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Philip J. Pearson
University of Wollongong, pearson@uow.edu.au

P. Webb
University of Wollongong, paul_webb@uow.edu.au

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Improving the quality of games teaching to promote physical activity

Phil Pearson and Paul Webb

University of Wollongong, Australia

Abstract

Teaching Games for Understanding (TGfU) was introduced in the 1980s and brought a new focus to the teaching of games. The participant is placed in a game situation where problem solving, decision-making and tactical understanding are vital ingredients. Another key ingredient is enjoyment to enhance and promote physical activity. In order to understand the factors that impact on the teaching of games that directly relate to a quality experience for the participant, the researchers surveyed 31 co-ordinators in the Australian Active After Schools Communities (AASC) program. This program is a structured physical activity program delivered nationally to children enrolled in Australian primary schools and Childcare benefit (CCB) approved out of Schools Hours Care Services (OSHCS) during the timeslot of 3.30-5.30pm. The program is designed to engage traditionally non-active children in structured physical activities and build pathways between local community organisations and sporting clubs. The 'Playing for Life' approach is based on the TGfU model that maximises participation and learning. The 31 coordinators consisted of 12 teachers, 2 Development Officers, 6 Sport Administrators and 11 coaches. The questionnaire addressed four areas: how the 'Playing for Life' approach in teaching games promoted physical activity; factors that enhance the teaching of games; factors inhibiting the teaching of games; and other strategies used in the teaching of games. Results indicate that a fun, innovative environment enhances the quality of physical activity. Other factors such as knowledge, resources and support that promote physical activity are also discussed.

Keywords: Physical activity, TGfU, Community

Introduction – Teaching Games for Understanding

TGfU places an emphasis on the play, where tactical and strategic problems are posed in a modified game environment, ultimately drawing upon players to make decisions. It places the focus on the player 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 player recognises the need for it' (Webb & Thompson, 1998. p.1). There are other terms 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' (Australian Sports Commission, 2005). Each of these has subtle differences but all aim to develop tactical understanding as a

focus to skill development. Whilst some authors argue the contrary, TGfU can be used as a general term to cover the different models.

Research and observation of games teaching in Australian schools typically show a series of highly structured lessons based heavily on the teaching of technique (Ho, 2003; Light, 2003b; Turner, 1996; Pearson & Webb, 2005). This format generally divides the lesson into an introductory activity, a skill phase and finishes with a game. This traditional model has consistently revealed a large percentage of children achieving little or no success due to the emphasis on performance, skilful players who possess inflexible techniques and poor decision-making capabilities, players who are dependent on the teacher/coach to make their decisions, and a majority of children who leave school knowing little about games (Werner, Thorpe & Bunker, 1996). The transition from technique learning to game play is difficult for children without an understanding of how and when to use their skills (Turner, 1996).

Using the game of hockey as an example, it is important that the player first has an understanding the game, that the ball must be moved down field, with the intention of scoring a goal. An appreciation of the game might include a grasp of the concept of moving down the field individually or as a team whilst thwarting the opponent's attempts to take control. One of many examples of tactics is passing to players on the wing to run the ball up field. Whether to have a shot at goals, or whether to pass to a player in a better position is where the skill of decision-making is required. Finally skill execution and performance is required to perform a flick shot to score in the top corner of the goals.

Teaching games for understanding is an approach to teaching games that makes very effective use of active learning in that the participants are learning though playing the games. Whilst 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.

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 (1997) 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 (2007) 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).

Since Thorpe's visit to Australia in 1996, 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. The concept of TGfU has now been written into NSW secondary school syllabus documents (Board of Studies, 2003). The teaching of games has moved 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. The Active After Schools Communities program (AASC) launched in 2005, adopts a derivative of TGfU called 'Playing for Life' (ASC, 2005). Playing for life (PFL) has a strong emphasis on catering to all children and ability levels when teaching games. The game is the focus with the teacher/coach being a facilitator with players providing feedback to make the game more or less challenging (ASC, 2008).

