PHYSICAL EDUCATION TEACHERS' USE OF GAME BASED APPROACHES IN ENGLAND AND AUSTRALIA

Kendal Jarrett and Richard Light

The fact that strong academic interest in GBAs such as Game Sense has not yet translated as well as expected into significant growth in its uptake in schools is disappointing (Jarrett, 2015; Pill, 2011). Among the possible explanations for this is the need to develop and improve teachers' pedagogical understanding, experiences and practice of them and this is our focus in this chapter. In it we present the findings of a study that inquired into the different ways in which secondary physical education teachers in England and Australia experienced game-based approaches (GBA) such as Game Sense. The focus of the study was on the nature of the teaching experience, their interpretation of it and the meaning they made of these experiences.

Experiences of teaching and its influence on practice

Teachers' unquestioned beliefs, knowledge and dispositions are developed throughout their lives by experience and its context to shape their interpretations and uptake of innovative sport and physical education pedagogy such as Game Sense (see Light and Butler, 2005). Light (2008) suggests that this is largely due to tensions between unarticulated assumptions about traditional approaches to games teaching and those that underpin learner-centred pedagogies such as Game Sense.

Research exploring the socialization of physical education teachers identifies the three phases of acculturalisation, professional socialisation, and organisational socialisation (see

Deenihan and MacPhail, 2013; Lawson, 1986; Richards, Templin and Graber, 2014). Acculturalisation begins at birth and is the most influential type of socialization experienced by physical education teachers with professional socialisation referring to socialization during teacher certification programs at a college or university and is believed to be the least influential phase (Curtner-Smith, Hastie and Kinchin., 2008). As the third phase, organizational socialisation is the school's influence on a teacher and, 'the process by which one is taught and learns the ropes of a particular organizational role' (Van Maanen and Schein, 1979, p. 211). Teachers' socialization influences their development and confidence to teach (Morgan and Bourke, 2008), interpretation of pedagogic innovation and preference for a particular pedagogical approach (Curtner-Smith et al., 2008), which is very relevant to this study.

Experiences and beliefs

Morgan and Bourke, (2008) contend that physical education teachers construct knowledge from their own experiences and that, 'the quality of an individual's school physical education experiences directly predicted his or her confidence to teach physical education' (p. 2). As Rossi (1999) and Barker and Rossi (2011) contend, the beliefs of PE teachers can be difficult to change because of the ways in which they act as a filter through which judgements and teaching decisions are made. These beliefs, which are informed by teachers' personal biographies and acculturation, inform the development of entrenched predispositions toward teaching (Green, 2002), but a study on Australian preservice PE teachers' receptiveness to an alternative approach to teaching games suggests that PETE educators can overcome the constraint of acculturation to change beliefs (Moy, Renshaw and Davids, 2014).

Game-based approaches

The term 'game based approaches' (GBAs) describes a 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 and Mooney, 2013, p. 2). Reviews of the GBA literature identify a range of innovative pedagogical approaches that reflect similar, characteristics in practice (Harvey and Jarrett, 2014; Oslin and Mitchell, 2006; Stolz and Pill, 2014). These include Game Sense (see den Duyn, 1997; Light, 2013) Teaching Games for Understanding (TGfU-Bunker & Thorpe, 1982), Play Practice (PP; Launder, 2001), Tactical Games Model (TGM; Mitchell, Oslin and Griffin, 2006), Tactical Decision Learning Model (TDLM; Gréhaigne, Wallian and Godbout, 2005), Ball School (BS- Kroger & Roth, 2005), Integrated Technique-Tactical Model (IT-TM; López-Ros and Castejón, 1998), Invasion Game Competence Model (IGCM; Mesquita, Farias, and Hastie, 2012) and the Games Concept Approach (GCA; Rossi, Fry, McNeill & Tan, 2007).

