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Abstract

This paper examines an experienced teacher’s employment of the teaching games for understanding (TGfU) model in a UK secondary school. The study sought to investigate how the teacher delivered TGfU and those factors that influenced his informal learning of this instructional model. Occupational socialisation was utilised to determine the factors that influenced his use of TGfU. Qualitative data were collected from interviews, lesson observations and documentary evidence. Inductive data analysis indicated the teacher delivered the ‘full version’ of the model largely congruent with the creators’ intentions. The traditional approach to games teaching seen in his childhood and partially learned in higher education were ‘washed out’ by the influence of teaching colleagues and the development of a student-centred approach to teaching games. This study indicates it is possible to overcome traditional approaches to games teaching and informally learn to use TGfU successfully given conducive circumstances and sufficient time.

Keywords

Informal learning, experienced teacher, occupational socialisation, teaching games for understanding, community of practice

Introduction

Research examining the interpretation and delivery of instructional models has steadily increased in recent years. Studies have investigated (student) teachers’ understanding and application of sport education (Gurvitch et al., 2008; Stran and Curtner-Smith, 2009); cooperative learning (O’Leary et al., 2014; Ovens et al., 2012) and tactically based games models (Pill, 2011; Wright et al., 2009) among others. However, (student) teachers’ implementation and those factors that

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influence their use of instructional models are not necessarily congruent (McCaughy et al., 2004). For this reason, this study attempts to identify those factors that facilitated learning of teaching games for understanding (TGfU) (Bunker and Thorpe, 1982) from the perspective of a qualified teacher. While there has been a plethora of research examining (student) teachers' attempts to learn to use TGfU and other game-centred approaches (GCAs), having been formally educated in their uses (see, for example, Cruz, 2004; Light and Butler, 2005; Lund et al., 2008), there has been minimal research conducted examining teachers' informal learning of TGfU. O'Leary (2014) investigated how a recently qualified secondary school teacher informally learned to use TGfU. In contrast, this research attempted to examine how an experienced teacher from the same secondary school taught TGfU, and identify those factors that facilitated their informal learning of this instructional model.

Teaching games for understanding

Teaching games for understanding attempts to develop students' tactical awareness and decision-making within modified games utilising constructivist learning principles (Griffin and Patton, 2005). Students should be set tactical problems to solve; for example, setting up an attack by creating space on the opponent's side of the court in badminton or tennis. In solving such problems, students should be able to execute overarching strategies or principles of play such as the use of depth in net games (Ward and Griggs, 2011). Modifications should be made to the playing area, equipment and number of players to suit the students' abilities while retaining the tactical intricacies of the adult game (Thorpe et al., 1984). Teachers should introduce their own rules to assist students in solving the tactical problem set (Almond, 1986). For example, a player gains additional points for forcing the opponent into the front of the court. Having created the initial modified game, teachers can then teach the required skills that the players specifically require to solve the tactical problem. These can be on-the-ball skills such as sending the ball or shuttle deep using a specific stroke or off-the-ball skills such as recovering to the best position to defend the whole court (Ward, 2009). The players should then be returned to the modified game. In short, TGfU and other GCAs such as play practice (Lauder, 2001), game sense (Light, 2004) and the tactical games model (Griffin et al., 1997) are game and learner-centred. These aspects are summarised in Table 1.

Learning to use teaching games for understanding

Examining the tacit beliefs of the three founders of TGfU, Butler (2014) identified that this approach was originally developed by practitioners for practitioners rather than a theoretically orientated teaching approach grounded in research. Despite this, TGfU and its game and learner-centred variants *have* been largely welcomed by academics (*emphasis added*). While there is a degree of contradictory empirical-scientific evidence of the educational value of such approaches, researchers appear to see the potential for enhanced student learning and lifelong participation in games (see Mendez et al., 2010; Stolz and Pill, 2014). However, there has been a clear difference between the enthusiasm with which these GCAs have been greeted by academics and their uptake by teachers (Lauder, 2001). Certainly, the use of TGfU among UK physical education (PE) teachers' remains limited (Jones and Cope, 2011).

Despite the planning fundamentals and pedagogical principles appearing to make excellent sense (Butler, 2014), the use of modified games to develop students' tactical awareness and decision-making utilising problem-solving, open-ended questioning and student social interaction

Table 1. Teaching games for understanding teacher and student benchmarks.**TEACHER BENCHMARKS**

A principle of play and/or tactical problem is used to organise learning tasks
 The lesson begins with a modified game to develop game appreciation
 Tactical and skill requirements are identified from the modified game
 Modifications are used to ensure developmentally appropriate games and help students solve the tactical problem set
 The teacher uses a high rate of (tactical) feedback during games
 On and off-the-ball techniques and skills are taught as required
 Open-ended questions are used to get the students to solve the tactical problem
 Peer/social interaction is evident
 The modified game contains the tactical intricacies of the adult game

STUDENT BENCHMARKS

Students are given time to think about open-ended questions
 Students are engaged in making tactical decisions
 Students make progress on tactical knowledge as they move from an initial game to technique/skill practice(s) to a final game
 Students have learned tactical awareness, decision-making and skill execution

(Adapted from Bunker and Thorpe, 1982, 1986b; Metzler, 2011; Thorpe et al., 1984; Ward, 2009).

