Special Blog: Bunker and Thorpe's (1982) Curriculum Model

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Forming part of the celebrations for the 40th anniversary of the Teaching Games for Understanding (TGfU) model, monthly 'spotlights' were published on some of the key models/approaches within the field of Game-Based Approaches (GBAs). I am continuing this initiative by presenting Bunker and Thorpe's (1982) Curriculum Model, more commonly referred to as the TGfU model. Examples of the practical application of TGfU are provided below. Also included are videos of a key academic in the development of TGfU, Len Almond, in discussions with Alan Ovens at the 30th Anniversary Conference, and what is believed to be Len's keynote speech from the 1st International TGfU Conference in New Hampshire, 2001.

Introduction

The 'skills-as-drills' mastery approach has dominated PE teaching in England, yet despite having a long history, practitioners had been aware of its shortcomings since the 1960s (Kirk, 2010; Thorpe and Bunker, 1986). Because of concerns that pupils were not progressing, some practitioners rejected this approach based on the behaviourist model and were influenced by a range of philosophers and learner-centred teachings from such as Bruner, Piaget, Suits, Stenhouse and Vygotsky (Casey, 2014).

Challenging the teaching of individual sports using the mastery approach, Mauldon and Redfern (1969) published their four-stage approach for teaching in primary schools that presented pupils with a progressive thematic curriculum based on game classifications (Gambles and Griffin, 2023; Thorpe and Bunker, 1986).

During the 1960s lecturers at Loughborough University were advocating for the use of modified equipment/playing areas and modified games in PE lessons. A novel undergraduate course on the concepts of games expanded their interests to include exploring the problem-posing elements of games and to understanding them more deeply (Thorpe and Bunker, 1986). A major turning point came in 1978 when Len Almond unexpectedly observed Rod Thorpe teaching a class of post-graduate students and saw how he broke down the game of badminton into smaller games. Using the action research approach, the

Loughborough team trained teachers on their ideas on games, so they would trial them with their pupils and reflect on their practice.

TGfU is a game-based approach (GBA) to teaching PE that utilises developmentally appropriate modified games which are learner-centred with the aim of creating intelligent performers (Almond, 2015). Introduced in 1982 (Bunker and Thorpe, 1982), TGfU formed the basis for a Special Edition of the Bulletin of PE. As editor, Len Almond gathered together a series of short articles that presented the ideas of the Loughborough team as a new perspective on games and invited the community to enter into a dialogue of the strengths, weaknesses and possibilities they perceived from the approach. After the success of the 1982 journal a follow-up edition was published in Spring 1983 where the TGfU model was reprinted alongside examples of practical applications across a range of sports. Key articles were later reproduced in 'Rethinking Games Teaching' (Thorpe et al., 1986) to provide a more complete explanation of the understanding approach with accounts from practitioners who had applied them in their teaching contexts.

Curriculum Model

The TGfU Curriculum Model (Bunker and Thorpe, 1982: Figure 1) comprises a sequential six-step cycle centred around the learner where the aim is for the teacher to help the pupil improve their skilful performance.

1. Game: This modified game forms of a more complex game which are developmentally appropriate for the players.
2. Game Appreciation: Players need to understand the rules that shape the game as these set the scene for tactical awareness (i.e. step 3)
3. Tactical Awareness: Players need to be aware of the tactics which are appropriate for the game
4. Making appropriate decision- What to do, How to do it: Player awareness of the choices they need to make as events take place during the game.
5. Skill Execution: the actual production of the required movement as envisaged by the teachers and seen in the context of the learner and recognising the learners' limitations.
6. Performance: The observed outcome as a measure of appropriateness of response as well as efficiency of technique.

Once a cycle is completed successfully the game may be modified and the process repeated

Figure 1: The Curriculum Model (Bunker and Thorpe, 1982)

The Model employs constructivist principles with emphasis on problem-solving and teaching tactics prior to full skill acquisition to challenge the traditional behaviourist approach of teaching decontextualised skills in isolation from the game (Bunker and Thorpe, 1982). The Model also includes opportunity for a skills-based intervention on an individual basis if required after the student has first experienced the game.

Such a curriculum would provide a suitable array of game types from game categories to allow pupils to develop an overarching appreciation of their similarities and differences and create situational understanding which may be demonstrated by appropriate practical responses (Thorpe and Bunker, 2012).

Importantly, later Almond emphasised that 'the Model was not the model', he stated that it had been developed as a thinking process, and he highlighted the importance of the pedagogical principles to TGfU.

Pedagogical Principles

Introduced at the 1984 Olympic Scientific Congress, the Curriculum Model was expanded upon with four pedagogical principles; (i) game sampling, (ii) modification- Representation, (iii) modification-exaggeration and (iv) tactical complexity (Thorpe et al., 1986).