Teachers' perceptions of game-based approaches

There is a significant body of studies on preservice PE teachers' and preservice primary teachers' perceptions of GBAs (see Li and Cruz, 2008; Dudley & Baxter, 2009) but this does not extend to in-service PE teachers. A study on in-service PE teacher's experience of using TGfU to teach a unit of tennis found that they were challenged by pedagogical and time constraint issues associated with planning and implementation, had feelings of insecurity and apprehension when orchestrating pedagogical change, and felt the need to provide pupils with a short 'crash course in how to be taught this way' (Casey and Dyson, 2009, 190). In-service teachers in Singapore felt confusion in regard to the different forms of GBAs that they were exposed to, with the use of GBAs seen by them as just another 'teaching trick' (Rossi, Fry, McNeill. and Tan, 2007, p. 106). In Spain, in-service PE teachers using GBA found themselves

'doubting their own pedagogical expertise and knowledge' (Diaz-Cueto, Hernandez-Alvarez and Castejon, 2010, p. 378) with an Australian study finding that TGfU and Game Sense 'had yet to be fully understood and implemented by the majority of teachers' (Pill. 2011, p. 115). The research suggests that challenging experiences of applying GBA and a lack of understanding is contributing to retarding the uptake and development of GBA across the globe.

Methodology

In recognition of the personal and subjective nature of teaching, this study adopted phenomenographic methodology to investigate the collective meaning participants experienced when using a GBA to teach games. According to Watkins and Bond (2007) 'meanings exist through the way individuals 'experience situations' (p. 291) which is why we chose to explore research questions that inherently focused upon variations in meaning offered through the reliving of teachers' experiences of using a GBA (Marton and Booth, 1997). Phenomenography has often been used to help answer questions about thinking and learning (see Åkerlind 2008; Entwistle, 1997; Marton, 1986) with the object of the research being the 'variation in ways of experiencing phenomena' (Marton & Booth, 1997, p. 111). Its use implies an interest in 'revealing and describing variation, especially in an educational context' (Marton and Booth, 1997, p. 111) which was the case with this study. In phenomenography, individual voices are not heard because the description and analysis of experience is at a collective level. It 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 and Bond, 2007, p. 291).

Participants

The twelve participants recruited comprised six PE teachers from secondary schools in southeast England and six from secondary schools in southeast Australia, with five schools in each country involved. Schools were selected based on our past experiences of teaching in schools and tertiary institutions in each geographic location with the two distinct site locations (England and Australia) also selected to reflect the growing global interest in and use of GBAs and the breadth of research into GBAs emanating from both countries. After responding to an initial questionnaire sent out to school PE departments, participants were selected based on their indication that they had 'some experience' of using GBAs during their teaching careers (which ranged from one to 30 year).

Data generation

Two, one-hour interviews were conducted with each participant with interview one designed to focus on developing trust between interviewee and interviewer via interviewee reflection upon their journey into teaching. Interview two encouraged participants to relive a past GBA teaching experience through the use of elicitation interview technique that focused on the reliving and verbalisation of a past situation through being guided into a state of evocation via use of Ericsonian language and sensorial questioning (Vermersch, 1994). See Jarrett, Mouchet, Harvey, Scott and Light (2014) for further information explanating use of elicitation interview technique.

Data Analysis

Reflecting common procedure in phenomenographic research practice, key extracts from transcribed interviews (described in the study as utterances) were categorised using analytic induction. All utterances selected related to participants' experiences of using GBAs to teach games. A conceptualisation of the framework used to guide analysis, known in phenomenographical research as the outcome space, is shown in Figure 1:

