2012

Creative unit and lesson planning through a thematic/integrated approach to Teaching Games for Understanding (TGfU)

Paul I. Webb  
*University of Wollongong, paul_webb@uow.edu.au*

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

---

**Publication Details**

Creative unit and lesson planning through a thematic/integrated approach to Teaching Games for Understanding (TGfU)

Abstract
The Teaching Games for Understanding (TGfU) approach developed by Bunker and Thorpe (1982) involves a different approach to the traditional/technical model of 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. The purpose of this paper is to explore a model for unit and lesson planning used for pre-service Physical and Health Education students at an Australian University as part of the movement studies subjects. These subjects included invasion, striking/fielding, target and net/court games. This paper extends Webb and Pearson’s (2008) previous work focused on an integrated approach that referred to teachers having the ability to create units across sports and categories of games. The current research now also includes a thematic approach that according to Meldrum and Peters (2012) adopts themes that are suggestive of a range of teaching ideas and often integrate several topics. For example, a theme for invasion games could be ‘space invaders’ where the whole focus in the unit is on creating and closing down space. TGfU identifies four categories of games: net/court, invasion, striking/fielding and target games. In-service teachers need to have an understanding of the categories and have the ability to create innovative units of work and lessons using the Teaching Games for Understanding (TGfU) framework as well as including other curriculum models such as Creating and Designing Games (CDG) and Sport Education. The approach requires the pre-service teachers to acquire an understanding of games within and across categories. For this a four-phase model for pre-service teachers is utilised (Forrest, Webb and Pearson, 2006). They determine what makes for an effective player in these activities based on strategy/tactics, skills, rules and psychological factors. Similarities and differences are explored before deciding on a theme for the unit. A unit overview can then take place. The paper provides a practical example of the subcategory crossing the line games where three sports: Touch Football, Walla Rugby (modified game of Rugby Union involving a 2 handed touch, noncontested lineouts and scrums and a ball take) and Ultimate Frisbee will illustrate the approach with models such as Sport Education and Creating and Designing Games.

Keywords
unit, lesson, planning, thematic, integrated, approach, teaching, games, creative, understanding, tgfu

Disciplines
Education | Social and Behavioral Sciences

Publication Details

This journal article is available at Research Online: http://ro.uow.edu.au/sspapers/93
Creative unit and lesson planning through a thematic/integrated approach to Teaching Games for Understanding (TGfU)

Paul Webb and Phil Pearson-Faculty of Education, University of Wollongong, NSW, Australia.

Abstract

The Teaching Games for Understanding (TGfU) approach developed by Bunker and Thorpe (1982) places a whole different approach to the traditional/technical model of 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.

The purpose of this paper is to explore a model for unit and lesson planning used for pre-service Physical and Health Education students at an Australian University as part of the movement studies subjects. These subjects included invasion, striking/fielding, target and net/court games. This paper extends Webb and Pearson’s (2008) previous work focused on an integrated approach that referred to teachers having the ability to create units across sports and categories of games. The current research now also includes a thematic approach that according to Meldrum and Peters (2012) adopts themes that are suggestive of a range of teaching ideas and often integrate several topics. For example, a theme for invasion games could be ‘space invaders’ where the whole focus in the unit is on creating and closing down space.

TGfU identifies four categories of games: net/court, invasion, striking/fielding and target games. In-service teachers need to have an understanding of the categories and have the ability to create innovative units of work and lessons using the Teaching Games for Understanding (TGfU) framework as well as including other curriculum models such as Creating and Designing Games (CDG) and Sport Education. The approach requires the pre-service teachers to acquire an understanding of games within and across categories. For this a four-phase model for pre-service teachers is utilised (Forrest, Webb and Pearson, 2006). They determine what makes for an effective player in these activities based on strategy/tactics, skills, rules and psychological factors. Similarities and differences are explored before deciding on a theme for the unit. A unit overview can then take place. The paper provides a practical example of the subcategory crossing the line games where three sports: Touch Football, Walla Rugby (modified game of Rugby Union involving a 2 handed touch, non contested lineouts and scrums and a ball take) and Ultimate Frisbee will illustrate the approach with models such as Sport Education and Creating and Designing Games.
Introduction to the TGfU Approach

The TGfU approach developed by Bunker and Thorpe provides another approach to the traditional/technical model of 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. Isolated skill development is only utilised when the student or athlete recognises the need for it (Webb & Thompson, 1998). There are many variations of TGfU including Game Sense and Play Practice (Australia and New Zealand), the Tactical Decision Learning Model (Europe), the Tactical Games Approach (USA), Invasion Games Approach (Europe) and the Games Concept Approach (Singapore) (Butler, Oslin, Mitchell and Griffin, 2008).

