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AN INTEGRATED APPROACH TO TEACHING GAMES FOR UNDERSTANDING (TGfU)

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Abstract

The Teaching Games for Understanding (TGfU) approach developed by Bunker and Thorpe (1982) places a whole different approach to the teaching of games. The focus of the model is placing the student or athlete in a game situation where tactics, decision-making and problem solving is critical. Other variations and terminology include ; 'game sense', 'play practice', and 'game centred approach'. This paper will review the literature of TGfU. There are four categories of games: net/court, invasion, striking/fielding and target games. Teachers need to have a good understanding of the categories and sports and activities to be able to analyse them. In addition, they need to understand the questioning technique. One of the many advantages of TGfU is that it enables teachers to integrate their approach within a category and across categories. One way this is achieved is to analyse activities within categories and across to look at similarities and differences between the activities and sports. This can be specifically be achieved by analysing similarities and differences in techniques, strategies and tactics, rules and psychological variables. From here it is possible to program using as a basis the common variables before branching into specific differences. One of the advantages is that it enables students or athletes to experience different activities and sports. For example, with invasion games an integrated unit of Touch (Football), Oztag and Walla Rugby could be taught. This paper will conclude with the process of unit planning.

Introduction – Teaching Games for Understanding

Teaching Games for Understanding (TGfU) is a games based pedagogical model aimed at generating greater understanding of all aspects of games, while increasing physical activity levels, engagement, motivation and enjoyment in physical education lessons. (Forrest, Webb and Pearson, 2006), The model has been around in the literature since the early 1980s but it was not introduced to the Australian sporting community at large until 1996, when Rod Thorpe from Loughborough University, England was brought out by the Australian Sports Commission (ASC) and conducted TGfU workshops around the country. However, ten years since its inception, it has made little progress within the teaching community in Australia (Pearson, Webb and McKeen, 2005).

TGfU places an emphasis on the play, where tactical and strategic problems are posed in a modified game environment, ultimately drawing upon students to make decisions. It places the focus of a lesson on the student in a game situation where cognitive skills such as 'tactics, decision-making and problem solving are critical… 'with isolated technique development utilised only when the student recognises the need for it' (Webb & Thompson, 1998. p.1). There is other terminology and variations of Bunker and Thorpe's (1982) 'teaching games for understanding'. Some of these include: 'Game sense' (ASC, 1999), 'Play practice' (Launder, 2001), the 'Games concept approach' (Wright, Fry, McNeill, Tan, Tan & Schemp, 2001, cited in Light, 2003) and more recently, 'Playing for life' (ASC, 2005).

TGfU is a holistic teaching approach that encourages student based learning and problem solving. It focuses on teaching games through a conceptual approach, through concepts, tactics and strategies rather than through a basis of skill, a technical games teaching approach, or TGT. (Wright, McNeill, Fry and Wang, 2005)

Since Thorpe's visit, many sporting authorities (for example, Australian Sports Commission, Australian Touch Association, Australian Football Federation, Australian Rugby Union), universities and state education bodies have promoted the TGfU approach via professional development and accreditation courses over the last decade. Teaching and coaching resources have been developed and continually updated. A number of tertiary institutions across the country involved in physical education and sports coaching incorporated TGfU concepts into their curricula However, it has only been recently that the concept of TGfU has been written into secondary school syllabus documents. In 2005, a new *Personal Development, Health and Physical Education (PDHPE) Years 7–10 Syllabus* (Board of Studies, 2003) was implemented with Year 7 and Year 9 students in NSW secondary schools. One area that has undergone major changes within the syllabus has been that of the teaching of games, with the move towards a TGfU framework. This change has implications for practicing teachers in relation to both the content and teaching strategies traditionally utilised in the teaching of games.

Primary aged children have recently been exposed to TGfU concepts through the Australian Sports Commission's 'Playing for life' approach adopted in their Active After School Communities (AASC) coach training program. AASC is a national program that is part of the Australian Commonwealth Government's $116 million Building a Healthy, Active Australia package. It provides primary aged school

children with access to free, structured physical activity programs in the after school time slot of 3.30 pm to 5.30 pm. The program is designed to engage traditionally non-active children in physical activity and to build pathways with local community organizations, including sporting clubs (ASC, 2005). 'Playing for life' is an approach to coaching that uses games as the focus of development. By concentrating on game-based activities, children are able to: develop skills within a realistic and enjoyable context, rather than practising them in isolation and from a technical perspective. Become maximally engaged in dynamic game-based activities that use a fun approach to developing a range of motor skills' (ASC, 2005, p.53).