Figure 1: Conceptualisation of the framework used to guide analysis
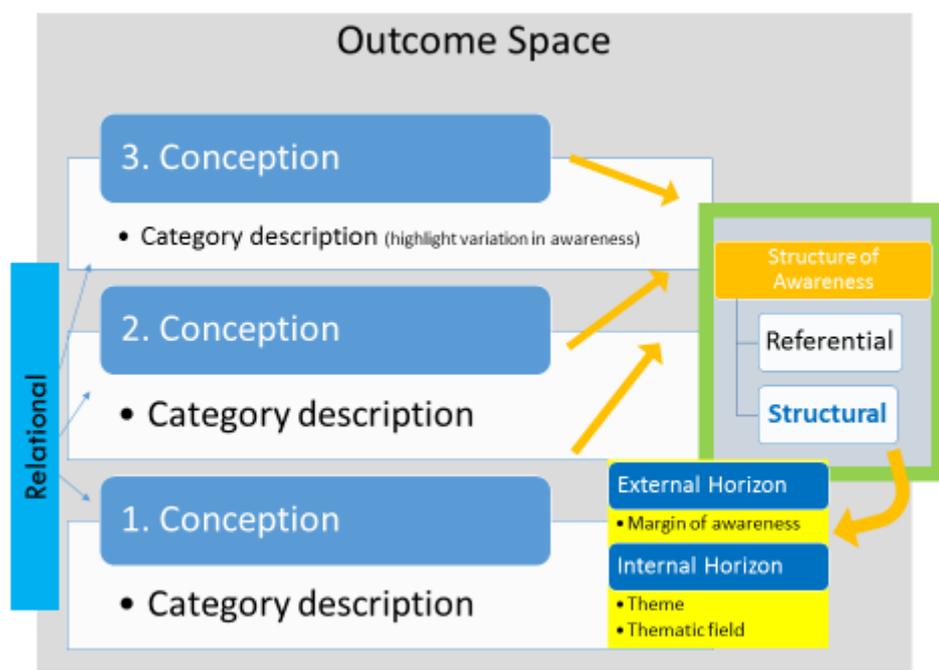
The first stage of transcript analysis involved reading and rereading transcripts in their entirety enabling key utterances to be linked. The second required utterances to be grouped based on similarities and differences in GBA-related teaching experience. We then focused on determining referential and structural aspects of the data. This meant ascertaining the overall meaning (or referential aspect) being attributed by participants to their GBA-related teaching experiences whilst also reviewing the many structural aspects present such as participants' focus of attention (e.g. what element of teaching practice they were focused on) and any threads of attention (also known as dimensions of variation) that linked utterances (Marton & Booth, 1997). A dimension of variation was determined if present throughout multiple participants' utterances across each grouping of utterances. Stage 3 of analysis was the formulation of a draft set of descriptive categories with the next stage being the initial development of the outcome

space. This stage included finalisation of category descriptions and the allocation of category name (known also as a conception) which was taken directly from transcribed data.
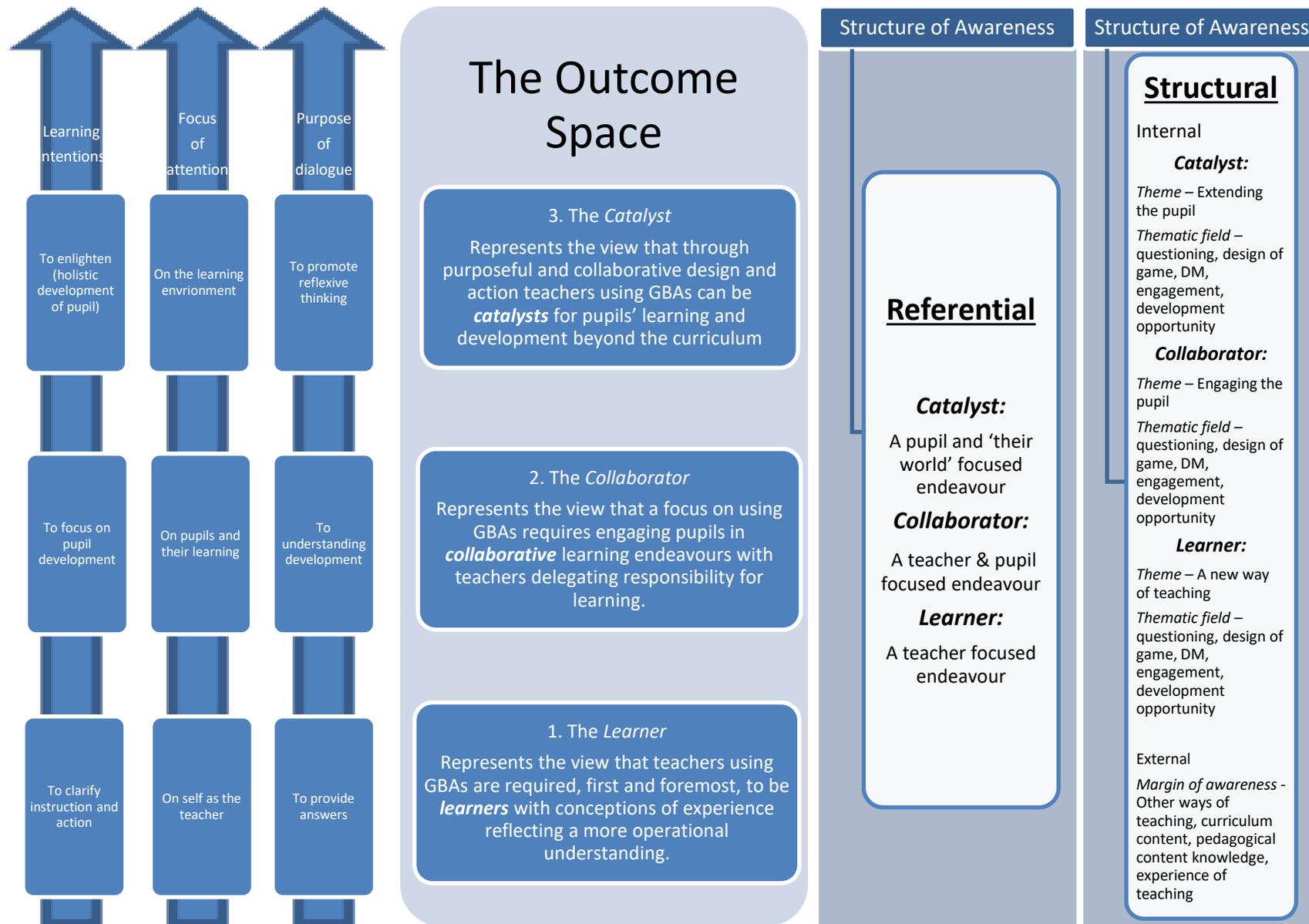
Results