appears problematic. While 'successes' have been reported using TGfU (Light and Butler, 2005; Light and Georgakis, 2005; Wang and Ha, 2009), the majority of research findings indicate that (student) teachers struggle to implement most/some of the benchmarks and/or modify the model to suit their own beliefs (Barrett and Turner, 2000; Brooker et al., 2000; Rossi et al., 2007). Examining six experienced teachers' use of the tactical games model, Lund et al. (2008) found that teachers' adherence to the benchmarks of Metzler (2011) varied. Those teachers who had received university theoretical classes had superior knowledge of the model and used most of the relevant benchmarks. Those without formal training used some or a few of the benchmarks. This and previous research cited indicates, in congruence with the research of Curtner-Smith et al. (2008) examining teachers' employment of sport education, that TGfU and its game-centred variants can also be delivered in three different guises. Teachers can employ the 'full version' of the model staying true to the spirit of the creator's intentions utilising most or all of the benchmarks; employ a 'watered-down version' using some of the benchmarks or they take a 'cafeteria approach' incorporating a few of the benchmarks into a traditional technique-orientated lesson. Confusion over the different GCAs (Rossi et al., 2007); limited pedagogical content knowledge (PCK) (Brooker et al., 2000); the use of open-ended questioning and concerns around behaviour management (Butler, 1996) appear to be the four fundamental issues preventing the 'full version' of the model being employed (see O'Leary, 2014).

As discussed above external expertise in the form of university-led formal training can help teachers overcome issues in learning to use TGfU effectively (Lund et al., 2008). University lecturers can help teachers introduce TGfU and potentially continue to support teachers in their use of the approach (Brooker et al., 2000). This is particularly important given the cost and often ineffective nature of traditional one or two-day external continuous professional development (CPD) courses (Armour and Yelling, 2007). Short formal training with limited support is unlikely to permit significant developments in PCK. As a result, the gap between theoretical understanding

of TGfU and its effective implementation is not likely to be closed (Wright et al., 2009). In contrast, teachers' learning how to use TGfU in their own school based on their students' needs would almost certainly improve the effectiveness of the approach's adoption (Butler and Griffin, 2010; Casey, 2014). Indeed, Stolz and Pill (2014) have argued that PCK is context specific and in ignoring the contextual features that teachers face on a day-to-day basis means that innovations such as TGfU has little meaning for them. However, university support cannot continue indefinitely.

Having obtained initial external support, Butler (1996) suggests teachers work alongside and receive further support from their colleagues in attempting to implement TGfU. Communities of practice – groups of individuals drawn together for a common purpose to achieve a common goal (O'Sullivan, 2007) – have been found to be very useful in learning to implement new pedagogical practices. Nash (2009) found that using a community of practice among primary generalist pre-service teachers helped their understanding of TGfU and their confidence to utilise this approach. The reduction in teachers attending external professional development courses due to current financial restraints and their perceived ineffectiveness is likely to mean teachers become increasingly reliant on informal in-school learning with their colleagues (Armour and Yelling, 2007; Livingston, 2012). Indeed, Harvey and Jarrett (2014) have commented that further research examining the effectiveness of such informal learning to support teachers' conceptual and PCK is required in learning GCAs.

Examining a recently qualified teacher's interpretation and employment of TGfU in a UK school, O'Leary (2014) found that informal learning among colleagues and the desire for good student behaviour led to a partial understanding and incomplete implementation of the model. An apparent emphasis on tactical understanding, the over-use of decontextualised technique practices and a reluctance to use social constructivist learning approaches were observed. In contrast, this study attempted to examine how an experienced teacher from the same school taught the 'full version' of TGfU and identify those factors that facilitated their 'successful' informal learning of this innovative approach to games teaching. Given this research strongly indicates that it is possible informally to learn to implement TGfU effectively, this study is likely to be highly relevant to the majority of UK teachers who might consider using this instructional model but have not been, and are not likely to be, formally educated in its use for reasons highlighted above. The occupational socialisation framework (Lawson, 1986) was utilised to investigate how childhood experiences of PE and sport, the impact of higher education and the influence of working in schools impacted on informally learning to implement TGfU successfully.

Occupational socialisation

The occupational socialisation framework was defined by Lawson (1986: 107) as 'all of the kinds of socialization that initially influence persons to enter the field of physical education and that later are responsible for their perceptions and actions as teacher educators and teachers.' Lawson (1986) makes four primary assumptions regarding PE teachers' socialization. Firstly, PE teachers' socialization is a life-long process. This contrasts with traditional notions that teacher socialisation starts in higher education (Fuller, 1969). Secondly, practices in PE are institutionalised encouraging newly qualified teachers to reproduce the teaching practices of their more experienced colleagues. Thirdly, socialisation is problematic rather than automatic. While universities and schools attempt to 'typecast' teachers, teachers also try to attempt to transform such institutions. Each has the capacity to shape the other. Zeichner and Gore (1980) suggested that teachers may engage in

short-term compliance and impression management; accept and internalise the contents of the socialisation, or act to change the socialisation setting and, in turn, the contents of the socialisation that initially greeted them. The last strategy is innovative, the second custodial and the first is a kind of 'fence-sitting' that may later result in a custodial or innovative response. There is good reason to suspect that differences between intended and actual socialisation outcomes are the result of the fourth assumption, which states that (student) teachers face three stages of occupational socialisation (Lawson, 1986).

