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Paper Title: **Teaching Games for Understanding (TGfU) – 10 years in Australia.**

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Teaching Games for Understanding (TGfU) – 10 years in Australia.

ABSTRACT:

TGfU was introduced to the Australian sporting community in 1996, through workshops presented by Rod Thorpe who was visiting from Loughborough University, England. Now, 10 years on, with the concept having been the focus of many coaching workshops and professional development sessions for physical education teachers and sports coaches, one would expect that TGfU would be well known and utilised among these groups.

This paper reports on the knowledge, understanding and experience that first year physical and health education students at an Australian university have on TGfU. Seventy students were surveyed by questionnaire and then actively engaged in a variety of games that demonstrated the concept and the type of questioning that is prominent in the approach.

The students surveyed had studied physical education during their primary and secondary schooling, and many had been involved as players and coaches in a wide range of sports. Consequently, one would expect that these students would have had prior exposure to Teaching Games for Understanding. However, findings confirmed that this group of students had poor knowledge, understanding and experience of TGfU, thus questioning the extent that the approach has been adopted by Australian coaches and teachers of games over the last decade.

Introduction – Teaching Games for Understanding in Australia

Whist the concept Teaching Games for Understanding (TGfU) has been around in the literature since the early 1980s, 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.

Teaching Games for Understanding 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).

Teachers and coaches have been teaching games for many years in physical education lessons and with sporting teams. The difference with TGfU is the approach that is used. They key to the teacher/coach is the questioning technique and the relevance to the student of the introduction of rules and techniques. The focus is on the student and problem solving. In addition, fun is the key ingredient. TGfU is an approach to teaching that makes very effective use of active learning in that the students are learning though playing the games. The use of questioning is a powerful method of encouraging players to analyse their actions, both individually, and as a team. Questions will generally relate to a particular tactical aspect. Effective phrasing of questions can also help to guide the player to an answer, in the event that they are struggling with an activity. Age, experience and ability level of the players will affect the complexity of the questions used.

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 New South Wales (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 organisations, 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 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.

Light (2003) examined the response for Teaching Games for Understanding pedagogical approach in an Australian University to Bachelor of Education students studying primary teaching. Student evaluations were generally positive indicating an increase in enjoyment, understanding and cognitive

engagement in the games. In comparing games sense to skill-based teaching, Werner et al, (1996) state that…'while the teacher may be convinced that skill-based lessons are having a positive effect in that some immediate skill improvement is made, the social and skill related interactions might over time convince the youngsters of their lack of ability' (p.32). Thorpe and Bunker (1986, cited in Allison & Thorpe, 1997) argued that a skill-based approach to teaching less physically able students is likely to: '…result in a sense of failure, a lack of enjoyment, poor self-concept and subsequently inhibition of long term participation' (p.11). In contrast to this, the students who exhibited low physical and technical ability in the TGfU lessons consistently reported significantly higher and more positive scores for these same factors. 'It appears that a skills-based approach serves only to highlight, confirm and reinforce – often publicly – the pupils lack of physical ability' (Allison & Thorpe, 1997, p.12).

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).

Following TGfU workshops where participants were asked to identify what they perceived as the strengths of TGfU, a number of themes emerge. Teaching Games for Understanding was found to:

- encourage a holistic approach to the teaching of games
- develop critical thinking and problem solving
- develop deep knowledge and understanding of the game
- promote high levels of participation and enjoyment for participants
- promote player centred learning and relevance of skills and tactics
- cater for varying abilities
- foster efficiency in aspects of implementation

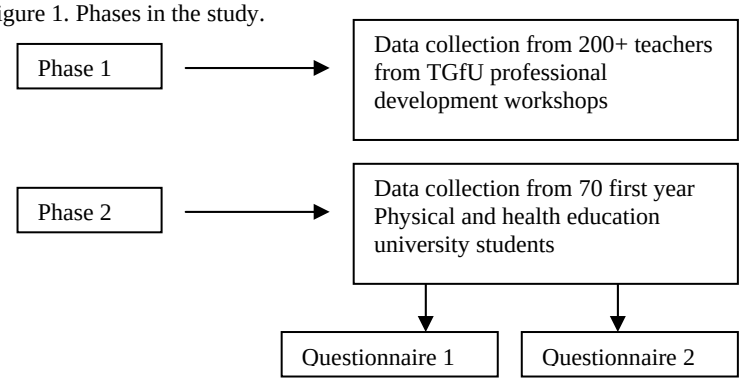
(Webb, Pearson & McKeen, 2005).