All the elements that comprise the outcome space are presented in figure 2. This outcome space showcases the presence of three main conceptions of GBA teaching experience; namely as a *Learner*, a *Collaborator*, or as a *Catalyst*.

Experience of variation

Utilising the work of Dewey (1938), Piaget (1970) and Vygotsky (1978) we see a participant's capacity for experiencing GBA teaching being a product of their previous experiences as a teacher and of the environments that shaped those experiences. Thus, there is an inherent complexity with how participants' experienced GBA teaching. This complexity is aligned to participants' increased awareness of the phenomenon (e.g. the experience of teaching using a GBA) which in turn influenced their capacity to experience it. The three conceptions outlined within the outcome space suggests a growth in participants' awareness of the phenomenon based on variation in how elements of the experience were discerned. Thus, the three conceptions of *Learner*, *Collaborator*, and *Catalyst* 'reveal not just participants' increasing awareness of the phenomenon as pedagogical choice defined by experience, but also their capacity to experience the phenomenon' (Jarrett & Light, 2017, p. 76).

A defining feature of phenomenographical research and the analysis framework is the attention given to understanding the differences between conception meanings. The distinct but inclusive meanings associated with each conception are presented in Table 1.

Figure 2: A summary of elements that formulated the outcome space

Learning intentions

To enlighten (holistic development of pupil)

To focus on pupil development

To clarify instruction and action

Focus of attention

On the learning envrionment

On pupils and their learning

On self as the teacher

Purpose of dialogue

To promote reflexive thinking

To understanding development

To provide answers

The Outcome Space

3. The *Catalyst*
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

2. The *Collaborator*
Represents the view that a focus on using GBAs requires engaging pupils in *collaborative* learning endeavours with teachers delegating responsibility for learning.

1. The *Learner*
Represents the view that teachers using GBAs are required, first and foremost, to be *learners* with conceptions of experience reflecting a more operational understanding.