In New Zealand there are pedagogies that assist in moving from technocratic/scientised/reproductive models of teaching physical education to physical education models that are more student centred, more productive, liberating and critical (Culpan and Galvan, 2012). These draw on models including Mosston and Ashworth’s (2002) spectrum of teaching styles and games based approaches such as play-teach play (Graham 2008), the Teaching Games for Understanding Curriculum model, the Tactical Games Model, Game Sense and Siedentop’s Sport Education model.

The Place of Games in the Curriculum

Sporting authorities and State Education bodies in Australia have promoted the TGfU approach via professional development and accreditation courses. In 2005, a new Personal Development, Health and Physical Education (PDHPE) Years 7–10 Syllabus replaced the current syllabus 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 Game Sense or Games for Understanding model. Similarly in New Zealand, NZHPE (1999) and New Zealand Curriculum (NZC) (2007), movement is conceptualised in its broadest sense with the significance, influence and functions of movement from both an individual and a societal perspective being studied. The teaching style is inquiry-based and reflective in nature. It encourages critical thought and challenges existing practice, and examines assumptions (Culpan and Galvan 2012). The original TGfU model proposed by Bunker and Thorpe (1982) advocated
the following principles: game form, game appreciation, tactical awareness, decision-making, skill execution and performance.

This change has implications for practicing teachers in relation to both the content and teaching strategies traditionally utilised in the teaching of games. Teachers 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. The key to this teaching method 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 through 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 can relate to a particular tactical, technical or rules 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.

TGfU has been shown to result in improved learning outcomes for students. The proportion of time devoted to games in physical education curricula is greater than any other component of the curriculum, thus adding to the significance of how games are taught (Hardman, 2008).

**Current Changes in Approaches in Countries**

New syllabus outcomes in New South Wales (Board of Studies, 2003) highlight the orientation to thinking and levels of cognitive engagement. In New Zealand the NZHPE (1999) and it’s revised counter-part The New Zealand Curriculum (2007) has a strong socio-critical orientation which draws significantly on a socio-critical humanist perspective (Culpan and Galvan, 2012). The Department for Education and Skills (2004) in England highlights the importance of inclusiveness in physical education with an emphasis on teachers having a deep knowledge and understanding of effective teaching strategies with a focus on student engagement and enjoyment. Whilst TGfU is not the only pedagogical model for teaching games, it is most
certainly one that can be used effectively to achieve the student outcomes. Research by McKeen, Webb and Pearson (2005) also supports the increased enjoyment of students exposed to the TGfU approach compared to traditional teaching of games.

**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 preservice 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. The need to program is critical as integrating units within and across categories will involve 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) (Forrest, Webb and Pearson 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 (Forrest, Webb and Pearson 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) (Forrest, Webb and Pearson 2006). In teacher education for an instructional model to work for preservice 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 preservice and teachers’ development. A four-phase model for preservice teachers has been proposed (Forrest, Webb and Pearson 2006).

<table>
<thead>
<tr>
<th>Phase 1</th>
<th>Elementary Understanding of Games within a Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phase 2</td>
<td>Elementary Understanding of Games across Categories</td>
</tr>
<tr>
<td>Phase 3</td>
<td>Advanced Understanding of a game within a Category</td>
</tr>
<tr>
<td>Phase 4</td>
<td>Advanced Understanding of Games within and across categories</td>
</tr>
</tbody>
</table>

**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 preservice 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 preservice skilling workshops and for teachers.

Activity Analysis
An activity analysis is an important step that the teacher needs to do in using the TGfU framework (Webb and Pearson 2008) before undertaking lesson and unit planning. They suggest analyzing the category or activity by listing all the elements required for an effective player in that category or activity. For example: what are the elements of an effective ultimate frisbee player? These elements can then be subdivided into the following: techniques or skills, strategies/tactics, fitness components and knowledge of the rules. Here are some examples:

Techniques or skills - throwing and catching
Strategies – using and eliminating space
Fitness - flexibility and speed
Knowledge of rules - how long a player can hold the Frisbee.

Following this analysis the teacher can then work out the specific problems and questions, which can be addressed for each of these components.