Investigating the knowledge and understanding of Teaching Games for Understanding as a strategy for teaching games

In order to investigate the current knowledge and understanding of TGfU, a two-stage process was implemented. The first stage involved a survey of practicing physical education teachers across New South Wales. This information was collected over 12 professional development workshops conducted by the authors during 2004-5. Results for the first stage demonstrated that there are still many Personal Development, health and Physical Education (PDHPE) teachers that have little knowledge of TGfU and who adopt the traditional skill development approach to the teaching of games (for full results see Pearson & Webb, 2005).

The second stage of the study surveyed first year physical and health education students at an Australian university. This paper reports on the results from the second stage of the study (see Figure 1). In the second stage, 70 first year physical and health education students completed a questionnaire prior to a theory and practical session (3 hour workshop) on TGfU in May, 2005. This questionnaire consisted of two main sections – their knowledge and understanding of TGfU and their experience/exposure to TGFU.

Figure 1. Phases in the study.



At the conclusion of the workshop, the participants were given a second questionnaire where they were again asked similar questions as to their knowledge and understanding of TGfU and to compare their knowledge and understanding prior to and after the workshop. They were also given the opportunity to reanswer the question on their experience of TGfU now that

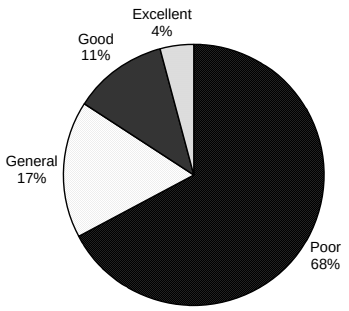
they had a working knowledge of the approach. Both surveys were analysed using the SPSS statistical package. Descriptive statistics were generated to provide frequency distributions for responses to each of the questions.

In responding to the first survey, a limited number of students were able to provide a basic definition for TGfU. Those that did respond and demonstrated some understanding of the approach to teaching games, mentioned modification of games but little else (16 students). Four students went further to include aspects such as encouraging teamwork and communication. Only one student from the 70 talked about game concept, problem solving, and decision-making. No students displayed knowledge of the four categories of games using the game sense approach. Students' self-reported knowledge and understanding of TGfU is displayed in Table 1 and represented in Figure 2. Prior experience/exposure to TGfU from the survey is shown in Table 2 and represented in Figure 3.

Knowledge	Poor	General	Good	Excellent
Responses	47	13	9	1

Table 1. Students' knowledge and understanding of TGfU (Questionnaire 1)

Figure 2

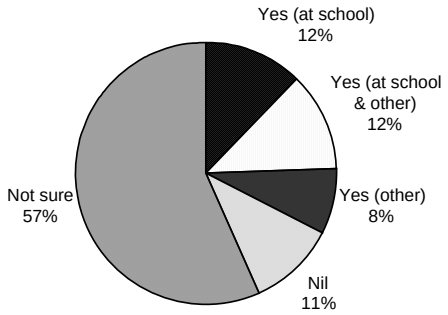


Experience	Yes (at school)	Yes (other)	Nil	Not sure
Responses	12*	12*	8	42

Table 2. Students' experience of Teaching Games for Understanding in Physical Education, sport or coaching (Questionnaire 1)

* some (6) students answered ‘yes’ for both these categories.

Figure 3



Other strategies to teaching games that were recalled by the students included traditional approach (warm-up, skill drills, game/modified game and cool-down), part-practice, video analysis and simply playing the game.