Structure of Awareness

Referential

Catalyst:
A pupil and 'their world' focused endeavour

Collaborator:
A teacher & pupil focused endeavour

Learner:
A teacher focused endeavour

Structure of Awareness

Structural

Internal

Catalyst:

Theme – Extending the pupil

Thematic field – questioning, design of game, DM, engagement, development opportunity

Collaborator:

Theme – Engaging the pupil

Thematic field – questioning, design of game, DM, engagement, development opportunity

Learner:

Theme – A new way of teaching

Thematic field – questioning, design of game, DM, engagement, development opportunity

External

Margin of awareness - Other ways of teaching, curriculum content, pedagogical content knowledge, experience of teaching

Table 1: Conceptions and their associated meaning

Conceptions of experience	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 shared utterances.**	

Discussion

Variation as a learner

As a *Learner* experiencing GBA teaching, the elements discerned within each thread of awareness were identified as follows: 1) clarifying instruction and action; 2) a focus on self as the teacher; and 3) the provision of answers. This informed the development of the conception description which detailed a more operational understanding of using GBAs. Utterances attributed to *Learner* experiences revealed limited focus of attention on what the literature suggests the two most important elements of GBA teaching are - *Design of games (DG)* and *Questioning (Q)*. Harvey (2009) and colleagues (see Light & Harvey, 2019; Light, 2014; Pearson & Webb, 2008) had previously commented on the importance of getting the game right in GBA-related teaching practice, however, this was not a prominent focus of attention for the majority of participants in this study, who were predominantly novices with limited nuanced understanding of GBA teaching. Effective *Questioning (Q)* is also a vitally important component of a teacher's responsibility in GBA teaching (Hubball, Lambert & Hayes, 2007; Light & Harvey, 2019), however, experience of GBA teaching as a *Learner* highlighted the predominance of questioning being used for pupils' knowledge recall. Such findings were also

found in the study by McNeill, Fry, Wright, Tan and Rossi (2008) on Singaporean preservice PE teachers utilising GBAs whilst on practicum.

Reflecting comments by Harvey and Light (2015), this study found that game design and effective questioning continue to be problematic for teachers utilising GBA teaching practices. As such 'the relationship between these two elements, that being the effect of game design on effective questioning and vice versa, appears synergistic' (Jarrett & Light, 2017, p. 77).

Variation as a Collaborator

As a *Collaborator* experiencing GBA teaching, all five elements identified in the thematic field (e.g. *Questioning (Q), Design of games (DG), Decision making (DM), Engagement (En), Development opportunities (DO)*) appeared to be focused upon evenly. This is in contrast to those experiencing GBA teaching as a *Learner*. Of significance for those experiencing GBA teaching as a *Collaborator*, greater attention was being paid to pupils' *Decision making (DM)* – a key aspect of GBA teaching effectiveness. Thus, it could be suggested that 'the teachers experiencing GBA as a *Collaborator* maintained a developing appreciation of the importance that different GBAs place on learning tactics alongside skills' (Jarrett & Light, 2017, p. 77). This attention spread evenly across elements within the thematic field supports the view that a *Collaborator* has the capacity to experience GBA teaching 'with an understanding of the interdependence of skill execution and decision-making as relational characteristics of game play' (Jarrett & Light, 2017, p. 78). As a *Collaborator* experiencing GBA teaching this is important as it suggests a developing confidence in not only understanding what GBAs offer pupils when used but also a developing confidence in the practice of teaching using GBAs.

Variation as a Catalyst

As a *Catalyst* experiencing GBA teaching, pupils' learning and development stretched beyond formal curricula. This is supported by the elements discerned within each thread of awareness, that being 1) to enlighten the pupil, 2) to promote pupils' reflexive thinking, and 3) and a focus of attention focus incorporating self, the pupil and the greater learning environment. Providing pupils with meaningful *Development opportunities (DO)* was a key focus of attention.

