

PHYSICAL EDUCATION TEACHERS' AND SPORT COACHES' DISPOSITIONS TOWARD GAMES TEACHING AND THE INFLUENCE OF GBA

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ABSTRACT

In the re-emergence of interest in TGfU from the 1990s there was a clear division made between 'technical' and 'tactical' approaches with extensive research comparing and contrasting the two in an oppositional relationship (see Turner & Martinek, 1999). Subsequent thinking regarding TGfU and other GBA identified the complexity of team sports and games but the literature is still dominated by debate about which is best and what is authentic GBA practice. This neglects the influence of GBA on teaching and coaching practice and discourages teachers and coaches from implementing them by reducing space available to them for adapting GBA to their teaching (Aguiar & Light, 2016). The work of Piaget offers a way of understanding how ideas from GBA can influence teachers'/coaches' dispositions toward games teaching in ways that aren't always immediately apparent. This article proposes an alternative explanation and one that suggests the influence of GBA is far more widespread than is currently assumed.

Keywords: game-based approaches, teaching, coaching, teachers' dispositions

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INTRODUCTION

A wealth of studies across the globe suggest the efficacy of TGfU and other game-based approaches (GBA), and their capacity to provide high-quality teaching and coaching (McNeill et al., 2008; Light & Harvey, 2017). However, it also suggests disappointing uptake by teachers and coaches (Pill, 2011; Aguiar & Light, 2015) of 'authentic' GBA as a concept that we feel limits our understanding of its possible influence. Looking for authenticity or fidelity of GBA (see Harvey & Jarrett, 2014) reflects the influence of what we see as being the more prescriptive, models-based approach (Metzler, 2017) that does not take into account the diverse range of interpretations of GBA and the ways in which teachers and coaches adapt GBA and the ideas informing them to the unique environment they are in (Aguiar & Light, 2016). We argue that the attention paid to all the challenges teachers and coaches face when implementing GBA and the search for an authentic implementation of these approaches takes the focus away from the influence of GBA on teachers' and coaches' practice. With a less prescriptive view of GBA it is

possible to see some aspects of these approaches implemented by physical education (PE) teachers and sport coaches even when their articulated knowledge about them may seem scarce.

This article draws on a larger study to provide an example of how GBA influences beliefs about the teaching of games and team sports without being 'authentic'. It reports on a small-scale study conducted in two New Zealand schools involving five teachers and coaches. It inquired into their dispositions toward teaching and coaching team sport and how these were developed over their lives, placing them on a spectrum from a teacher/coach-centred approach, dominated by direct instruction, at one end to student-centred GBA at the other end as a way of thinking about the influence of GBA on them. In it we drew on Piaget's concepts of assimilation and accommodation to understand how the participants developed their particular dispositions toward games and team sport teaching and coaching, and how they were influenced by the ideas underpinning GBA.

Assimilation and accommodation

The work of Piaget offers a way of understanding how ideas from GBA influenced the participants' dispositions toward teaching/coaching team sports in ways that were not always immediately apparent. Piaget was a biologist and the 'father' of individual constructivism who saw learning as a process of cognitive adaptation to a perturbation through the interrelated processes of accommodating and/or assimilating learning experiences. According to Piaget, assimilation 'is the integration of external elements into evolving or completed (cognitive) structures' (1970: 706) with accommodation being 'any modification of an assimilatory scheme or structure by the elements it assimilates' (1970: 708) that 'assures the continuity of structures and the integration of new elements to these structures' (1970: 707). For Piaget, cognitive adaptation consists of adapting to a perturbation to a cognitive equilibrium through changing existing cognitive structures through assimilation and/or accommodation as, 'a developmental process that results when a blend of maturation and experience creates conditions that make assimilation alone inadequate' (Reinking, Labbo & McKenna, 2000: 114). This basically refers to the interrelated processes of changing existing cognitive structures and/or modifying and adapting new knowledge to an existing cognitive structure. Piaget's theory assumes that assimilation and accommodation are continuous and frequently inseparable actions that require learners to pursue equilibrium between incoming information and the cognitive structures that are essential to interpret that information (Reinking, Labbo & McKenna, 2000):

'Assimilation and accommodation are entwined processes that moderate an individual's response to the environment and any subsequent readjustment of existing schemas, or construction of new schemas, in a cyclic feedback manner.' (Nurrenbern, 2001: 1109.)

