Dilemmas facing physical education teachers' when teaching using game-centered approaches

ecent decades have seen the development and integration of second generation models of teaching physical education. Second generation models include cooperative learning, sport education, and the Tactical Games Model. These models are characterized by a number of similar features, which Dyson, Griffin, and Hastie (2004) state include: a) participation in a student-focused rather than teacher-focused curriculum; b) teacher facilitation of activities that encourage the holistic development of students, and c) active learning focused on the development of student cognitive processes such as decision-making, social interaction and cognitive understanding.

The latter of these models, the Tactical Games Model, is an is an Americanized derivative of the Teaching Games for Understanding (TGfU) model (Bunker & Thorpe, 1986). In contrast to the direct instruction model, Game Centered Approaches (GCAs) such as TGfU and TGM present an initial game form first, introducing skill practice second and 'when needed'. As Oslin and Mitchell (2006) note, the *what* therefore comes before the *how* in GCAs such as the TGM refuting the notion that quality game play cannot emerge until the core techniques are mastered a priori, instead offers a way of linking techniques and tactics with the aim of promoting skillful and intelligent performance. This link between tactics and technique is promoted in the TGM by the utilization of a game-practice-game format that Oslin and Mitchell (2006) argued 'assisted teachers in lesson planning and instruction' (p. 629).

Despite a growing research evidence base for GCAs such as TGfU and TGM, researchers have tendered the rationale that GCAs have been accepted by academics but appear to only exist in isolated instances in practice, particularly where teachers demonstrate true fidelity to the model (Harvey & Pill, 2016). In their recent study, both academics and practitioners reported that a range of constructivist dilemmas (Windschitl, 2002) still exist for practitioners who are keen to integrate GCAs into their practice (Harvey & Pill, 2016). The remaining part of this editorial will overview these 'dilemmas', outline aspects of these dilemmas have been uncovered in research on GCAs, and conclude with some practical suggestions for practitioners wanting to overcome such dilemmas.

Windschitl's dilemmas framework

Windschitl's (2002) dilemmas framework provides a heuristic to investigate beliefs, routines, and the forces that shape pedagogical practice. It is prefaced by the perspective that, in practice, application of new instructional strategies to the teacher is a complex concern and an activity that is highly problematized due to the tensions that typify teaching reform in general, and, in this current instance, teaching for understanding specifically. Windschitl's (2002) dilemmas framework offers a way of understanding the practitioners' individual practices, but within a wider social context that became a critical factor in their implementation of GCAs, and incorporates four frames of reference: a) Conceptual dilemmas based in attempts to understand the theoretical underpinnings of the model; b) Pedagogical dilemmas based in the added complexity of the curriculum design and enactment demands of the model; c) Cultural dilemmas associated with reorientation of teacher and student roles and expectations; and, d) Political dilemmas associated with resistance from institutional and community of practice norms, and routines of privilege. The dilemmas framework does not suggest that the everyday reality of the practitioner can be neatly assigned under the labels, but that it is a product of the interplay of the four frames of reference.

Conceptual dilemmas

Conceptual dilemmas are rooted in teachers' understanding of learning, their assumptions and beliefs and their ontological and epistemological underpinnings. The literature on pre-service teachers' experiences of GCAs is littered with examples of conceptual dilemmas. For example, a commonly cited conceptual dilemma invoked in the GCA literature is the firm belief that students to possess skills first as a prerequisite for operationalizing games tactics (e.g., Harvey et al., 2015). This dilemma appears in the literature as a relatively stable and inflexible belief about learning, and by consequence GCAs are only suited to more experienced or older year groups (e.g., Pill, 2011).

Moreover, Wright, McNeill, and Fry (2009) and Harvey et al. (2015) noted that a lack conceptual understanding of GCAs created tension between traditional behavioristic notions of teaching and the 'new' constructivist orientation. Wright et al. argued that this led to some teachers retreating back to a tried and tested methods such as using techniques and drills because they did not understand the differences between the two. Moreover, in the study of Harvey et al. (2015) teachers described what Hargreaves (1994, p. 80) calls 'safe simulation', with imitations of GCAs practiced with minimal disruption to teaching norms and traditions.

Pedagogical dilemmas

Pedagogical dilemmas intersect to greater or lesser degree with the other dilemmas as teachers seek to negotiate the implementation of their pedagogical practices (Cushion, 2013). These practices are not only shaped by their own beliefs and understanding of the world which act as a filter through which all of their experiences must pass, they are also mediated by wider cultural and political forces, such as government policy, the ethos of the school in which they work etc. At the heart of GCAs is not simply the notion of modified games and/or situated practices, but the teacher's ability to step back, observe and analyze performance, and know when to ask and when to tell.