The Active After-school Communities program

Active After School Communities (AASC) program 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 (Australian Sports Commission, 2005). The AASC program was developed due to the increasing incidence of childhood obesity and sedentary behaviour in Australian children, the decline in time spent on physical education and sport in schools due to crowded curriculum, and a need to counteract societal changes which have impacted on the family's ability to involve children in extracurricular activities. The AASC program commenced in Term 2, 2005 with over 1400 school and Childcare Benefit approved Out of School Hour Care Services. These numbers grew dramatically over the first year to 90,000 children across 1756 sites (primary schools and OSHCS) being involved (Australian Sports Commission, 2006). The aim was to have 150,000 children involved across 3250 sites by the end of 2007. This goal was achieved with 150,000 children participating in over 3,000 sites across Australia (ASC, 2008). At the end of 2007, the program received further funding for a further three years through to 2010.

The AASC program has a key aim of enhancing the physical activity of primary school aged children, particularly those who have been inactive. Another aim is to develop in children a love of physical activity that will encourage them to be active throughout their life. The approach assists coaches to provide structured physical activity programs that are fun, engaging, motivating, challenging, safe and which maximise participation and cater for all ability levels. A key component to the program is the Playing for Life (PFL) approach to coaching that is based on the TGfU approach. Like TGfU, PFL is an approach to coaching that is 'game centred' rather than the traditional 'technique centred' approach. Unlike TGfU, PFL activities are not necessarily designed with a specific sport in mind (although they can be) and they may also have a multi-skill, general physical activity focus. 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. They become maximally engaged in dynamic game-based activities that use a fun approach to developing a range of motor skills' (Australian Sports Commission, 2005, p.53). This approach promotes maximum participation as well as promoting long term learning, catering for all abilities, assisting the beginner coach with limited technical knowledge of a sport and inexperience in group management and it encourages the child's understanding of the need for rules.

Key findings from the first year of operation of the AASC program include:

- 88% of children participating in AASC program were traditionally inactive prior to their participation
- 75% of children say they want to continue in ASC
- 81% of schools and OSHSC believe AASC encourages non-active children to spend more time participating in physical activities
- 91% of schools and OSHCS believe AASC improves the attitudes of non-active children towards physical activity
- 89% of schools and OSHCS report that AASC increases children's fundamental movement skills
- 74% of children feel they are better at physical activities since participating in AASC (Australian Sports Commission, 2006).

The Australian Sports Commission (ASC) has designed a Community Coach Training Program to accredit AASC coaches to deliver structured physical activity programs to primary school children. This program consists of six modules: Role of the AASC community coach (1 hour), communication and behaviour management (2 hours), safe environments (1.25 hours), nutrition and well-being (0.75 hours), PFL (6 hours), and planning, preparing and reviewing (3 hours). It is significant that the 'Playing for Life' approach has such a major role in the training program. The PFL module also aligns the categories of games to TGfU with target, net/court, striking/fielding, and invasion games forming the basis of the program. In addition, PFL focuses on three principles of games that set questions and challenges: time (when will you?), space (where will you?), and risk (which option?). The PFL session generally follows the format of: warm-up, small game, challenge/questions, further development of game, repeat process 3-4 times, small game, cool-down (Australian Sports Commission, 2005). There are now over 20,000 trained community coaches that assist in the implementation of the program throughout Australia (ASC, 2008).

The study

This study set out to determine what factors enhance or inhibit the teaching of games to children utilising the Playing for Life (PFL) approach adopted by the AASC program.

Methodology

The participants in the study were purposefully selected from a professional development workshop for AASC NSW regional coordinators conducted in 2006. Thirty-one AASC coordinators consisting of 12 teachers, 2 Development Officers, 6 Sport Administrators and 11 coaches, were surveyed to investigate the success of TGfU in the program. The questionnaire addressed four areas: how the Playing for Life approach in teaching games promoted physical activity and game understanding; factors that enhanced the teaching of games; factors that inhibit the teaching of games; and other strategies used in the teaching of games. The questionnaire was supported by a focus group interview with six of the coordinators. Data generated were analysed to identify common themes that emerged.