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

The utterance above highlights GBA teaching as experienced by a *Catalyst* as being attentive to the act (and product) of reflexive thinking. This utterance, as relived by the teacher, is more than just a focus of attention on the pupil. By providing the means for pupils to voice their opinions, to showcase their thinking, the teacher gives prominence to the pupil's perspective and *their world* as a valid source and focus of learning. Utterance 68 also provides evidence of a pupil 'making or creating their own games' (Quay and Stolz, 2014, p. 23). This is significant because the provision of opportunity for a pupil to change the game they are involved with broadens their learning environment beyond a focus on tactical awareness, decision making and skill execution to enable 'game appreciation to be achieved at a deeper level' (Quay and Stolz, 2014, p. 23). Thus, experiencing GBA teaching as a *Catalyst* means investment in learning as a *pupil and 'their world' focused endeavour (PWF)*. This investment is further highlighted in the collective endeavour seen within utterance 24 below:

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)

One of the principle features of effective GBA teaching as suggested by Light (2013), is use of an inquiry-based approach that requires facilitating opportunities for pupils' collaborative formulation of ideas/solutions and their testing. Utterance 24 supports precisely this in that a collaborative approach was adopted (e.g. "We'll try…") to formulate ideas (e.g. "…find the answers through the practise…") which were then tested in context (e.g. "…you can answer those questions physically on the court"). Thus, as a *Catalyst* experiencing GBA teaching, a more complex understanding of GBA teaching is evidenced by a change in what becomes the predominant focus of attention and action.

Implications

With this study having been conducted in two culturally different countries its findings should be of interest to those involved in the administration of and teaching of PETE programs. As has been suggested, 'many teachers already teach in a manner not too far removed from a TGfU-GS approach' (Pill, 2011, p. 120) which offers an effective starting point for guiding the learning of Game Sense and other GBA. Identifying starting points for a Game Sense approach in existing teaching practice would offer the opportunity to refine and shape existing practice that might give its development more traction. This is also suggested by Light and Harvey in their book Positive Pedagogy for Sport Coaching which suggests coaches and teachers should adapt it to their existing practice and implement it gradually (Light and Harvey, 2019) with Chapter 19 lending support to this thinking. On the other hand, Kirk (2011) suggests that pupil achievement might be undermined by continual modification and subsequent slippage away from truer versions of approaches. Considering both these perspectives leads us to suggest that to contribute to the growth of GBA in schools and clubs, PETE and coach education programmes should focus on developing a practical and philosophical understanding of a variety of GBA approaches to provide more informed pedagogical content knowledge. Longer

more thorough Game Sense and other GBA-related induction within PETE and coach education programmes would offer more scope to focus on nuanced and deeper understanding of a range of approaches that include Game Sense.

This study also suggests that it is incumbent on teacher educators to help preservice PE teachers experience variation in the way they conceptualise GBA teaching and come to understand it. Thus, the GBA teaching experiences relived in this study lend support to Kirk's (2011) belief in the need for PETE programmes to focus on developing a practical and philosophical understanding of a variety of approaches (see Jarrett & Harvey's 2016 article on the similarities and differences of Game Sense and TGfU). PETE programmes that direct their students towards developing an appreciation and knowledge of a variety of GBA approaches would also help teacher educators avoid confusion during GBA induction practices that may ultimately restrict the students' overall pedagogical development.

References

Barker, D. and Rossi, T. (2011) 'Understanding teachers: The potential and possibility of discourse analysis', *Sport Education and Society, 16*(2), 139-158. DOI:10.1080/13573322.2011.540421

Bunker, D. and Thorpe. R. (1982) 'A model for the teaching of games in secondary School *Bulletin of Physical Education 18*(1), 5–8.

Casey, A. and Dyson, B. (2009) The implementation of models-based practice in physical education through action research, *European Physical Education Review, 15*(2), 175-199.

Curtner-Smith, M.D., Hastie, P.A. and Kinchin, G.D. (2008) 'Influence of occupational socialization on beginning teachers' interpretation and delivery of sport education', *Sport, Education and Society, 13*(1), pp.97-117.

Dewey, J. (1938) *Experience and Education*, New York: Collier Books.

Diaz-Cueto, M., Hernandez-Alvarez, J. and Castejon, F. (2010) 'Teaching games for understanding to in-service physical education teachers: Rewards and barriers regarding the changing model of teaching sport', *Journal of Teaching in Physical Education, 29*(4), 378–398.

Dudley, D. and D. Baxter, D. (2009). Assessing levels of student understanding in pre-service teachers using a two-cycle SOLO model. *Asia-Pacific Journal of Teacher Education 37*(3), 283–293.

Entwistle, N. (1997) 'Introduction: phenomenography in higher education', *Higher Education Research and Development, 16*, 127-134.