METHODOLOGY

This small study formed part of a larger study that adopted combined constructivist grounded theory (CGT) (Charmaz, 2014) and narrative inquiry (NI) (Clandinin & Connelly, 2000) to inquire into physical education teachers' beliefs about games teaching and how they were formed. These methodologies were combined to gain deeper understanding and enrich the process of data collection and analysis. The aim of choosing grounded theory and narrative inquiry was to keep the participants' stories intact but at the same time being able to explore emerging themes or categories that were then compared and contrasted to identify any common aspects between the participants. We began with observations and the first round of interviews to get to know the participants and identify their approaches and dispositions toward coaching/teaching and to develop initial codes. The second round of interviews helped to develop focused codes that were followed by narratives/stories to explore how the participants developed these dispositions.

The participants

Purposive sampling was used to select four participants from two secondary schools in Christchurch, New Zealand. David was a sport coach and Mark, Rachel and Christina were both PE teachers and coaches. The study followed all ethical procedures required and obtained ethical approval by the Educational Research Human Ethics Committee from the University of Canterbury and all names used are pseudonyms.

Data generation and analysis

Data were generated through noted observations of the participants' practice, two rounds of semi-structured interviews, followed by a long life-history-type interview in which they told their stories about how they developed their ideas on, and beliefs about, teaching and coaching games and team sports. It also used a Likert scale survey that inquired into the participants' views on their approach to teaching/coaching that involved being asked to what extent the statements based on what the literature suggests are common features of GBA were evident in their teaching/coaching. Examples of these statements are: 'I use questioning to generate dialogue and thinking'; 'I facilitate and encourage interaction between players/students to enhance their abilities to negotiate, compromise and arrive to outcomes'; 'I generate positive experiences for athletes/students'; 'I make practice/lessons enjoyable, and foster the ability and inclination to learn'. The participants chose one of the following five options: Agree strongly; Agree; Have not thought about it/do not realize if I do it; Disagree; Strongly Disagree.

FINDINGS

Tensions between articulated and enacted knowledge

Interviews and participant narratives revealed how their early experiences of sport were mainly of being coached using coach-centred approaches and how their attitude to

coaching and teaching changed after being exposed to GBAs, which in four cases was TGfU. Mark was half Samoan and half European New Zealander born and raised in New Zealand who, from a young age (4 years old) played a variety of sports from rugby and volleyball to athletics. He used to play informal games outside with his friends, most of them Samoan, but his parents tried to keep him at home most of the time. Despite the experience of playing informal games, he viewed all his early experiences of sport before university as coached in a traditional, directive, coach-centred approach, and he felt that they were highly influential on his development as a player and as a coach:

...probably initially my experiences as a player, and then my initial experiences as a coach I followed a traditional format of warm-up, by working on skills and then finish with a game, that is probably the biggest influence because it is probably what I've always experienced... (Interview 1, Mark.)

All participants had been coached as children using a coach-centred approach that emphasised direct instruction and were only introduced to game-based approaches as adults, during their studies at university. For example, from an early age David, who was British, had been interested in football (soccer) and rugby. His passion for rugby led him to move from the UK to New Zealand 11 years prior to the study to pursue a coaching career. His views on teaching and coaching were challenged and shaken during his physical education teacher training in the UK through his introduction to TGfU. He had Rod Thorpe as his lecturer who is widely accepted as the founder of TGfU (see Bunker & Thorpe, 1982) and who had a huge influence on David's thinking about teaching team sport and games. This exposure produced some disruption to his cognitive equilibrium and, over his time at university, changed his thinking:

...mainly going to Loughborough University and having a number of practical sessions with some really high-level educators looking at developing questioning techniques and developing a game sense approach, coaching through games, that significantly changed how I went about things after that. (Interview 1, David.)