'Acculturation' is the first stage of occupational socialisation referring to childhood experiences of PE and sport. This 'apprenticeship of observation' (Lortie, 1975) provides an opportunity to identify the attributes and skills required of teachers (Schempp, 1989). Richards and colleagues (2014) suggest these subjective theories of reality can be viewed as sieves that screen out inconsistent perspectives while allowing consistent perspectives to be incorporated with the individual's existing worldview. However, there is evidence that these relatively stable filters can be altered over time as individuals accumulate new experiences and interact with new socialising agents.

'Professional socialisation' is the second stage of occupational socialisation and refers to the influence of higher education. Defined as 'the process by which prospective teachers acquire and maintain the values, sensitivities, skills, and knowledge that are deemed ideal for physical education teaching' (Lawson, 1983: 4), the impact of this stage is often seen as limited. As a result of their childhood experiences, student teachers can arrive at university with formed perceptions of themselves as teachers, the technical skills and conceptions required to teach (Curtner-Smith et al., 2008; Stran and Curtner-Smith, 2009). While research does indicate that university instruction can have an impact on student teachers' pedagogical practices (Curtner-Smith, 1996, 1997; Curtner-Smith and Sofu, 2004), in most cases, the subjective theories acquired from acculturation appear to remain dominant (Capel, 2007).

The third stage of occupational socialisation is 'organisational socialisation.' It refers to the influence of the school and is defined as 'the process by which one is taught and learns the ropes of a particular organisational role' (Van Maanen and Schein, 1979: 211). The teacher's response to the workplace is either custodianship or innovation. In the former, the recruit assimilates into the existing school environment and adopts the customary pedagogical strategies. In the latter, the beginner teacher challenges existing teaching and learning strategies (Van Maanen and Schein, 1979). This dialectical exchange is rarely equal. The individual is likely to be reshaped more in the exchange than the organisation (Schempp and Graber, 1992). This 'passing down' of knowledge and culture from experienced to newly qualified staff is known as the 'institutional press' (Zeichner and Tabachnik, 1981). This press can result in reality shock for the inexperienced teacher if s/he has custodial orientations and is inducted into an innovatively orientated school culture or vice-versa (Stroot and Ko, 2006). Induction assistance and mentoring can reduce such reality shock. Communities of practice are seen as an effective means of helping PE teachers succeed in a school context (O'Sullivan, 2007). Indeed, Richards and Templin (2011) have noted that such informal supportive arrangements may have a more positive influence on induction than formalised induction programmes given they allow experienced and inexperienced teachers to share ideas and best practices.

This study directly responds to three requests from Richards et al. (2014). Firstly, this study recognises that new studies should be conducted to add to the body of literature related to teacher socialisation. Research on teacher socialisation cannot be absolute given school cultures change and so the experiences of student (teachers) change with them. Secondly, the majority of previous

research has examined how student teachers and newly qualified teachers have been socialised into PE pedagogical practices. Very little attention has been given to how experienced PE teachers are socialised into teaching. Finally, greater research is required into the influence of socialisation on teachers' interpretation and delivery of specific curricular models.

The research site

The Celtic Academy (a pseudonym), the case study site, is a Department for Education funded comprehensive specialist sports, mathematics and computing college situated in the West Midlands, UK. During the enquiry the school population was 1460. The majority of the students were white-British (68.3%); 21.7% were eligible for free school meals; 22.5% had special educational needs and 21.7% did not have English as their first language. The most recent full Ofsted inspection rated the overall effectiveness of the school as outstanding. A more recent interim assessment concluded that the school's performance had been sustained.

At the time of the study, the PE departmental programme of study was devised to meet the requirements of the national curriculum for physical education (QCA, 2007a, 2007b). While the content of a unit of work such as 'outwitting opponents' in games was determined by the teacher, the head of department (HOD) expected his teachers to utilise the TGfU approach in achieving tactical requirements and adaptations of actions to outwit opponents. Staff are not provided with formal external training. Instead, teachers are initially supported by Bill (a pseudonym) the HOD and Pete (a pseudonym). The former had attended an external CPD TGfU course and as a result, began to encourage Pete to use TGfU. Both of these experienced teachers now encourage all staff in the department to use this approach. (New) staff observe their colleagues teach games, plan lessons with them, team-teach and informally talk with their colleagues creating a community of practice about how TGfU is best utilised.

The research was conducted over a four-month period by the author. Pete, the participating teacher, suggested that a year seven middle set boys badminton class (ages 11–12) should be observed for data collection purposes. Students were split into a top, middle or lower set group based on practical ability deduced from a variety of introductory lessons at the beginning of the school year. Six of the 23 boys had moderate language or behavioural difficulties.

The participant's biography

During the data collection the participating teacher Pete was 41 years old. His mother and father were interested in sports and his uncle had played football. He commented that 'sport was all around us' and 'sport was part of my life.'

He found it difficult to recall his primary school PE lessons but remembered the 'structured football coaching' and playing for the school football and cricket teams. At secondary school Pete played for the football, cricket and rugby teams. He explained that the PE lessons appeared to be 'geared to Saturday morning fixtures' and that 'you learned through playing games basically.' During his secondary school years he played Saturday afternoon local league football.