Green, K. (2002) 'Physical education teachers in their figurations: a sociological analysis of everyday 'philosophies', *Sport, Education and Society, 7*(1), 65-83.

Gréhaigne, J. F., Wallian, N. and P. Godbout, P. (2005) 'Tactical-decision learning model and students' practices', *Physical Education and Sport Pedagogy 10*(3), 255–269.

Griffin, L., Mitchell, S. and Oslin, J. (1997) *Teaching sport concepts and skills: A tactical games approach,* Champaign, IL: Human Kinetics.

Harvey, S. (2009) 'A study of interscholastic soccer players perceptions of learning with Game Sense, *Asian Journal of Exercise and Sports Science, 6*(1), 1–10.

Harvey, S. and Jarrett, K. (2014) 'A review of game centred approaches to teaching and coaching literature since 2006', *Physical Education and Sport Pedagogy, 19*(3), 278-300. DOI:10.1080/17408989.2012.754005

Harvey, S., and Light, R. (2015) 'Questioning for learning in game based approaches to teaching and coaching', *Asia-Pacific Journal of Health, Sport and Physical Education,* DOI: 10.1080/18377122.2015.1051268

Hubball, H., Lambert, J. and Hayes, S. (2007) 'Theory to practice: Using the Games for

Understanding approach in the teaching of invasion games', *Physical and Health Education Journal, 73*(3), 14-20.

Jarrett, K. (2015) 'What else can I do?' Radical suggestions to help physical education teachers successfully implement a game-based approach to teach games', *ACHPER Active & Healthy Magazine, 22*(2/3), 27-30.

Jarrett, K. and Harvey, S. (2016) Similar, but not the same: comparing the game based approaches of TGfU and Game Sense. *eJournal de la Recherche sur l'Intervention en Education Physique et Sportive (eJRIEPS), 38*(April), 92-113.

Jarrett, K. and Light, R. (2017) In-service teachers' experiences of using game based approaches to teach games: implications for physical education teacher educators. *International Journal of Physical Education, Sports & Health 4*(2), 73-81.

Jarrett, K., Mouchet, A., Harvey, S., Scott, C. and Light, R. (2014) **'**Using elicitation interview within a phenomenographic framework: Developing the breadth of research designs associated with game-based approaches', *Agora for Physical Education and Health, 16*(3), 291-306.

Kroger, C. and Roth, K. (2005) '*Ball School – An introduction to game play*', Schorndorf: Hofmann.

Larsson, J. and Holmstrom, I. (2007) Phenomenographic or phenomenological analysis: Does it matter? Examples from a study on anaesthesiologists' work. *International Journal of Qualitative Studies on Health and Well-being, 2*, 55-64.

Launder, A. (2001) *Play Practice: The games approach to teaching and coaching sports*, Champaign, IL: Human Kinetics.

Lawson, H.A. (1986) 'Occupational socialization and the design of teacher education Programs', *Journal of Teaching in Physical Education, 5,* 107–113.

Li, C. and Cruz, A. (2008). Pre-service PE teachers' occupational socialization experiences

on teaching games for understanding. *New Horizons in Education 56*(3), 20–30.

Light, R. (2008) 'Complex learning theory – its epistemology and its assumptions about learning: Implications for physical education', *Journal of Teaching in Physical Education, 27*(1), 21–37.

Light, R. (2013) *Game sense: Pedagogy for performance, participation and enjoyment*, London: Routledge.

Light, R. (2014) 'Positive pedagogy for physical education and sport', in R. Light, J. Quay, S. Harvey and A. Mooney (eds.), *Contemporary development in games teaching*, London: Routledge, 29-42.

Light, R. and Butler, J. (2005) 'A personal journey: TGfU teacher development in Australia and the USA', R. Light (ed.) An international perspective on Teaching Games for Understanding, special issue of *Physical Education and Sport Pedagogy*, 10(3), 241-254.

Light, R. L. and Harvey, S. (2019) Positive Pedagogy for sport coaching, 2nd edn, London: Routledge.

