialogue (PD)		**Attribute (Att) –** To develop understanding (U)		
8	I ask students to argh… decide on whether they had made a good decision, what was working for them, what was not working and they gave all sorts of feedback and different people gave feedback	TPF	EnP-Q-PCK	PD	U	C
17	I questioned more than told because I wanted to understand exactly what they knew and how I could best help them.	TPF	EnP-Q-ET	PD	U	C
19	I spoke to them again about how they thought they had improved… what where they doing better… had they improved… were they effective?	TPF	EnP-Q-OWT	PD	U	C
22	What are we doing well, what do we need to improve on? Someone said we are going very direct, we want to go at the goal… there is only one goal now we just want to get it in there… good, so what can we do to make this better and they said well in the last drill we spread the game wide and I said 'perfect' so I set up the same goals on the 25 and said this time you have to make sure you go through one of the goals on the side line before you can score a goal in the middle and it just took off from there.	TPF	EnP-Q-PCK	PD	U	C
27	how… what was it you were trying to achieve	TPF	EnP-Q-PCK	PD	U	CAT
30	they struggled with the task but it was probably most beneficial out of the 3 cause I'd ask why are you struggling, what was going wrong	TPF	EnP-DO-ET	PD	U	CAT
34	I have given them some time in their 4 little teams to think for themselves about what they think they were doing well as a team and what they think they need to do better as a team	TPF	EnP-Q-PCK	PD	U	L
48	'what are they doing different to the you guys'	TPF	EnP-Q-PCK	PD	U	C
51	I'm saying exactly that, I'm saying when you are about to pass the ball where are you passing, that is my question 'where are you passing?' Then they come up with 'well we are passing to a player', and I said 'well where can you throw the ball in order to pass to the player'	TPF	EnP-Q-PCK	PD	U	C

75	so I wanted to check for understanding	TPF	EnP-Q-ET	PD	U	CAT
76	I say to them what strategies are you finding successful here in trying to run past your opponent?	TPF	EnP-Q-PCK	PD	U	CAT
95	Without too much instruction I just say 'game on' and I sit back and watch the girls probably for 5 minutes…	TPF	EnP-En-ET	PD	U	C
	Utterances/Meaning Statements	**Dimension of Variation (DV) –** Purpose of Dialogue (PD)		**Attribute (Att) –** To promote reflexive thinking (R)		
24	we'll try to get you guys to find out the answers through the practice so that during the game you can answer those questions physically on the court	PWF	ExP-DM-PCK	PD	R	CAT
29	after 10 minutes I'll pull the pupils back in and Q each player i.e. you're going to talk to the group about that, you're going to talk about that… I feel that when pupils feel that they have got the answer that they've discovered it um.. that they feel more comfortable that talking and demonstrating it	PWF	ExP-DO-ET	PD	R	CAT
66	I offer praise and encouragement in the context of what has just happened…	PWF	ExP-DO-ET	PD	R	CAT
68	'Miss can we take this line of cones out here, it is too hard'	PWF	ExP-DG-PCK	PD	R	CAT
68	'Miss can we take this line of cones out here, it is too hard'	PWF	ExP-DO-PCK	PD	R	CAT
78	Can they tell me or identify or have that awareness of what they are actually doing in that 1 on 1 situation	PWF	ExP-DO-PCK	PD	R	CAT
97	I bring them in and get them into their groups. I say coaches, get them to talk, 'how did that feel?'	PWF	ExP-DO-PCK	PD	R	C