The Thematic Approach
Once the activity analysis has been conducted a theme for the unit can be decided. Meldrum and Peters (2012) describe a thematic model as one that adopts themes that are suggestive of a range of teaching ideas and often integrate several topics. For example, a theme can be ‘space invaders: crossing the line games’. This allows for the choice of any of the two or three dimensional crossing the line games. Two dimensional refers to sports where the ball is passed sideways or backwards while three dimensional refers to passing forwards, sideways or backwards. Examples of two dimensional games include touch football, rugby union, rugby league, oztag¹, etc.

¹ Similar to touch football but required to remove tag for a touch, kicking allowed.
while three dimensional crossing the line games include ultimate Frisbee, American Flag football etc.

**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. Target invaders could be a unit title for exploring target and invasion games.

<table>
<thead>
<tr>
<th>Stage 1</th>
<th>Develop a unit on one sport</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stage 2</td>
<td>Develop a unit across a subcategory</td>
</tr>
<tr>
<td>Stage 3</td>
<td>Develop a unit across subcategories</td>
</tr>
<tr>
<td>Stage 4</td>
<td>Develop a unit for a category</td>
</tr>
<tr>
<td>Stage 5</td>
<td>Develop a unit across categories</td>
</tr>
</tbody>
</table>

**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.

<table>
<thead>
<tr>
<th>Phase 1</th>
<th>Choose a category and subcategory eg invasion with a subcategory of carrying the ball across the line</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phase 2</td>
<td>List the sports or activities to be analysed eg Touch Football, Walla Rugby, Oztag</td>
</tr>
<tr>
<td>Phase 3</td>
<td>Analyse the sports or activities under the headings of tactics,</td>
</tr>
</tbody>
</table>

---

2 Modified version of rugby union, two-handed tag rather than tackle.
skills, rules and psychological

<table>
<thead>
<tr>
<th>Phase 4</th>
<th>List the differences of the sports under the headings of tactics, skills, rules and psychological</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phase 5</td>
<td>Determine the unit plan for teaching the sports</td>
</tr>
</tbody>
</table>

**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.

**Integrated Approach using different Curriculum models**

The integrated approach above can be extended to include different curriculum models within a TGfU unit. An example of this is the inclusion of Creating and Designing Games (CDG) and Sport Education in Physical Education Program (SEPEP).

**Creating and Defining Games (CDG)**

CDG provides an opportunity for a class to be involved in creating/developing and designing games (Almond 1983; Curtner-Smith 2005; Holt 2005 and Quay and Peters 2009) and provides further opportunities to develop understanding and enjoyment in target games. Quay and Peters (2009) advocate that groups of students (four teams in a class of 30) create a game using the structural variables provided by the teacher. The CDG variables include equipment, the number of participants, the skills, the space and time available, the issue of participation, simplicity of rules and scoring, the issue of safety. For example, challenge the students to design a game integrating ultimate Frisbee (three dimensional crossing the line game) and touch football (two dimensional crossing the line game) with 8-10 participants.

The process would then be a round robin format. In a class of 30 students allocate four teams. Each team creates a game and teaches it to the other team, in turn being taught the other team’s game - one interchange between teams for one lesson. Play the game and have the participants discuss how enjoyable, how safe, how participatory
and how easy is the game to understand. This enables feedback to be given to the

game designers and also makes the participants reflect on the game they have played.

Sport Education

The Sport Education model is defined by six primary features that create the sport
context in physical education (Siedentop, 1994, see also Siedentop, Hastie & Van Der Mars, 2004).

1. Seasons. Sport is played in seasons that contain both practice and competition.
2. Affiliation. Sport is played in teams and players connect with and usually
   belong to the one team for the season.
3. Formal competition. Sports seasons include a schedule of competitions
   between teams.
4. Record keeping. Records of individual and team participation are kept to
   provide feedback and enable goal setting by participants and the teacher.
5. Festivity. Individual and team performances are recognised and celebrated
   throughout the season and during a culminating end of season event.
6. Culminating event. Sport seasons typically come to a conclusion with a
   defining event. The seasons therefore conclude with a festival type of event
   that celebrates the success of all students who participated.

One of the key aspects of the Sport Education model is that students participate in
roles that are utilised in the sport environment. These can include coach,
referee/umpire, publicity officer, game analyzer, etc. As part of these roles questions
Can be set to guide the participant and to integrate TGfU with Sport Education. These
questions can be directed at cognition (concentration, communication, decision
making), strategy and tactics and technique.