Pedagogical dilemmas in the literature are aplenty. For example, McNeill, Fry, Wright, Tan and Rossi (2008) found that although both primary and secondary pre-service teachers began to structure classes with more time for game-based situated practice at the secondary level (this was not the case for primary students) and use high levels of questioning, these questions were substantially low-order involving knowledge or recall (76%) whilst only 6.7% were open-ended or divergent and capable of developing tactical awareness. Harvey et al. (2015) also noted issues with teachers use of questioning, alongside concerns for model fidelity (see also Harvey & Pill, 2016). Other studies have also noted the advanced pedagogical content knowledge required for skillful employment of GCAs (e.g., Diaz-Cueto, Hernandez-Alvarez, & Castejon, 2010; Gurvitch, Blankenship, Metzler, & Lund, 2008; Harvey & Pill, 2016; Wright et al., 2009) and the amount of preparation and adaptability (Wang & Ha, 2009) necessitated by GCAs with Wright et al. (2009) concluding that teacher quality mediated learning of students with GCAs.

Cultural dilemmas

There is a resilient culture that pervades physical education. The 'learning approach underpinned by social constructionist theory' (Cushion, 2013, p. 68) challenges the pervasive beliefs of both teachers and pupils about a 'type' or 'form' of physical education dominated by teacher-led instruction and students as empty vessels waiting to be filled. Any teacher who uses a different approach may be perceived as problematic (Windschitl, 2002).

Brooker, Kirk, Braiuka and Bransgrove (2000) substantiated the above notions by finding that many of the institutionalized practices in physical education such as scheduling, facilities, equipment, lack of collegial support and miss-aligned assessment tools can prevent innovation, findings mirrored in some later studies (e.g., Pill, 2011). In addition, stories of pupil resistance are plentiful and researchers have noted how pupil unfamiliarity and poor attitudes to the model (e.g., Gurvitch et al., 2008) and pupils not liking modified games as they are not connected to real game play (Harvey et al., 2015; Wright et al., 2009).

Other cultural dilemmas in the literature pertain to the support offered to pre-service teachers in schools by both cooperating teachers and university supervisors. Cooperating teachers that were not trained were a hindrance as they did not understand the aims of models such as GCAs and its focus on learning domains other than psychomotor (e.g., Gurvitch et al., 2008).

Political dilemmas

Progressive and culturally responsive teachers and teacher education programs have worked to develop curricula that reflect the creative and innovative practice upon which GCAs to teaching and learning reside. Paradoxically, as Cushion (2013) argues, political systems can run counter to these practices, in that, they seek to limit and remove freedom and autonomy for practitioners as teacher seek to meet a range of benchmarks, standards and levels in order to demonstrate the fidelity and efficacy of their, in this case, physical education programs.

One of the best examples of this political dilemma in the GCA literature is in the study by Rossi and colleagues (2007) in Singapore. While not with pre-service teachers, but in-service teachers instead, Rossi and colleagues found that the government's mandated requirement for the delivery of PE lessons using GBAs was paradoxical in relation to the ontology and epistemology of these approaches to teaching games. On a positive note, studies note some of the strengths of GCAs, for example in its alignment with the national curriculum (e.g., Wang & Ha, 2009). Harvey and Pill (2016) further noted that the number of GCAs caused confusion and interrupted the pedagogical conversation for teachers.

Practical implications

From the literature reviewed above, there is no doubt that effective employment of GCAs is challenging, even for teachers who have teaching experience (Diaz-Cueto et al., 2010), particularly due to cultural norms that exist within schools (Harvey et al., 2015; Harvey & Pill, 2016). That said, many teachers see the benefits of utilizing such a second generation model due to its strong 'learner-centered' focus. I therefore draw on suggestions by Griffin (1996) which may help teachers, and pre-service teachers in their shift to a GCA.

- 1. Think small start with one class.
- 2. Pick your favorite game/sport.
- 3. Follow the lesson structure of GCAs for example, if using the TGM, then follow the game-skill-game cycle, and don't be afraid to repeat this cycle within one lesson. For example, you may go from game-skill-game back to skill and then to game (game-skill-game-skill-game).
- 4. Think game like design game-like conditions and use questioning to enhance students' understanding of tactical problems such as maintaining possession, progressing the ball up the field and scoring in a invasion game.
- 5. Find company in pre-service teacher education program such as the on at UCAM, consider forming a majors club (Harvey et al., 2015) where students share ideas with each other. Other ways to find company include joining Twitter to find like-minded teachers who share ideas on their games teaching practice.
- 6. Make it yours if you find materials such as unit/lesson plans, and curriculum materials adapt them to your needs..

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