He had no intention of becoming a PE teacher because 'there was a large majority of people that didn't want to be involved in PE and just had a mess around.' As a result, Pete studied for a Bachelor of Arts (Honours) in sport and recreation at university. During his university years he played semi-professional football and represented British university students. He remarked that 'I was told to play to the highest standard you can possibly play at and that's what I always did.' Pete

decided to complete a postgraduate course in education (PGCE) in secondary PE. He felt his first teaching practice reinforced the technical approach to teaching games that he had experienced as a school student and football player. It is clear that up to this point Pete's 'apprenticeship of observation' (Lortie, 1975) of what constitutes good pedagogical practice had not been changed. He had what Evans (1992) would describe as a 'sporting perspective' focusing on the development of physical skills within a meritocratic system, fostering a love of sport among all students while securing the potential for the elite child. It was during his second teaching practice that he encountered one teacher who encouraged him to consider teaching games with a child-centred and understanding approach.

Pete has taught in two secondary schools for 15 years. He described his first teaching position in a large secondary school as 'challenging' concentrating on 'football and crowd control.' Pete has spent seven years teaching at the Celtic Academy. He admits his understanding and use of TGfU has been heavily influenced by Bill.

Data collection methods

A case study research design (Stake, 2000) was adopted to provide an in-depth interpretation of the teacher's experience of learning to teach TGfU. Studying a teacher in their real-life context (Gratton and Jones, 2004) has the potential to provide multiple sources of information rich in context (Creswell, 2002). Three sources of data were utilised: semi-structured interviewing, non-participant lesson observations and documentary evidence.

Semi-structured interviews

Three semi-structured interviews were undertaken to provide an opportunity to gain in-depth responses and allow the teacher to recreate their experiences. The initial interview (II) took place prior to lesson observations. The questions were based on the interview from the examination of the influence of occupational socialisation on beginning teachers interpretation and delivery of sport education by Curtner-Smith et al. (2008: 115–117). The questions explored the specifics of the teacher's acculturation, professional and organisational socialisation. Lesson six was used to conduct a stimulated recall interview (SRI). Interviewing the teacher while playing them an audio-visual recording of one of their lessons (Dempsey, 2010) would help the teacher recall events with accuracy by presenting them with questions from that event (Allison, 1990). The camera angles and views were determined by the author. The questions were largely based on the benchmarks in Table 1. It was felt that use of a SRI would move the teacher beyond how they might or should act in a given situation to how they *did* act and why (*emphasis added*). The final interview (FI) occurred after the lesson observations. The questions were developed from the other sources of data. The broad categories of questions examined the teacher's use of TGfU; improvements that could be made utilising the model and those factors he felt had impacted on his use of the model.

Non-participant lesson observations

Nine non-participant observations were completed to allow the researcher to 'experience' the 60 minute lessons (Cohen et al., 2007). The lesson observations (LOs) enabled the author to compare what the teacher said they did or was planning to do in the interviews and/or documentary evidence, with what actually took place. Although unstructured in nature, the lesson observations

were based on the benchmarks in Table 1 given they verify that TGfU has been employed appropriately in terms of lesson structure and pedagogical principles.

Documentary evidence

Teacher documentation in the form of a self-reflective journal (SRJ) and lesson planner (LP) were also utilised. Recognising that written words can be more meaningful than spoken words (Mason, 2002), it was felt these two methods would firstly, provide additional data around the teacher's use of TGfU and secondly, support, contextualise and verify the other forms of data. The SRJ was completed voluntarily by the teacher. The teacher was asked to identify what was taught, how it was taught and why it was taught. Following the research of Curtner-Smith and Sofo (2004) and O'Sullivan and Tsangaridou (1992), the author also attempted to discover, what Flanagan (1954) referred to as critical incidents. The teacher was asked to describe anything that happened during the lesson that he found significant and finish the statement with 'this was significant because . . .'. A requirement of the PE department to aid lesson planning and evaluation, lesson planners were completed after each lesson. Details required included lesson objectives, tasks set and evidence of learning outcomes being achieved.

Data analysis

Given the exploratory nature of the study, a general inductive approach (Thomas, 2006) was used to analyse data from the various sources. Defined as a process for 'making sense of field data' (Lincoln and Guba, 1985: 202), this approach is summarised in Table 2.

This process was completed firstly, regarding how the teacher practised TGfU and secondly, how his occupational socialisation had influenced these practices.

Table 2. The coding process in inductive analysis.

		Label the units of information to create initial categories	Reduce overlap and redundancy among the categories	Create a model incorporating summary categories or themes
Initial read through text data	Identify specific units of information			
Many pages of text	Many units of text	30–40 Categories	15–20 Categories	2–8 Categories

(Adapted from Creswell, 2002: 266; Lincoln and Guba, 1985: 202–204).

Ethical considerations

The British Educational Research Association guidelines (BERA, 2011) were adopted to address the ethical issues of deception, consent, privacy, disclosure and accuracy. The issue of accuracy will be considered below. The aims, methods and intended uses of the possible data obtained were made clear to the teacher both verbally and in written form at the beginning of the study and informally throughout the data collection period. He was informed that his participation in the study was voluntary and all data would be treated as strictly confidential. Throughout dissemination of the study his entitlement to privacy and rights to confidentiality and anonymity were guaranteed. These five ethical issues were incorporated into an informed consent form, which was signed by the participating teacher.