David's views on teaching games were significantly changed by his exposure to Rod Thorpe during university. He said that what he remembered most was learning about TGfU and understanding the importance of the work involved in planning a session as a key aspect of the approach and one that is not emphasised in the literature as much as questioning:

... what I learnt from him was the importance of a game-based approach... looking to start your session in a different way, you don't necessarily have to start with skill practice, even the warm-up can involve a game component... I also learnt that you have to plan the sessions and do it carefully... it's not

something that could just happen, and there was a real emphasis on questioning to be able to achieve that effectively. (Interview 3, David.)

After university, David seemed to have a sound understanding of key aspects of GBAs and some of the main goals, such as the use of small-sided practice games, the increase of focusing on developing tactical awareness and the creation of situations that enhance decision-making:

...What I understand is that... by using games you're including more people within the session. Using small-sided games the players have more opportunities to touch the ball and make decisions... the games can be used at any point and the key thing is the insight, and the understanding, and not just the plan of the game just for the sake of planning a game. The main goals... would be increased tactical understanding from the players, increased engagement and better ability to make decisions... (Interview 3, David.)

Like Mark and David, Rachel and Christina were also PE teachers and coaches with some knowledge about GBAs, who seemed to share the same ideas about adopting a student/athlete-centred approach. Christina was first exposed to GBA at university in New Zealand, and at the time of the study she had been teaching for only two and a half months, which meant that her attempts to implement TGfU, were made more challenging by having to adapt to the demands of being a beginning teacher, yet, she said that her "...main goal is to build knowledge around a concept or idea and skill-based at the same time without being overwhelmed by going into the game".

Rachel was also born and raised in New Zealand and was half Maori and half European New Zealander. She said that her coaching style was student centred and always culturally responsive. She said she wasn't exposed to Maori culture as she was growing up and during her interviews she said that it was one of the things she missed, so she tries to be aware of that in her teaching. She also emphasised the difference in her approach to teaching physical education and coaching sport:

It's student centred, it's innovative... it's culturally responsive, and it's very relational... It's not I'm the expert and I know everything, it's... 'What can I learn from my students?'... That's my teaching style. It's different from coaching. (Interview 1, Rachel.)

Most of the participants articulated an understanding of the core features of GBAs, and said they favoured the student-centred, inquiry-based approach. For example, during the interviews, Christina said that she is "...an inquiry teacher and pass on inquiry learning to the students...I want students to have control of their learning", and Mark emphasised that, "it's all about meeting the students' needs... I'd like to think, I can adapt to different

situations, different classes and different types of students”, however, there seemed to be some tension between their conscious beliefs of how they taught or wanted to teach, and their deep beliefs developed over time, prior to entering university. Although we recognize that accommodation and assimilation interact in learning, this suggests to us that the accommodation process (Piaget 1970) that comes with experience that matures or modifies new knowledge and generates actions that are consistent over time was not as influential on their learning as the process of assimilation. This was a particular problem for Mark and David who seemed to struggle to ‘shake off’ what Kirk (2010) calls the sport skill approach:

...the... sessions I’ve been... tend to break the game down a lot, and look at certain areas of the game, key components of a game, and that’s often through more of a technical... so it becomes more skill learning, so... it’s up-and-down, I’ve had to really work on keep the focus of developing a game sense in terms of the coaching approach that I use. (Interview 2, David.)

I think instinctively I would go to the coach/teacher-centred approach to be honest. If I’m not sure where to go always like “okay this is what we’re going to do”... So I definitely, rightly or wrongly, take control... I definitely think when its needed I take a step back in terms of... sometimes, in sport and teaching things start falling apart, so I need to stop, take a step back and then go forward from there. (Interview 2, Mark.)

Contradictions between teaching and coaching

In addition to tensions between what the participants rationally and consciously saw as good teaching and coaching and their deeply embedded inclinations toward teacher/coach-centred approaches, they articulated and enacted very different beliefs about teaching and coaching with their exposure to TGfU and other GBA not seeming to have changed their cognitive structures enough to really change their practice for coaching. Mark, Rachel and Christina, who were both PE teachers and sport coaches had different views on coaching when compared with their teaching due to quite different perspectives on the aims of these two roles. When coaching they said they are in command and adopt direct instruction and a coach-centred approach because the students/players have chosen to play but when they teach they said they adopted a learner-centred approach primarily aimed at teaching in an inclusive way. They all shared the idea that when coaching, the students they coach have chosen to be there and are clearly interested in improving, so they have to take control:

I’ve always believed that the coaches are there, to run the show and the players... fall within what the coach wants as opposed to the other way around... when I coach, the students have chosen to be there, they want to play volleyball or rugby whereas the students... are there because they have to be, because PE is compulsory... (Interview 1, Mark.)