Light, R. and Mooney, A. (2013) 'Introduction', in R. Light, J. Quay, S. Harvey and A. Mooney (eds.), *Contemporary developments in games teaching*, London: Routledge, 1-12.

López-Ros, V. and Castejón, F.J. (1998) 'Técnica, táctica individual y táctica colectiva. Teoría de la implicación en el aprendizaje y la enseñanza deportiva (I), *Revista de Educación Física. Renovar la teoría y la práctica, 68*, 5-9.

Marton, F. (1986) 'Phenomenography: A research approach to investigating different understandings of reality', *Journal of Thought, 21*, 28-49.

Marton, F. and Booth, S. (1997) *Learning and awareness,* Mahwah: Lawrence Erlbaum.

McNeill, M., Fry, J., Wright, S., Tan, C. and Rossi, T. (2008) 'Structuring time and

questioning to achieve tactical awareness in games lessons.', *Physical Education and Sport Pedagogy, 13*(3), 231-249. DOI:10.1080/17408980701345766

Mesquita, I., Farias, C. and Hastie, P. (2012) 'The impact of a hybrid sport education–invasion games competence model soccer unit on students' decision making, skill execution and overall game performanc,' *European Physical Education Review, 18*(2), 205–219.

Mitchell, S., Oslin, J. and Griffin, L. (2006) *Teaching sport concepts and skills: A tactical games approach* (2nd ed.), Champaign, IL: Human Kinetics.

Morgan P. and Bourke S. (2008) 'Non-specialist teachers' confidence to teach PE: The nature and influence of personal school experiences in PE. *Physical Education and Sport Pedagogy*, *13*, 1-29.

Moy, B., Renshaw, I. and Davids, K. (2014) 'Variations in acculturation and Australian PETE students' receptiveness to an alternative pedagogical approach to games teaching', *Physical Education and Sport Pedagogy*, *19*(4), 349-369.

Oslin, J. and S. Mitchell. (2006) 'Game-centred approaches to teaching physical education', in D. Kirk, D. MacDonald and M. O'Sullivan (eds.), *The Handbook of Physical Education* London: Sage, 627-651.

Pearson, P. and Webb, P. (2008) 'Developing effective questioning in Teaching Games for Understanding (TGfU),' paper presented at 1st Asia Pacific Sport in Education Conference: Ngunyawaiendi Yerthoappendi Play to Educate, Adelaide. Retrieved from: http://ro.uow.edu.au/cgi/viewcontent.cgi?article=1054&context=edupapers

Piaget, J. (1970) *Science of education and the psychology of the child*. New York: Orion Press.

Pill, S. (2011) 'Teacher engagement with teaching games for understanding-game sense in physical education', *Journal of Physical Education and Sport,* 11(2), 115–123.

Quay, J. and Stolz, S. (2014) 'Game as context in physical education: A Deweyan

philosophical perspective', in R. Light, J. Quay, S. Harvey and A. Mooney (eds.),

Contemporary development in games teaching, London: Routledge, 15-28.

Richards, K., Templin, T. and Graber, K. (2014) 'The socialization of teachers in physical

education: Review and recommendations for future works', *Kinesiology Review, 3*, 113-134.

Rossi, T., Fry, J., McNeill, M. and Tan, C. (2007) 'The games concept approach (GBA) as a

mandated practice: Views of Singaporean teachers', *Sport, Education and Society, 12*(1),

93-111.

Stolz, S. and Pill, S. (2014) 'Teaching games and sport for understanding Exploring and

reconsidering its relevance in physical education', *European Physical Education*

Review, 20(1), 36-71.

Van Maanen, J. and Schein, E. (1979) 'Toward a theory of organisational socialization.', in

B. Shaw (Ed.) *Research into Organisational Behaviour*, Greenwich, CT: JAI

Press, 209-261.

Vermersch, P. (1994) *L'entretien d'explicitation*, Paris, France: Nathan.

Vygotsky, L. S. (1978) *Mind in society: The development of higher psychological processes.*

Cambridge, MA: Harvard University Press.

Watkins, M. and Bond, C. (2007) 'Ways of experiencing leisure, *Leisure Sciences:*

An Interdisciplinary Journal, 29(3), 287-307.