Research credibility

To improve the credibility of the data collected the research process was made transparent to the participating teacher at the outset of the study (Lincoln and Guba, 1985). To reduce the impact of researcher reactivity, time was spent with the teacher prior to collecting data and immediately following data collection episodes (Padgett, 1998). Reflective comments following interviews and observations indicate that trust and rapport were established with the teacher. Cross-checking the accuracy of the data from three data collection techniques was completed (Markula and Silk, 2011). The teacher was also asked to verify the accuracy of the data (Patton, 2002). A competent qualitative researcher was asked to review the data and subsequent analysis of it (Lincoln and Guba, 1985). Finally, an audit trail including research aims and questions, raw data, analysis of data and how much trust and rapport were achieved was kept. Following the advice of Altheide and Johnson (1994), the audit trail also recorded mistakes, misconceptions and surprises. For example, in the pilot lesson observation the researcher realised that trying to write additional reflective comments while the lesson was in progress was almost impossible given the need to write down what was actually taking place. As a result, reflective comments were written as soon as possible after the lesson.

Results

Interpretation and delivery of teaching games for understanding

Data indicated that Pete employed the 'full version' of the model. The majority of the benchmarks in Table 1 were seen in all nine lessons. The lessons were child-centred taught to 'the requirements of the kid' (SRI). Pete commented that his intention was 'to try and deliver the lessons through modified games as much as possible' (FI). Data indicated all his lessons were indeed, game-centred as suggested by Bunker and Thorpe (1982, 1986b). The initial games in each lesson introduced the necessary rules to play the game and provided the students with a problem to solve so the students could start to 'think about how we can outwit their opponent' (LO 1). Tactical and skill requirements were usually identified from the initial game in congruence with the recommendations of Bunker and Thorpe (1982, 1986b) and Metzler (2011). Field notes from all observed lessons indicated that the teacher used a high rate of tactical feedback during games and the game modifications were developmentally appropriate. Court dimensions were regularly changed and additional points were awarded to encourage students to solve the tactical problem. Students were engaged in making tactical decisions and many appeared to have learned tactical awareness and improved their decision-making. Pete stated that his 'main concern is their understanding of the game and similar/other games' (FI). Techniques of the game abstracted or taught outside the modified game in drill form were only taught when Pete felt this was required. However, he frequently gave technical feedback to students about their use of game skills during the modified games. While Pete regularly used open-ended questions, students were not always given opportunities to think individually and socially about how tactical problems might be solved. Inductive data analysis from the three types of data collection methods indicated there were three overriding themes from his interpretation and delivery of TGfU: an emphasis on tactical understanding; limited student reflection; and minimal technical practice.

An emphasis on tactical understanding. It was evident that Pete felt that a tactical understanding of the game to outwit their opponent was the priority in teaching games. When asked what he found

significant in lesson six he stated 'they are starting to get 'canny' in their play in greater numbers which is what outwitting opponents is all about' (SRI). In the first lesson Pete explained the nature of outwitting opponents suggesting it was about 'out-thinking them' (LO 1). He informed the class that tactical means 'using skills the right way' (LO 1). In the same lesson he stated that he would teach the students 'when and where to use these techniques in the game' (LO 1): something Ofsted have repeatedly requested from PE teachers (Office for Standards in Education, 2001, 2004, 2009).

All learning outcomes included a tactical focus. Examples included 'apply overhead shots to outwit your opponent' (LO 3), 'plan ahead to outwit your opponent' (LO 5) and 'refine techniques effectively to carry out tactical plans' (LP 8). The initial game outlined the rules necessary to play the game and a tactical problem. Modification of games was seen in all lessons. For example, the boys played a singles game in a narrow and long court either throwing the shuttle or using a short or long handle racquet (LO 2). Additional points were awarded for moving the opponent into the front or rear of the court or the shuttlecock landing in one of those two areas of the court. Students were able to hit or throw the shuttle over their opponent's head or in front of their opponent. All students showed an understanding of the principle of depth. As such, the variety of equipment helped prevent limited technical competence inhibiting the demonstration of tactical understanding.

The teacher benchmark of a high rate of tactical feedback during games was exemplified by the comment offered to one boy in lesson seven: 'where did you bring him before you won the rally? Good, you brought him to the front before hitting the shuttle to the back. Good lad' (LO 7). Discussing tactics with one student Pete explained that 'if you are going to win the rally on your third shot, you are going to have to think about where you are going to put the shuttle on your second shot' (LO 8). Such feedback usually required the boys to answer open-ended questions posed by Pete. However, the opportunity for student reflection was limited.

Limited student reflection. The boys were given numerous open-ended questions to answer during the nine lessons. In lesson three they were required 'to have a discussion in your group of three and think about what parts of the court do you think you should target to win points' (LO 3)? In the same lesson one boy from each group of three was asked to evaluate and make brief written notes on the strengths and weaknesses of the two boys playing. This could have been extended to suggest how such information could be used when playing against the relevant opponent. However, the notes generated were not discussed among the students or utilised in the game to assist outwitting the opponent.

The lack of student discussion was evident in a number of lessons. During the plenary in lesson one minimal time was provided for students to think about their replies to the question 'what options have you got to outwit your opponent' (LO 1)? In lesson four the same opportunity to interact socially and consider their replies to 'where did you play the shuttle and why?' (LO 4) was not taken. Developing ideas through verbalisation (Light, 2002) and allowing students to take greater ownership of the lesson (Adams, 2006) were limited. Indeed, during the plenary in lesson two, having asked the question 'how can you create space?' Pete answered the question himself (LO 2). He was aware of the limited student discussion in his lessons commenting 'the students could have done more discussion work throughout the unit of work' (SRJ). Technique drills were also conspicuous by being largely absent from Pete's use of TGfU.