This suggested that these three participants saw the advantage of student-centred approaches like TGfU as being inclusive and making classes enjoyable with little consideration of performance. In contrast, they saw coaching as being focused on performance and their role as transmitting knowledge. Christina clearly articulated this view of coaching as the transmission of knowledge from the coach to the players: "...in coaching... I am more in command, because I have more knowledge and I am expressing my knowledge to them" (Interview 2, Christina). Rachel also held this idea that student-centred teaching should be adopted for PE classes but that the coach's role requires being in charge and making all the decisions:

"When I teach I feel that I am sharing knowledge with my students but they are also part of it and they have something to teach me, whereas when I am coaching I am the one in charge... they have chosen to be there, so I tell them what to do" (Interview 2, Rachel).

These participants adopted a coach-centred approach when coaching that contradicted their articulated vision of good teaching as taking up a student-centred, inquiry-based approach. This suggests the powerful influence of their previous experiences of sport, where they experienced a coach-centred approach and a lack of understanding of how GBA can be used for a focus on performance (Evans, 2014). This embodied knowledge and dispositions seemed deeply rooted and operating at a non-conscious level to direct their coaching and prevent their belief in student-centred learning in physical education influencing their coaching. Noted observations of practice suggested that even in teaching PE there are some aspects of a student-centred approach but also of a traditional teacher-centred approach that suggests they have assimilated some knowledge about GBAs and that through experience they are starting to accommodate that knowledge into their way of teaching.

A teacher/coach-centred to student/athlete-centred spectrum

Drawing on the data generated in the study, with an emphasis on the questionnaire, we attempted to place the participants on a spectrum that went from a teacher/coach-centred approach at one end to a student-centred approach at the other end. This task was made challenging by contradictions between their rational, articulated beliefs about teaching and coaching and deeper, non-conscious beliefs developed through lifetime experiences as well as contradictory views on teaching and coaching.

Noted observations made by the first author of the participants' practice were used to compare (from an external point of view) to what extent their beliefs and perceptions about their own practice corresponded to their real practice. The observations suggested that, especially when teaching, the participants' self-perception not always aligned with their practice. There were times where what they articulated as being their teaching approach (student-centred approach) was not what they were actively doing. This might be explained by the fact that what they had in mind (at a conscious level) about GBAs,

was being challenged by their past experiences (that were acting at a non-conscious level), creating a conflict between “thought, beliefs and execution”.

In the questionnaire, Mark and Christina placed themselves toward the student-centred, inquiry-based end of the spectrum for physical education. They strongly believed that they were adopting an inquiry-based pedagogy to encourage reflection, collaboration and dialogue between students. They also felt that they used modified games to improve tactical knowledge, trying to promote positive and enjoyable experiences while fostering the ability and inclination to learn. Rachel’s responses to the questionnaire also indicated that she placed her teaching toward the student-centred end, but in her case it was clear that she gives more emphasis to the social aspects of teaching games using a student-centred approach (e.g., ‘Facilitate and encourage interaction between students to enhance their abilities to negotiate, compromise and arrive at outcomes’). The observations of Christina’s and Rachel’s classes suggested that their teaching approach aligned with their articulated beliefs about teaching, and what they believed it was important to emphasise in their teaching, such as, the use of questioning to enhance decision-making, collaboration and understanding of the game was evident in their practice. Despite their limited knowledge about GBAs, and the fact that during the observations, the first author observed that they still presented some signs of a teacher-centred approach, their main ideas and actions when it comes to teaching aligned with a student-centred approach. All that, helped place them toward the student-centred end of the spectrum. On the other hand, during the observations of Mark’s classes, and despite the fact that he perceived his way of teaching as being student-centred, the first author noted more characteristics of a teacher-centred approach than a student-centred approach. She also noted his struggles with giving up the control of the class, and allowing the students to make decisions which indicated that he was clearly toward the teacher-centred end of the spectrum. Although, he demonstrated a good articulated understanding of GBAs, during interviews he also recognized his ‘instinct’ for the teacher-centred approach: ...“instinctively I would go to the coach/teacher-centred approach”.