A Practical Application of a Thematic/Integrated Approach with Crossing the
Line Games

Space invaders crossing the line games will be the theme. This represents phase one
of choosing the theme and category/subcategory. Phase two involves choosing the
games and three games will illustrate this: Ultimate Frisbee (3D), Touch Football
(2D) and Walla Rugby (2D). Ultimate is played with two teams of seven players where the object is to throw the Frisbee to a team-mate in the end zone. Players cannot run with the disc and have a ten second time limit with the Frisbee. Touch Football evolved from the rugby codes and involves six players per team on the field where the object of the game is to score a touchdown by crossing the scoreline and placing the ball down. Minimal contact is made by a defender as they effect a touch on the attacking player. Six touches are allowed before a change of possession. Walla Rugby is a modified form of Rugby Union that involves seven players per team and a two handed tag. The object is to score by crossing the line and placing the ball down. There are other elements of uncontested scrums and lineouts.

Phase three and four involve analysing the sports under the headings of strategies/tactics, skills, rules and psychological to determine the similarities and differences. With strategies/tactics we can analyse from an individual (one player), subteam (two or more players but not the whole team) and the whole team. For example, with ultimate Frisbee an individual strategy/tactic would be knowing when to pass and what type of pass, subteam could be using two or three players working together in attack or defence while team could be using a one on one defensive pattern or utilizing a zone where a player defends a space. With technical (skills/techniques) individual involves all the different throwing and catching techniques whereas a subteam and team example is passing down the line and all team members having power, speed and agility. Example of rules could include starting play, scoring etc. With psychological you can list all the requirements under various headings such as decision-making, goal setting, concentration and motivation. Having undertaken this analysis with one sport the same analysis would be undertaken with the other two sports. When this is completed you can circle the similarities that then leaves you with the differences.

Phase five then involves completing the unit. As three sports are being included the unit could consist of up to 10 lessons. After determining the outcomes for the unit it is then possible to determine the approach and structure. There are many different ways to do this and it is not possible to include all of them in this paper. One consideration would be to include the similarities between the sports in the early lessons which can then be followed by the differences and then with a culminating event where
participation can take place in all three in a round robin competition.

In the first lessons around commonalities the students can experiment with the various types of throwing and catching with the different equipment of disc and footballs including 2D and 3D. The questioning would be important eg What are the similarities for catching and passing a football and a disc? From this point small and full-sided games can be included with both 2 and 3D games. A full sided game with Ultimate can be five v five or six v six or seven v seven beginning with modified rules eg allowing three steps and having a person designated behind the line to throw the Frisbee to for scoring. Similar full-sided games can be undertaken with Touch Football and Walla Rugby which then allows for questioning around similarities and differences of the games. Small sided games can also be conducted around a similar vein eg two v two, three v three etc. At this point the inclusion of creating and defining games (CDG) to enhance student problem solving can enhance the integration of curriculum models. The teacher can set tasks around the variables for all three of the sports. Students can be divided into groups and set specific tasks of designing a game around the three sports and then presenting it to the other groups. For example, one group could be assigned Touch Football and set the task of designing a catch and pass game involving eight players with a maximum of two Touchballs, including safety factors and a question around each of the areas: strategies/tactics, technical, rules and psychological. Similar tasks can be set around the other sports with the participants given a participant feedback checklist.

Once the commonalities of the sports have been undertaken the middle lessons can focus on the individual sports utilizing a TGfU approach. The order for doing this can be starting with the 3D game first and then the 2D games. In this case Ultimate Frisbee, Touch Football and Walla Rugby and focusing on problem solving in the areas of strategies/tactics, technical, rules and Psychological factors.

The culminating lessons can provide the participants of playing all three sports in a competition format eg. a round robin. This then provides the opportunity for the participants to be involved in Sport Education roles such as participant, coach, referee, competition organizer, scorer, game analyzer etc.
This example of a unit is only one approach to the thematic/integrated approach to TGfU. There are many different ways that can be undertaken which can be situationally driven or dependent upon the needs of the participants. The key focus for teachers, teacher educators and coaches is to provide for movement in a relevant and meaningful context for the participants. Critical thinking will enable them to compare and contrast movement activities within a pervading theme allowing them to analyse strategies and tactics, rules, techniques and psychological factors.

**Conclusion**

In conclusion, this paper has analysed a thematic/integrated to creative unit planning for teachers for games. This requires teachers and pre-service teachers to move beyond a base level of understanding of a game and move towards advanced understanding of games both within a category and across categories with a pervading theme to provide innovative and creative units and lessons. The practical example around crossing the line games can be extended to all games and is only one way of applying the model. The teacher can approach unit planning from many different ways depending on the situation and needs assessment of the participants.

**References**