Minimal technical practice. In congruence with the relevant teacher benchmark in Table 1, Pete taught on and off-the-ball techniques and skills when *he* felt they were required (*emphasis added*). This resulted in a small number of technical learning objectives during the unit of work. When

present they were usually combined with a tactical learning objective. For example, in lesson three students were encouraged to 'apply overhead shots to outwit the opponent' (LP 3), while in lessons seven and eight the boys were required to 'refine techniques to carry out tactical plans effectively' (LP 7 and LP 8). It was evident that Pete saw, in agreement with Kirk and MacPhail (2009), the need to perform the correct actions and when and where to use those actions. He commented 'the kids have to have enough technical ability to be able to play the game. We can't hide away from that at all, but then once they have got that technical ability to actually maintain a realistic game, that's when we can develop things' (FI). However, lesson observations indicated that he wanted the boys to be playing modified games so they can begin 'to think about how we can outwit the opponent . . . and then the technical side of things sort of comes along with it and that just fits in as and when ready' (FI). For Pete, it was tactical understanding first, technical execution second. In this sense, he mirrored the spirit of the intentions of Bunker and Thorpe (1982, 1986b).

Three of the lessons had specific technical learning objectives. Lesson one required students to 'hold the racquet correctly' (LP 1), lesson three required the boys to 'hit overhead shots long and short (to outwit the opponent)' (LP 3), while lesson six stated students should attempt to 'start the rally with a good serve (in order to outwit your opponent)' (LP 6). Despite these technical learning objectives, Pete only used one whole-class technique drill or practice in lesson one teaching the group how to hold the racquet correctly (LO 1). When asked after lesson six why he had not used technique practices to teach the serve he replied 'I couldn't see the need to actually break things down and be real picky about how they were serving' (SRI). Lesson observations showed that Pete discussed techniques with the class or assisted individual students with their technical performance if he felt their technical inability prevented them from displaying tactical understanding. For example, in lesson six he gave the class a variety of technical teaching points about how to serve high and long relating to the starting position, travel, hit and recovery. He also helped a few boys successfully with their high serve by allowing them to practise the technique on their own for a short time and providing one-on-one teaching and feedback (LO 6).

Factors influencing interpretation and delivery of teaching games for understanding

Given Pete had 15 years teaching experience it is not surprising that the organisational stage was highly influential regarding his understanding and use of TGfU, particularly as he had not encountered the model during his degree and PGCE course. Indeed, much of his professional socialisation and concurrent football coaching had reinforced the use of technique drills in order to develop technically competent performers: something he had also experienced as a gifted young footballer. While Pete did not feel that lectures had assisted his knowledge and understanding of the pedagogical requirements of TGfU, a specific colleague during the second PGCE teaching practice had encouraged him to be more child-centred and focus on learning rather than merely instructing students. Inductive analysis of the three data sources indicates there were two over-riding themes that influenced Pete's interpretation and delivery of TGfU: the influence of colleagues and a student centred approach to teaching games.

The influence of colleagues

The PE teachers with whom Pete worked during his PGCE year appeared to influence his teaching in two contradictory ways. His experiences as a competitive footballer were reinforced on his first

teaching practice by colleagues who primarily taught in a traditional way. However, he began to observe an alternative approach during his second teaching practice as a result of the influence of Brian (a pseudonym), the HOD. Pete recalled that

I saw a different side of things. There was more stuff done with challenging questions as opposed to just getting them out there and occupying them. My experience with Brian was more about the learning. Learning became an issue as opposed to making sure that the discipline was right (FI).

The fact that ‘it was more focused on the kids and on the learning experience’ made Pete reconsider the technical model. He commented that ‘my mind changed to I don’t want to do it like that.’ This was seen in how he began to teach games:

I probably was becoming more child-centred as opposed to drill-centred. The decisions were going out more towards the kid and it was more game-orientated. Let’s just slightly rectify that as we’re going along, as opposed to we’re all going to do this and until we’ve all done this we’re not going to go into the drill that improves it further still (FI).

Despite the influence of Brian encouraging Pete to teach students in the ‘game’ situation rather than in whole-class technique practices, Pete confessed he still had what Evans (1992) would call a ‘sporting perspective’ in his first teaching post. At this stage of his career, and like many PE teachers (Capel, 2007), Pete admitted that he ‘didn’t really identify much of a difference between a coach and a teacher’ (FI). He acknowledged that he largely adopted the traditional approach used by his fellow teachers. This example of a traditional ‘institutional press’ could have totally ‘washed out’ (Zeichner and Tabachnik, 1981) the innovative seeds sown by Brian. A colleague in his current post helped prevent this from occurring.

Moving to his current school he came under the influence of Bill, the HOD who Pete stated has ‘been a massive influence on my teaching of games’ (FI). When asked how he had been such an influence Pete replied ‘I think it’s that shift from the lesson being about the kids and not being about me. I went from being a red coat to actually being what a referee should be – not seen in the game’ (FI). Bill encouraged him to teach games facilitating the student learning rather than directing the lesson. The students were given greater ownership by allowing them to make decisions during the game. Pete began to support Bill and the school’s ethos of student understanding.

Pete explained that the Celtic Academy was a ‘proactive school as opposed to a reactive school meaning students having some ownership of their learning’ (II). He commented that senior staff expect ‘students to be making decisions and understand the decisions that they’re making and why they’re making them’ (II). Working in such an environment with ‘teachers who promote that sort of thing’ (FI) further encouraged Pete to develop student understanding during games lessons. This is further reinforced by the PE department handbook, written by Bill, who advises teachers to adopt proactive teaching styles and encourages student-focused lessons.