Regarding their coaching, the same participants (Mark, Christina and Rachel), placed their practice on the opposite end of the spectrum, at the coach-centred end. Mark’s responses to the questionnaire suggested his coaching was leaning toward an athlete-centred approach, but the observations indicated that his interventions during the sessions were too prescriptive and did not empower the athletes to find answers by themselves. Although it was possible to observe some features of an athlete-centred approach in his sessions, the main ideas and beliefs he shared during his interviews about coaching placed him on the coach-centred end of the spectrum. Christina’s and Rachel’s practice was clearly at the coach-centred end because their ideas about coaching and how they ran their sessions were all about the coach being in control.

David was the only coach who perceived his coaching as being totally athlete-centred, but observations of his practice identified the struggles in keeping the focus on GBAs that he pointed to during the interviews. However, we placed David on the athlete-centred end of the spectrum, because despite his apparent struggles he was able to implement in his sessions some of the main features of GBAs.

Drawing on the data collected we suggest that two of the three teachers could be placed toward the student-centred end of the spectrum for physical education teaching, with Mark being the only one on the teacher-centred end. However, the findings for coaching were very different with three of the four participants placed at the coach-centred end and only David clearly on the opposite end of the spectrum as an athlete-centred coach.

DISCUSSION AND CONCLUSION

The influence of GBAs on teaching and coaching

The findings suggest that the participants that took part in this study had a good articulated understanding of some of the core features of GBAs, despite their late introduction to it, and that almost all of them had adapted it to their teaching in physical education. They seem to have gained such knowledge through a process of learning in which assimilation (Piaget, 1970) of new information during their time at university, as they began to question their previous beliefs, played a significant part. However, their university education didn't seem to have formed an effective and permanent influence on their practice, which was shaped more by their experiences as athletes and the way they were coached. The beliefs operating at a non-conscious level, developed from experience, were still able to overpower the articulated and rational beliefs the participants had about coaching and in one case in teaching. Although they were keen to implement what they had learnt, some of them struggled to keep a focus on GBAs, alternating between old and new practice, retreating to the familiarity of a more direct and teacher- or coach-centred approach. There seems to be tension between what they learnt at university and their embodied knowledge and inclinations toward coaching developed through practice over their lives of participation in sport and PE. However, the knowledge, experiences and self-perception, regarding GBAs and its implementation shared by the participants suggest that their approaches to games coaching and teaching are shifting away from a view that we refer to here as assimilation (learning new information about GBAs) towards accommodation (maturing that information through experience, generating deeper knowledge about it). We argue that, although the participants' self-perception of how they teach or coach did not always correspond to the reality, the influence of key aspects of GBAs on their practice was clear. Their previous knowledge and past experiences still acted at a deeper and unconscious level, presenting a certain degree of unconscious reluctance to innovative practices, more visible in their coaching than teaching, but it was clear that the knowledge about GBAs is becoming more and more embedded, and its implementation has occurred more often than we initially thought.

The contradictions between the participants' beliefs, articulated knowledge about GBAs and their practice made it too difficult to accurately place them on a spectrum but the attempt to do so highlighted the complexity of factors influencing their dispositions and practice and the challenges for higher education institutions in affecting lasting change in teachers' approaches to teaching and coaching.

FIRST AUTHOR'S BIOGRAPHY

Bianca is completing a PhD at the University of Canterbury in New Zealand on games teaching and coaching in secondary schools with focus on what shapes teachers' and coaches' practice. The data gathered for this study were collected during the 2016 school year in Christchurch, New Zealand. She completed her undergraduate studies in Sports Science, and her Master's degree in Teaching of Physical Education in Primary and Secondary School at the University of Coimbra, Portugal.

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