Results

Overall, the data revealed that a fun, innovative environment enhances the quality of games teaching. The responses to the four major survey questions from the coordinators are tabulated below (see Tables 1, 2, 3 and 4).

Table 1 Participant responses to Question 1.

Describe how you implement 'Playing for Life' in teaching games and promoting physical activity
Through a variety of games
Highlight questioning and inclusive practices
Developing game scenarios
Socratic questioning
Practical based learning
FISH principle-fun, inclusive, safe and have a component of high intensity
Having as many students active as possible
Learning by doing
Through small games

The responses in Table 1 were very positive in relation to the role PFL played in the success of the AASC program. This was supported by the focus group where the emphasis

was on progressively challenging the children and creating situations where they had to problem-solve.

Table 2 Participant responses to Question 2.

What factors enhance the teaching of games?
Calling on participants' experience
Demonstrations
Inclusivity
Knowledge of the games
Ability of students
Creativity
FISH principle-fun, inclusive, safe and have a component of high intensity
Have students involved in creating games
Communication
Questioning
Resources
Experience
Have a structure to meet outcomes
Many different games
Ask questions for changes that help the students have ownership of the games
Flexibility
Planning
Equipment
Empowerment

There are obviously many factors that influence the teaching of games. Many of the responses in Table 2 reflect the PFL/TGfU concept. The emphasis from the focus group was the role of the coach being a facilitator rather than a director, with each session consisting of player-centred activities.

Table 3 Participant responses to Question 3.

What factors inhibit the teaching of games?
Inflexibility
Lack of enthusiasm
Lack of resources-space, equipment and environment
Uninterested students
Lack of knowledge
Students lack of skills
Traditional methods
Weather
Behaviour of students
Wide range of abilities of participants
Group sizes too big
The game itself

The responses outlined in Table 3 are typical of most coaches that teach children. These were reinforced by the focus group that suggested the PFL approach counteracts many of these inhibitors by providing for maximum participation through its inclusive practices. They also emphasised that the PFL concept can be implemented well in reduced space and indoor areas.

Table 4 Participant responses to Question 4.

What other strategies do you utilise for the teaching of games?
Feedback from players
Learning by discovery
Fully inclusive
Balloon and simple games
Variety and flexibility
Try to relate strategies and techniques from different sports

A lot of contact with equipment
Exploring technical aspects of games

It is important to state that the TGfU/PFL approach is not the only pedagogical model for teaching games. However, the participant responses indicated that it is most certainly one that encapsulates the dimensions of the AASC program - allowing children of all abilities to participate, enjoy and contribute to the learning of games.

Discussion

The results highlighted that there are many factors that are important if we want children to remain active and participating in games. They include having plenty of variety of games and making sure that they are fun, inclusive, safe and have a component of high intensity (FISH principle). It is appropriate to challenge the participants through questioning through the TGfU approach and to keep them active through a learn-by-doing approach. As teachers/coaches we need to be creative, flexible, have knowledge of the games and the appropriate resources to implement them. The majority of responses that the ASSC coordinators provided in relation to enhancing the teaching of games were those that are the basis of TGfU. Whilst teachers and coaches interpret TGfU in different ways (Light, 2004), PFL provides a sound basis for coaches teaching games to children of all ages and abilities in the AASC program.

Teaching games for understanding in Australia has had increased awareness and exposure since the visit of Rod Thorpe in 1996. Teachers and coaches have received information and training through professional development workshops and through courses such as the AASC Community Coach accreditation. Coaches involved in the AASC program indicate that PFL enhances the quality of games teaching. It is important that the TGfU focus continue in all coach education programs so that more children remain active and wanting to participate in games because of the fun and challenging environments that this approach can provide.

The TGfU concept is now widely recognised in Australia. It is written in to school syllabi, coach training programs and pre-service teacher education programs. Continuing research into games teaching at a variety of delivery sites will assist in promoting long-term learning and enhancement of physical activity for all children.

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Corresponding Author: Dr. Phil Pearson, Faculty of Education, University of Wollongong, NSW 2522 Australia, Ph: 61 2 42213889; Fax: 61 2 42213892; e mail: phil_pearson@uow.edu.au