After this initial questionnaire, students were involved in a TGfU workshop as part of a first year subject, *Movement Concepts and Practices* where Physical and Health Education students are introduced to teaching strategies which can be implemented when teaching games to promote physical activity in both schools and the general community. Students participate in practical experiences which explore the fundamental principles underlying all movement and identify how these principles impact on the development of specialised skills. The workshop consisted of a theory component outlining the TGfU model, categories of games and different teaching/coaching approaches. This was followed by a practical session which involved the students in three categories of games – invasion, net/court and striking/fielding. Students rotated through each examining different teaching approaches with the focus on problem solving and decision-making. Specific activities for this session closely followed those described by Webb, Pearson and McKeen (2005).

At the conclusion of the workshop, the students were given the second questionnaire. A high percentage of students (75%) were then able to provide a meaningful definition of TGfU in relation to the concept being a problem-solving approach. All students were able to identify at least three of the four

categories of games. Table 3 shows students' self-reported knowledge and understanding of TGfU prior to and after the workshop.

Knowledge	Poor	General	Good	Excellent
Prior to workshop	50	15	3	2
After workshop	0	16	42	12

Table 3. Students' knowledge and understanding of TGfU (Questionnaire 2)

There is some variation between the figures shown here when compared to those in Table 1 from the first questionnaire. For example, three students originally answered excellent for knowledge in Questionnaire 1 but only two in questionnaire 2 for prior knowledge. A suggested reason for this is that some students re-evaluated just how much they did know about TGfU prior to the workshop after participation in the session.

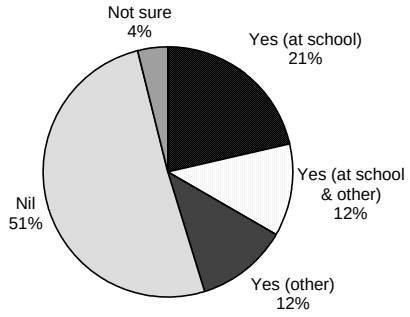
Table 4 indicates student responses when they were given the opportunity to reanswer the question on their experience of TGfU now that they had a working knowledge of the approach.

Experience	Yes (at school)	Yes (other)	Nil	Not sure
Responses	25*	18*	38	3

Table 4. Students' experience of Teaching Games for Understanding in Physical Education, sport or coaching (Questionnaire 2)
* some (9) students answered 'yes' for both these categories.

Table 4 demonstrates that there were a number of students that had prior experience to the TGfU approach than originally reported in Questionnaire 1. This increase in numbers provides a more positive sign that TGfU is being utilised as an approach in schools and the sporting community. However, the fact that more than half this group have had no experience or exposure to the TGfU approach further reinforces that TGfU has not been adopted as widely throughout the state and country as one would assume after ten years. Figure 4 graphically represents the students' experience of TGfU:

Figure 4



Students also had the opportunity to provide comments on the TGfU approach in the second questionnaire. Just over 85% of participants responded favourably to the approach, citing such things as higher enjoyment levels, development of understanding the game and skills required, high participation levels and inclusiveness. This concurs with previous findings (Light, 2003; McKeen, Webb & Pearson, 2005).

Conclusion

The Teaching Games for Understanding framework has been firmly adopted by universities and a number of sporting associations around Australia over the last ten years. The students surveyed in this study had experienced physical education and sport during their primary and secondary schooling, and many had been involved as players and coaches in a wide range of sports. Consequently, one would expect that these students would have had prior exposure to TGfU. However, findings confirmed that the majority of this group of students had poor knowledge, understanding and experience of TGfU, thus questioning the extent that TGfU has filtered down to coaches and teachers of games and sport in Australia.

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.

The nexus between teaching and research is paramount for academics associated with Faculties of Education who must concurrently be at the forefront of pre-service teacher training, innovation in multiple educational sectors and teacher professional development. It is, therefore, imperative that academics are active and leading members of their community of practice. Within the specialisation of physical and health education, key members of the community are: teacher educators (i.e., university-based academics); practicing teachers; and pre-service teachers (i.e., university students).

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.

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