Contrary to the traditional approach of teaching one specific sport in a discrete unit, TGfU advocates for providing opportunities for learners to explore a range of different games (*game sampling*) (Thorpe et al., 1986), with the intention that they will begin to recognise the fundamental similarities and differences of games and gain an understanding of how to resolve the problems they pose (Thorpe et al., 1986).

Modification- Representation describes modifying the adult game into a simplified game form which is developmentally appropriate for the players yet retains its underlying tactical framework (Thorpe et al., 1986).

The pedagogical principle, *modification-exaggeration*, involves changing the secondary rules of the game to create specific tactical problems (Thorpe et al., 1986). Games within the same games category differ based on their secondary rules these include aspects such as; the number of players, the size/positioning of the goal, the dimensions/zones of the playing area, the size/types of play equipment, etc.

The fourth pedagogical principle, *tactical complexity,* refers to increasing the complexity of the game as pupils develop an understanding of the tactical problems and solutions, whilst ensuring that the game forms are appropriate for the players (Thorpe et al., 1986).

The four pedagogical principles are not mutually exclusive, for example, a PE curriculum that is developmentally appropriate for the child may be devised through the modification of equipment and sampling a wide variety of games with similar tactical demands (Thorpe et al., 1986).

Game Classification

A system for classifying games was required to facilitate the game sampling and representation processes. The development of a games classification system for TGfU (Almond, 1986a) was influenced by definitions for games from Mauldon and Redfern (1969) and Brackenridge (1979 cited in Almond, 1986b) along with game classification systems proposed by Mauldon and Redfern (1969) for primary school pupils and by Ellis (1984, presented at the 1983 AIESEP Conference in Rome cited in Almond, 1986a). In TGfU, games are assigned to categories on the basis of commonalities in the tactical problems they present (primary rules); invasion, target, net/wall and striking/fielding. Importantly, whilst similarities in technique within different sports are limited, tactical learning is transferable between games in the same class (Hopper, 1998).

Academics have since recognised that this four game form system excluded certain sports and activities whilst privileging others and have offered their revised categories. With the intention of encompassing a diverse range of sports Shane Pill proposed an additional category at the 2017 International Game Sense Conference, termed ‘competing’ for such as swimming, sailing, cycling, rowing and athletics (Pill, 2021).

GAME CATEGORIES						
TARGET	NET/WALL	STRIKING/FIELDING		INVASION/TERRITORY		COMPETING
Aim to target	Consistently return the object	*Batting*	*Fielding*	*With possession*	*Without possession*	?
		Score runs	Stop scoring runs	Score	Stop score	?
Placement in relation to target and other obstacles	Placement of object and Positioning based on placement	Accuracy and Distance of ball hit	Making hitting the ball difficult	Invade	Stop invading	?
Spin and/or turn	Spin and power	Avoid getting out	Get batter out	Keep possession	Get possession	?

Figure 2: Pill (2021) Game Classification

A 5th category, 'performance games', had also been suggested by Siedentop et al. (2011: Figure 3) which highlighted the balance between techniques and tactics across the game categories and sports. (My thanks to Prof. Shane Pill for kindly drawing this to my attention)

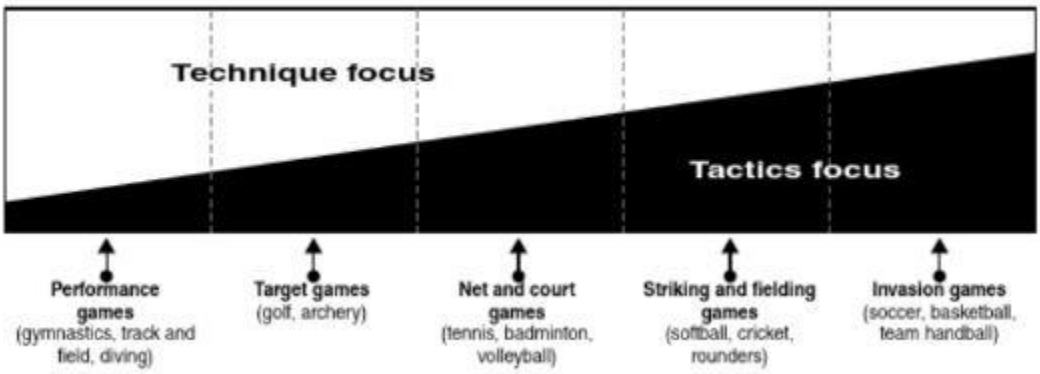

Figure 3: Balance between techniques and tactics across games (Siedentop et al., 2011)

In contrast to a traditional UK PE curriculum of competitive games, current participation trends indicate the popularity of physical activities that incorporate affective, performative and social aspects such as dance, cycle sports, athletics, and those that require gymnastic skills or tricks. In recognition of this, O'Connor et al. (2024) have tentatively presented five classes to expand beyond the boundaries of the

TGfU games categories; ‘lap or circuit sports, route or journey sports, rush or action sports, stunts or tricking sports and rhythmic or aesthetic sports.’.