A student-centred approach to teaching games

Pete provided two student-centred reasons for his constant use of modified games and limited technical practice. Firstly, in congruence with previous research (Light and Butler, 2005; Mendez et al., 2010), he believed that the class was best ‘motivated by maintaining a game situation throughout the lesson’ (FI). Secondly, he argued ‘the initial ability of the kids in the group didn’t

require technique work' (FI). This point mirrors the belief of Bunker and Thorpe (1982, 1986a) that skills need to be of sufficient standard to allow tactical performance to be shown in the game. In contrast to other research findings (see for example, Barrett and Turner, 2000; Rossi et al., 2007), Pete did not feel the need to make techniques central to his lessons. However, lesson observations showed that Pete did provide technical assistance to those children who he felt required such help during the modified games.

The type of child also appears to have been a factor in the limited student reflection to open-ended questions. In the final interview Pete explained that the class contained pupils with

A range of special educational needs that have got to be taken into consideration. Some have got real issues relating to concentration. When they were writing down their strengths and weaknesses and areas for development, there were one or two that were starting to 'bubble' ... and so, you might restrict what they're doing with regards to that sort of thing.

Indeed, he commented 'that my questioning is more challenging with certain individuals than it is with others. Some, a simple basic answer is all I expect ... whereas others, I know that we can go into greater depth' (FI). However, Pete also felt it necessary to 'maintain discipline with kids that have got a tendency to drift off-task and ... ensure that they're still focused' (FI). It was evident that the need to maintain appropriate student behaviour was important. Indeed, he conceded that he had adopted some of the 'military' mannerisms of a teacher from his first teaching practice with the younger boys 'just to crack the whip' (FI). Brooker et al. (2000) indicate that Pete is not alone in feeling a potential loss of control when attempting to utilise social constructivist learning strategies. The various data sources indicate that Pete felt individual and social student reflections were important but these were used sparingly with this group of boys. Observational data indicated he did not lack the PCK to ask open-ended questions; it was managing the thinking and/or discussion periods that may have been problematic. This was made apparent when asked in the final interview 'what developments do you feel you need to make to be able to deliver TGfU more effectively,' his reply was 'the thinking side of things.'

Discussion

During his seven years at the Celtic Academy Pete had been part of a community of practice attempting to learn how to use TGfU. Observing, planning lessons and team-teaching with his fellow teachers and particularly Bill, Pete utilised the 'full version' of the model. He consistently demonstrated almost all the benchmarks shown in Table 1. He taught tactical understanding in every lesson and in congruence with the founders of TGfU, Pete understood the teaching of techniques and/or skills should follow tactical understanding (Bunker and Thorpe, 1982, 1986b). He predominantly taught technical aspects during games, with a mixture of individual technical assistance and feedback. While open-ended questions were utilised throughout the nine lesson observations, opportunities for student reflection and interaction were only seen sporadically. However, in utilising almost all of the teacher and pupil benchmarks and mirroring the intentions of the creators of this approach, Pete has shown it is possible informally to learn the 'full version' of TGfU. The influence of colleagues and students on his use of TGfU supports the argument that the application of innovative PCK must take into consideration the contextual features that teachers consistently face (Stolz and Pill, 2014).

Nonetheless, this study does recognise the need for external expertise at the outset. Pete predominantly learnt how to use TGfU from Bill who had attended an externally run TGfU course. While recognising the value of external support such as university staff in ensuring continuing effective use of innovative instructional models following CPD courses (McMahon and MacPhail, 2007; Stran and Curtner-Smith, 2009), this research indicates this may not always be necessary. While a lack of sustained external support may encourage ineffective informal learning among teachers (Wenger, 1998), an expectation that this is the teaching and learning approach to be adopted for games appears to be a strong starting point. As the HOD, Bill expected Pete and other PE staff to use TGfU. Indeed, staff were encouraged to adopt proactive teaching styles in all PE lessons. Moreover, senior staff also expect lessons across the academy to be student focused. Such consistent whole-school and department teaching and learning approaches appear to encourage the use of innovative models. While Pete had learned to use the 'full version' of TGfU, the recently qualified teacher at the same school in O'Leary (2014) had only learned partial use of the model. Such findings support the claim of Casey (2010) that consistent practice of the required pedagogical approaches are necessary in acquiring competence.

This study also illustrates the importance of pedagogical practice with known students. The learner-centred nature of TGfU requires teachers to know their students well in order to modify games appropriately, select relevant techniques and skills to be taught and ask applicable open-ended questions (Griffin and Sheehy, 2004; Thorpe et al., 1984). Pete demonstrated these pedagogical practices on a consistent basis with his students. The traditional one or two-day external CPD courses ignore the contextual features that teachers face on a day-to-day basis. While theoretical knowledge of TGfU may be improved on such courses, how to implement such knowledge with their own students is not enhanced. As a result, TGfU may have little meaning for teachers (Stolz and Pill, 2014). In using this model over a number of years based on his own students' needs, Pete supports the view that learning how to use TGfU knowing the students' needs would almost certainly improve the effectiveness of the approach's adoption (Brooker et al., 2000; Butler and Griffin, 2010; Casey, 2014).

