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Challenges, Practical Developments, and Future Directions: Twenty Years of Games-Based Teaching Experience in Schools

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INSPIRING LEARNING
TRANSFORMING TEACHING
ADVANCING RESEARCH

Context

- Introduction of the Games Concept Approach (GCA) as part of the National Curriculum Revision in 2000.
- Part of the Thinking Schools Learning Nation (TSLN, 1997) movement in the education system at that time.
- The GCA was adapted from Bunker & Thorpe (1982) *Teaching Games for Understanding* and Mitchell, Oslin & Griffin (1997) *Tactical Games Approach*.

Games-Related Concepts (MOE, 2016)

	Net-Barrier		Striking-Fielding		Territorial-Invasion	
Main intention of the game	To send the object (e.g. a ball or shuttle) back to the opponent so that he/she is not able to return it or is forced to make an error. The play area is separated by a barrier such as a net that is placed at a pre-determined height. Serving is the only time the object is held in hand.		To place the ball away from the fielder and score runs by advancing bases safely.		To attack the opponent's defending area and score a goal while protecting own goal at the same time. Scoring is achieved through sending and/or shooting an object (e.g. a ball) to a specific or target area accurately, or moving the object across an open-ended target (e.g. across a line).	
Games-related concept	Offence	Defence	Offence	Defence	Offence	Defence
	<ul style="list-style-type: none"> • Winning the point • Setting up an attack 	<ul style="list-style-type: none"> • Defending against an attack • Defending space 	<ul style="list-style-type: none"> • Sending into space • Advancing bases to score 	<ul style="list-style-type: none"> • Defending space • Defending bases 	<ul style="list-style-type: none"> • Keeping possession of the ball • Using space to invade • Creating space to invade • Attacking the goal 	<ul style="list-style-type: none"> • Regaining possession of the ball • Delaying the invasion • Denying space to invade • Denying scoring opportunity

Adapted from Butler, J. (1997), Mitchell, S. A., Oslin, J. L., & Griffin, L. L. (2006, 2013), & Ward, G. & Griggs, G. (2011).

Games Concept Approach Structure

GCA Structure

Situational game 1	A small-sided game with teacher-set conditions, designed to raise students' awareness of a games-related problem that could have a technical, conceptual, or tactical focus
Questioning	A teacher-facilitated question and answer session.
Developmental Focus	Small-group activities that explore potential resolutions to the initial problem wherein the teacher's role is to guide and facilitate students' responses.
Situational game 2	A second small-sided game whereby the students revisit the initial problem and are 'forced' to play-out rehearsed resolutions through teacher-set conditions.
Closure	Lesson debriefing wherein the teacher facilitates comparisons between situational games 1 and 2, builds understanding about the enhanced play, and scaffolds to other situations, including lessons which might follow.

Source: Children's perspectives on conceptual games teaching: a value-adding experience by Fry, J. M., Tan, C. W. K., McNeill, M. C., & Wright, S. (2010).

Challenges

- Lack of facilities in schools for maximum student participation
 - lack of indoor or covered playing space
 - especially so because of the inclement weather

Challenges

- Limited Teacher Capacity
 - at the primary level, as not all classes were taught by qualified PE teachers (QPETs)
 - for the QPETs, the issue was related to how they could represent the situational games to reflect the concepts, and ask related questions appropriately

Challenges

- Insufficient curriculum time to cover the concepts to some reasonable depth for understanding and to provide skill practices adequately

Practical Developments

- Programme for **Rebuilding** and **Improving Existing** schools (PRIME) and Primary Education Review and Implementation (PERI) Upgrading
 - ✓ Provision of Indoor Sports Hall & other facilities



