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Abstract
Using a Game Centred Approach (GCA) to teaching physical and health education is an approach that is rapidly increasing in popularity as it has a higher level of student engagement and cognitive learning (Light, 2003) when compared with a skill- or technical-based approach. As an observational tool, GCA has not yet been validated across all games and sports (Oslin, Mitchell & Griffin, 1998); research that investigates experiences while learning a GCA are found to be of greater benefit. This paper outlines an honours project that is investigating the experiences of pre-service physical and health educators as they learn a GCA model firsthand.

Keywords
physical & health education (PHE), game centred approach (GCA), teaching games for understanding (TGfU), pre-service educators, game performance assessment instrument (GPAI), student engagement

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Honours feature

An initial investigation into a Game Centred Approach to physical and health education at the University of Wollongong

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Using a Game Centred Approach (GCA) to teaching physical and health education is an approach that is rapidly increasing in popularity as it has a higher level of student engagement and cognitive learning (Light, 2003) when compared with a skill- or technical-based approach. As an observational tool, GCA has not yet been validated across all games and sports (Oslin, Mitchell & Griffin, 1998); research that investigates experiences while learning a GCA are found to be of greater benefit. This paper outlines an honours project that is investigating the experiences of pre-service physical and health educators as they learn a GCA model firsthand.

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Introduction

Teaching games and sport within Australian physical education programs is a popular option for the K–12 student. As such, future physical educators need to be well grounded in the latest pedagogies for delivering quality sport-based lessons. At the University of Wollongong, pre-service teachers engage in EDPM202 – Teaching and Learning Net/Court, Striking/Fielding and Target Games. It is within this subject that pre-service physical and health (PHE) students are first introduced to a Game Centred Approach (GCA) of teaching physical education. The terminology, GCA, is used to refer to a broad range of models of teaching, which have been through a series of progressions since they were first introduced in the late 1960s and 1970s (Werner & Almond, 1990, cited in Werner, Thorpe & Bunker, 1996), and are now known by different titles across the globe. Some alternate titles for GCA include ‘Teaching Games for Understanding’ (TGfU – UK), ‘Game Sense’ (Australia and New Zealand) and ‘Tactical Approach to Teaching Games’ (USA) (Wright & Forrest, 2007). The common factor between all these models is the basis of the models, which promote students developing an understanding or knowledge of how to play (Bunker &
This is in stark contrast to the most commonly used alternative, Rink’s model (1993, cited in Werner, Thorpe & Bunker, 1996), which emphasises developing the skills or technical qualities of a game. This skill-based approach is referred to as an analytical model of game play analysis, according to Grehaigne, Richard and Griffin (2005), with the aim of this model being to maximise an individual’s technical ability. The preferred model, which Grehaigne, Richard and Griffin (2005) propose, is the systemic model, as it seeks to explain game play from the “oppositional relationship that constantly exists between two opposing teams” (p.9).

Since Bunker and Thorpe first proposed the TGfU model in 1982, much debate and research has been placed into TGfU and other models of a similar nature. Light (2002) suggests that, using a GCA when teaching, students display a higher level of engagement with the lesson and a greater level of cognitive learning. This is supported by further research Light conducted (2003) with undergraduate primary teachers who reinforced higher levels of enjoyment, engagement and cognitive learning from participating in game-centred tutorials while at university. In contrast, Werner, Thorpe and Bunker (1996) suggest that a skill- or technical-based approach serves to highlight to students their inability to perform the required skills of a game, which can lead to a sense of failure, low levels of enjoyment and impact a student’s long-term participation in games and sports (Bunker & Thorpe, 1986, cited in Allison & Thorpe, 1997).

At present, quantitative measurements of student knowledge and understanding within a TGfU approach have not been possible, as an observation tool to measure students’ knowledge and understanding has not yet been validated across all games and sports. The Game Performance Assessment Instrument (GPAI) (Osling, Mitchell & Griffin, 1998) is an observational tool that seeks to equip “teachers and researchers with a means of observing and coding performance behaviours (eg. making decisions, moving appropriately, and executing skills) that are linked to solving tactical problems” (p.233), which has been validated within the games of soccer, basketball and volleyball (Osling, Mitchell & Griffin, 1998). Further investigation into the GPAI has proven some faults in the tool itself, with Memmert and Harvey (2008) suggesting that many of the calculations within the GPAI are incorrect due to the formulas used. They also suggest an inability to gauge game-play involvement (due to use of ratios) and another significant cause of error, that being the reliability of the observer to initially recognise each component of the GPAI in play and then make a decision regarding the appropriateness of that decision. As this is highly subjective it requires an observer with a level of expertise in that category of games and sports or tactical understanding. Therefore, given the invalidity of conducting quantitative research into a GCA, it was decided that a project that investigated students’ experiences while participating in a GCA approach to teaching would yield more significant results.

Honours project – Experiences of pre-service teachers and GCA
This honours project aims to use the learning content covered during weeks 1–4 and 8 (EDPM202, Spring session, 2011) as the basis for what the participants are expected to learn and know at the conclusion of the five-week GCA intervention. The learning
content will act as a reference point to the level of understanding being displayed by the participants. An expanded version of the content covered in EDPM202 can be seen in Figure 1. Field notes and observations taken during EDPM202 tutorials will be used to evaluate the experiences of participants, primarily observing for signs within play and speech that demonstrates knowledge and understanding of the GCA being taught. Combined with this are focus group interviews that are conducted at the conclusion of each tutorial, with participants discussing the content covered within the tutorial and also their actions and reasons for doing so. The last form of data collection is from student self-reflections. In the following three days after their tutorial, self-reflection questions are emailed to participants to further garner their experiences within the tutorial and display their knowledge and understanding of a GCA to teaching.

Figure 1: Expanded GCA model used in EDPM202 (Forrest, 2011)
Project to Date
At the present time (November 2011) all data has been collected due to the nature of the subject EDPM202. As it is only a Spring session subject, it was required that all data be collected in the semester that has just concluded, focusing on weeks 1–4 and 8, as the GCA was programmed into the subject during these weeks. As data collection has been concluded, data synthesis will be required within an initial investigation into the dominant trends and themes to emerge from the experiences of the participants. In the coming months, further reading as a part of the literature review is also needed, with the aim of a draft version of this research being written by March 2012 and the final copy completed by May 2012.

References