The findings of the present study recognise that the socialisation of PE teachers need not be a life-long process (Lawson, 1986). While recognising that the three stages of occupational socialisation are often experienced simultaneously (Lawson, 1983, 1986) making it almost impossible to gauge the *exact* influence of any one stage (*emphasis added*), it appears that influences from Pete's acculturation had been 'washed out.' Traditionally seen as the most dominant form of socialisation, this research has indicated that the 'apprenticeship of observation' (Lortie, 1975) need not be self-perpetuating. In contrast to Richards et al. (2014), who suggest acculturation's subjective theories are relatively stable filters, this study provides further evidence that these filters can be altered over time as individuals accumulate new experiences and interact with new socialising agents.

Factors within professional and organisational socialisation were able to negate the traditional approach to games teaching that Pete had witnessed and experienced during his childhood experiences of PE and sport. Attempting to follow in the footsteps of Brian and his current departmental colleagues during the professional and organisational stages respectively, this research provides further evidence to support the second assumption of Lawson (1986) that operations or practices in PE departments are institutionalised. In contrast to the majority of occupational socialisation literature suggesting that professional and organisational socialisation reinforces the personalised experiences from acculturation (see, for example, Curtner-Smith et al., 2008; Stran and Curtner-Smith, 2009), this study has shown that innovative practices from the two latter stages can largely

'wash out' traditional acculturation influences. In contrast to the third assumption of Lawson (1986) it has also indicated that socialisation is predominantly automatic rather than problematic.

It was clear that Pete had adopted the customary pedagogical practices of the Celtic Academy and its PE department. He had accepted and implemented the customary pedagogical strategies (Stroot and Ko, 2006). The Celtic Academy 'institutional press' (Zeichner and Tabachnik, 1981) had encouraged the innovative pedagogical status quo. In contrast to many innovative teachers having to adopt traditional teaching and learning practices when first joining a school (Capel, 2007; Penney and Waring, 2000), the child-centred approaches encountered with Brian were reinforced by the innovative Celtic Academy (PE) teachers. The informal community of practice appears to have allowed experienced and inexperienced teachers to share ideas and best practices in their school (Richards and Templin, 2011). The passing down of pedagogical knowledge and understanding from Bill and other colleagues over seven years resulted in him being able to deliver the 'full version' of TGfU. In contrast, his recently qualified colleague who had only been teaching at the Celtic Academy for two years delivered a partial application of the model (O'Leary, 2014). While a community of practice may assist PE teachers integrate into their department (O'Sullivan, 2007), its effectiveness in learning to use TGfU appears to be dependent on sufficient time to learn how to apply the model effectively from others and consistent practice of the required PCK to use the model fully.

Conclusion

This study has aimed to add to the paucity of research regarding the informal learning of TGfU. In particular, the study used occupational socialisation to identify those factors that facilitated or inhibited informal learning of the model from the perspective of an experienced teacher. This research has illustrated that it is possible to learn the 'full version' of TGfU informally. This finding is significant for two reasons. Firstly, while recognising the need for initial external expertise, the cost and weaknesses of traditional forms of CPD provision such as short off-school site courses (Armour, 2010; Casey, 2013; Groundwater-Smith and Mockler, 2009) means teachers are likely to rely increasingly on informal learning and support from their own colleagues in developing their pedagogical practices. Secondly, this research has shown it is possible to 'overcome' the socialisation effects of the traditional approaches to games teaching 'acquired' by the majority of potential PE teachers during their childhood and higher education (Kirk, 2010).

In recognising the potential for PE teachers to learn informally to use the 'full version' of TGfU, the author recognises two key influences that aided Pete in learning to use TGfU successfully. Firstly, his socialisation in teaching games with a child-centred and understanding approach occurred across two occupational socialisation stages. In short, Pete was fortunate that the innovative orientations partially acquired on his second teaching practice with Brian largely matched the 'institutional press' (Zeichner and Tabachnik, 1981) of the Celtic Academy PE department. This is likely to have aided his learning of the innovative TGfU model. In contrast, the recently qualified teacher at the same school in O'Leary (2014) who delivered an incomplete version of TGfU had only encountered the PCK underpinning TGfU during the organisational stage. Most PE teachers are likely to face a reality shock if they have conservative orientations and are inducted into an innovative school/PE department or vice versa (Stroot and Ko, 2006). Secondly, and again in contrast to his recently qualified colleague (O'Leary, 2014), Pete has taught for seven years at the Celtic Academy to refine his use of TGfU. The newly qualified teacher demonstrated a partial version of TGfU due to the influence of traditional perceptions of games teaching acquired during

his childhood and higher education, and his desire to maintain good student behaviour during lessons. In contrast, greater time had 'washed out' Pete's traditional acculturation experiences. As Fuller (1969) suggests, experienced teachers become more concerned with the impact of their teaching on students learning rather than concerning themselves with issues such as ensuring appropriate classroom control. In short, experience allows teachers to become more learner-centred. This research indicates that informally learning to use the 'full version' of TGfU is not a quick fix.

Acknowledging the relatively short timescale of this research (four months) and that the findings are based on the experiences of one experienced PE teacher, care should be taken in drawing conclusions from the study. Nonetheless, it is appears possible informally to learn to use TGfU successfully given conducive circumstances and appropriate teaching experience over a significant period of time. Given the limited use of TGfU in UK schools (Jones and Cope, 2011), further research examining how occupational socialisation influences teachers using TGfU with differing backgrounds and current teaching experiences appears to be warranted.

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