Research (Light, 2002, 2003; Thomas, 1997a; Turner & Martinek, 1999; Werner, Thorpe & Bunker, 1996) indicates the strengths of the TGfU approach and the desirability of it as one of the major approaches to the quality teaching of games. Light (2002) highlighted the effectiveness of TGfU for engagement and cognitive learning. Higher order thinking occurs from questioning and discussion about tactics and strategies and also 'through the intelligent movements of the body during games' (Light, 2002, p.23). Cognitive development through decision-making and tactical exploration are combined with skill development within modified games to provide meaningful contexts. Light (2002) suggests that it is difficult for some physical educators to address cognition in games. TGfU is one pedagogical approach that may assist teachers and coaches to address this issue.

Given the decreased involvement of children in physical activity, TGfU is aimed at encouraging children to become more tactically aware and to make better decisions during the game. As well, it encourages children to begin thinking strategically about game concepts whilst developing skills within a realistic context and most importantly, having fun. Essentially by focusing on the game (not necessarily the 'full' game), players are encouraged to develop a greater understanding of the game being played. Thomas (1997b) states that the desired effect of this is 'players/students who are more tactically aware and are able to make better decisions during the game, thereby adding to their enjoyment of playing the game' (p.3). Research by McKeen, Webb and Pearson (2005) support the increased enjoyment of students exposed to the TGfU approach compared to traditional teaching of games. TGfU has been shown to result in improved learning outcomes for students. Games are a significant component of the physical education curriculum, with research suggesting that '65 per cent or more of the time spent in physical education is allotted to games' (Werner et al, 1996, p.28).

The Implications of TGfU for teachers

There is no doubt a number of key aspects come to light. These include a deep understanding of games both within and across categories (target, invasion, striking/fielding and net/court) as is illustrated in a model for pre-service teachers (Forrest, Webb and Pearson 2006). The integrated approach refers to the ability to analyse and develop constructive lessons that go across sports and activities In addition, the response from teachers indicate the need to develop and understand the questioning technique. (Webb, Pearson and McKeen, 2005). Finally the need to program is critical as integrating units within and across categories will involve more innovative and stimulating lessons.

TGfU involves four categories and subcategories. They are invasion, net/wall, target and striking/fielding. Invasion are team games where the purpose is to invade the opponents territory with the aim being to score more points within the time limit than the opposing team, while endeavouring to keep their score to a minimum. Subcategories include where the ball can be carried or caught across the line (eg. Rugby league, rugby union, touch), it can be thrown or shot into a target (eg netball, basketball, handball, lacrosse) or it can be struck with a stick or foot into a target area (eg hockey, soccer, Australian rules football) (Webb, Pearson & Forrest, 2006). The aim of net/wall games is for a player or team to send an object into an opponent's court so that it cannot be played or returned within the court boundaries. Tennis and volleyball are examples of net games while squash and racquetball are wall games. Striking/fielding games is a contest between the fielding and batting team where the aim is to score more runs than the other team using the number of innings and time allowed. The aim of target games is to, place a projectile near or in a target in order to have the best possible score. The subcategories are unopposed or opposed. In unopposed games the accuracy of the player in relation to the target determines an individuals success (eg golf, archery, tenpin bowling). In opposed games the players have an opportunity to interfere with the target or oppositions ball in order to create an advantage for themselves (Webb, Pearson and Forrest 2006).

There are also three different teaching approaches with TGfU. These approaches include the full sided (larger numbers), small sided (small numbers) and games for outcomes (setting outcomes for the game) (Webb, Pearson and Forrest 2006).

In teacher education for an instructional model to work for pre-service teachers, the model needs to be relevant in their limited experience and their own immediate future as teachers (Howarth 2005). A deep understanding of games both within and across categories is essential for both pre-service and teachers' development. A four-phase model for pre-service teachers has been proposed (Forrest, Webb and Pearson 2006).

Phase 1
Elementary Understanding of Games within a Category

Phase 2
Elementary Understanding of Games across Categories

Phase 3
Advanced Understanding of a game within a Category

Phase 4
Advanced Understanding of Games within and across categories

Figure 1 –Theoretical Model for Games Understanding

The first phase of the model requires teachers to have an elementary understanding of games within a category. This involves deconstructing a game. Phase two

involves comparing games across categories so that principles of play, tactics and strategies, rules and technical skills are examined to find general similarities and differences. Phase three is the advanced understanding of a game within a category. This means that the teacher should have an appropriate level of games understanding to provide pedagogically challenging lessons for most students in secondary education classes. Phase four is the advanced understanding of games within categories. Teachers should analyse a series of games within a category developing a summary sheet of the game elements divided into the three subcategories. This will allow comparisons between games noting the areas of technique, rules and tactics and strategies that are similar and which are sport specific, allowing teachers to determine whether specific strategies of attack in squash can be used in or adapted for badminton, whether methods used to create an overlap in touch can be used to create an extra player in basketball offence (Forrest, Webb and Pearson, 2006).