Examples of TGfU in application

Rod Thorpe and David Bunker wrote several articles in the 1983 Spring Bulletin of PE and their 1986 co-authored book with Len Almond ‘Rethinking Games Teaching’. Within these articles they demonstrate how to apply the TGfU model to tennis, cricket, badminton, and basketball.

Bunker, D. (1983) Taking an understanding approach to the teaching of cricket- an example of a fielding game. Bulletin of Physical Education, 18(1), pp. 20-26.

Bunker, D. and Thorpe, R. (1986) From theory to practice. In Thorpe, R., Bunker, D. and Almond, L. (eds.) Rethinking games teaching. Loughborough: Loughborough University of Technology, pp. 11-16.

Thorpe, R. (1983) An ‘understanding approach’ to the teaching of tennis. Bulletin of Physical Education, 18(1), pp. 12-19.

Thorpe, R. (1986) A Demonstration of a Different Focus. In Thorpe, R., Bunker, D. and Almond, L. (eds.) Rethinking games teaching. Loughborough: Loughborough University of Technology, pp. 17-24

More recently:

Pill, S., Gambles, E-A.F. and Griffin, L. (2023) Teaching Games and Sport for Understanding. Routledge, New York, USA. ISBN 9781032287294

Gambles, E-A.F. and Anderson, S. (2025) Netball: Adapted Teaching Games for Understanding (England). In Farias, C., Pill, S. and Griffin, L. (eds.) Game-based Approaches in Physical Education: International Applications. Routledge, pp.33-47. ISBN 9781032723303.

Harvey, S. and Turner, A. (2025) Field Hockey: Teaching Games for Understanding (The USA). In Farias, C., Pill, S. and Griffin, L. (eds.) Game-based Approaches in Physical Education: International Applications. Routledge, pp.134-154. ISBN 9781032723303.

Gutierrez, D. and Segovia, Y. (2025) Pickleball: Application of Teaching Games for Understanding in Secondary Education (Spain). In Farias, C., Pill, S. and Griffin, L. (eds.) Game-based Approaches in Physical Education: International Applications. Routledge, pp.198-217. ISBN 9781032723303.

Varela, N. (2025) Softball: Teaching Games for Understanding (Argentina). In Farias, C., Pill, S. and Griffin, L. (eds.) Game-based Approaches in Physical Education: International Applications. Routledge, pp.219-237. ISBN 9781032723303.

Our TGfU SIG website also provides links to videos on how to apply TGfU in practice- click here

Growth of TGfU and Iterations

Since the initial publications of the 1980s, researchers have applied theories from the fields of learning and psychology to TGfU and GBAs that have served to legitimise and deepen our understanding (Gambles and Griffin, 2023; Ovens et al., 2021). The fundamental principles of TGfU have been used in the creation of pedagogical/curriculum models and subsequent hybridised models used around the world and underpin such as (but not limited to) the Tactical Games Model (Mitchell et al., 2021), Play with Purpose (Pill, 2007), Game Sense (Thorpe, 1996) and Inventing Games (Butler, 2016).

Consensus Statement

With the development of second generation GBAs it was recognised that there were confusing terminology issues as published journal articles used a range of generic terms to describe these types of pedagogy and that a consensus was required (Gambles and Gutierrez, 2023)

After long deliberation and debate the term, 'game-based approach' was chosen 't*o refer to the learner-centered teaching and coaching practice in which the modified games set the base and framework for developing thoughtful, creative, intelligent, and skilful players.*'

(Click here for link to the Game-Based Consensus Statement)

Final Thoughts

The introduction of the TGfU model has been viewed as a key historic moment in the development of the field of GBAs (Ovens et al., 2021). It emphasises that children of all abilities and ages can learn through a modified game when introduced at a developmentally appropriate level. The role of the teacher is to facilitate the learning environment, encouraging decision-making and problem-solving. Through teaching within the game, learners can develop both tactical awareness and their movement skills.

"While children may be pre-occupied with any one component of the model at any one time this will always be in the context of an appropriate game with the result that many of them will experience some of the satisfaction of the skilful player." (Bunker and Thorpe, 1982, p.8).

At our 30th anniversary conference held at Loughborough University, Alan Ovens sat down with one of the TGfU founders, Len Almond, to discuss the history of the TGfU model. Please check out this video to hear Len's recollection of the events surrounding the formation of the approach.

[30th Anniversary video- https://www.youtube.com/watch?v=-sBuSPpu03Y]

Also of interest is Len Almond's keynote speech at the first international TGfU conference (Plymouth State University, Waterville Valley, New Hampshire, USA in 2001) where he highlighted the influences from academia on the development of TGfU.

Thank you to the individual who recorded the keynote. The quality of the audio is poor in places as such I have created a transcript to the best of my ability. If anyone is able to add more please contact me.

[insert transcript file and Len Almond keynote- https://www.youtube.com/watch?v=8_46CG4ubS0&t=1s]

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