The next step of TGfU is to make sure all pre-service teachers and teachers are beyond Phase 1 of the model and ideally are in Phases 3 and 4 in most activities. This is critical if we are to promote challenging environments and higher order thinking with Physical Education classes and coaching sessions. In order to achieve this it is essential that it is provided in both pre-service training and in professional skilling workshops for teachers.

Effective Questioning

As important to the whole TGfU approach of deep understanding of games is the art of successful questioning because without it the approach will not succeed. Questioning skills and the ability to develop appropriate activities to allow the questions to be answered are central to the success of the Game Sense (TGfU) approach (Light 2003) which are fundamental reasons for the approach being so valued as a pedagogical model of quality teaching (Pearson, Webb and McKeen, 2005). Questioning can be applied to four areas: strategies, technical, rules and psychological. It is important that teachers can move beyond the beginning stage of asking questions to an intermediate or advanced stage. An example of this related to Touch (Football) is as follows. The teacher may ask the following question: You are the person with the ball (the ball carrier) what are your options? Response “pass or run”. Teacher then says” When do you pass and when do you run?” Response: “You pass when you are about to be touched and you run when there is space”. Teacher says “Good answer”. However, the questioning has only reached the beginning stage as space could have many different meanings and scenarios to different participants. The teacher needs to extend this and provide different situations and questions. For example, for a winger the teacher may provide different situations and place players and then refocus the questioning. Again it is important that teachers through workshops move beyond the elementary phase of questioning.

Integrated Model for Unit and Lesson Planning

Finally, teachers need to be prepared to develop innovative and creative unit and lesson plans, Instead of a number of lessons on one sport or activity, eg touch football, the teacher can extend this to a second phase by integrating lessons across a subcategory eg a unit on touch (football), oztag, league tag and walla rugby. This

would allow the teacher to teach the common techniques and strategies before branching out to the individual activities. Further extension would involve unit planning across subcategories, eg netball, touch (football) and soccer. Next it could involve a whole category, eg Invading Space (Space Invaders) could be the unit title for exploring all invasion games. At the advanced stage of planning, a unit could be developed across categories, eg target and striking/fielding games.

Stage 1 Develop a unit on one sport

Stage 2 Develop a unit across a subcategory

Stage 3 Develop a unit across subcategories

Stage 4 Develop a unit for a category

Stage 5 Develop a unit across categories

Figure 2 Stages of Unit Planning

Whatever stage the teacher or student teacher is at, their unit plan can be greatly assisted by a TGfU analysis before they actually address the unit outcomes and teaching strategies. This can take place by following the process as outlined in Figure 3.

Phase 1
Choose a category and sub-category eg invasion with a sub-category of carrying the ball across the line

Phase 2
List the sports or activities to be analysed eg Touch Football, Walla Rugby, Oztag

Phase 3
Analyse the sports or activities under the headings of tactics, skills, rules and psychological

Phase 4
List the differences of the sports under the headings of tactics, skills, rules and psychological

Phase 5
Determine the unit plan for teaching the sports

Figure 3 – Five Phase Model for TGfU Analysis before undertaking unit planning

Once the TGfU analysis has been completed the stage is then set for unit and lesson planning to take place.

Conclusion

The teaching games for understanding framework has been adopted by teachers and coaches around Australia over the last ten years. Many professional workshops have been undertaken with teachers on TGfU so that many now have a base level of understanding of the concept.

There is still a gap between research on teaching and learning games and sport and TGfU practices and development. It is difficult for knowledge to penetrate into the existing practices of teachers and coaches (Grétiaigne, Richard & Griffin, 2005). Given that TGfU is still new for many current Physical and Health Education teachers and students, there needs to be continuing awareness and development of TGfU in teacher training institutions and coaching accreditation courses. This combined with continuing professional development courses/workshops for practicing teachers/coaches is paramount for the opportunity of the TGfU approach to be adopted by teachers and coaches throughout Australia.

It is only very recently that this combined approach of teaching and awareness of TGfU is becoming a common theme to games education in Australia. With TGfU concepts now being adopted in primary, secondary and tertiary curricula and supported with appropriate research and professional development, the foundation for TGfU in Australia has been laid. The transition from reading and talking about TGfU is finally moving towards coaches and teachers integrating the concepts into their teaching of games.

The next step requires teachers and pre-service training to move beyond the base level of understanding and move towards advanced knowledge of both an activity within a category of games to across categories. Inherent with this is a greater knowledge and application of the questioning technique. Finally creative unit and lesson planning will follow both within and across categories. The challenge is there to be taken.

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