Practical Developments



Practical Developments



Practical Developments

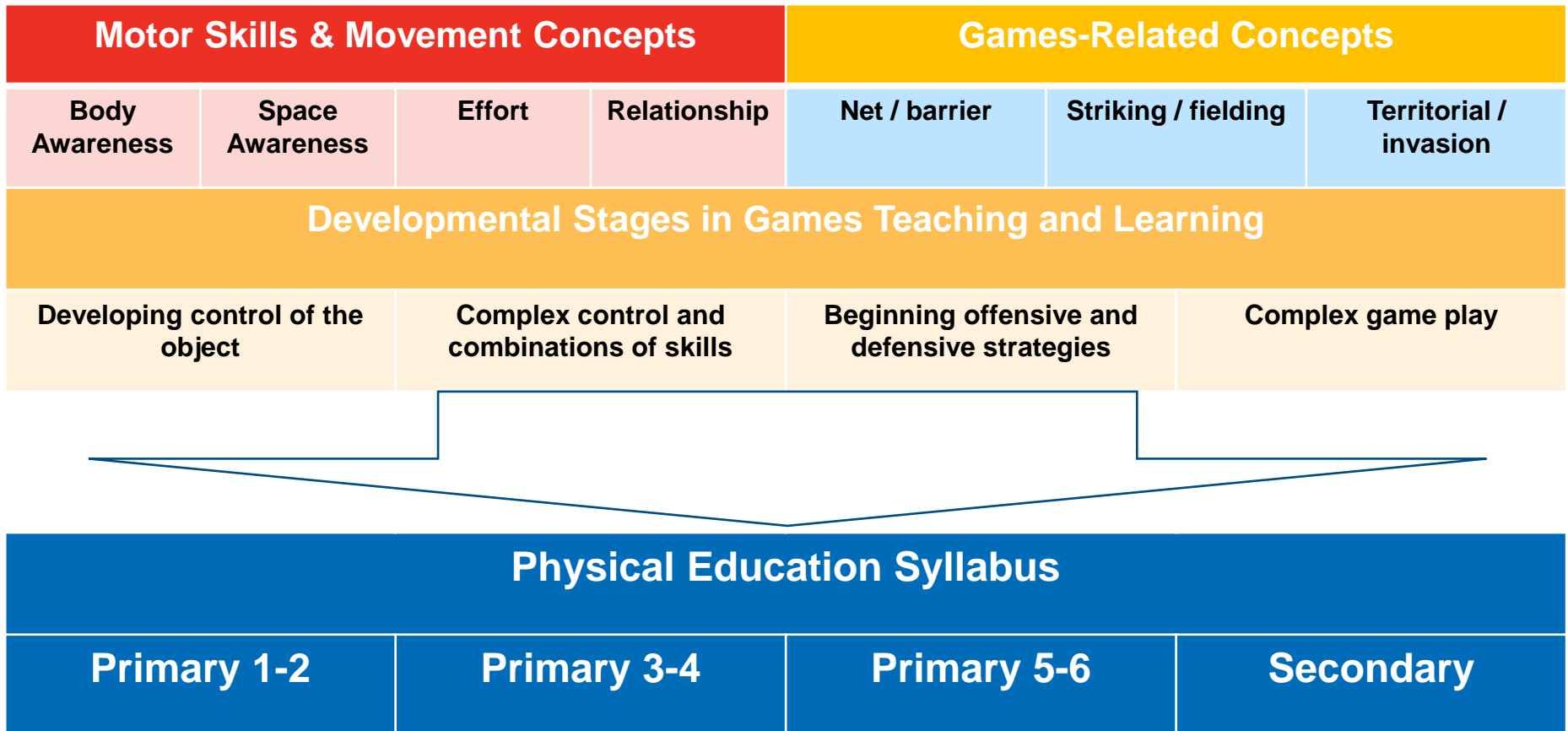
- *QPETs' single-subject specialization*
 - ✓ Majority of QPETs teach 100% PE
 - ✓ Revised PE Syllabus (2014-2016) to assist QPETs to link the game situations, questions, and skill development
(URL: https://www.moe.gov.sg/-/media/files/primary/physical_education_syllabus_2014)
 - ✓ Introduced recreational games

Practical Developments

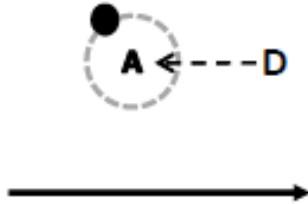
- *Increased in curriculum time from 2010*

	Primary	Secondary	Pre-University
PE Curriculum Hours	<u>P1 & P2:</u> 2 hours per week <u>P3 to P6:</u> 2.5 hours per week	<u>Sec 1 to Sec 4/5:</u> 2 hours per week	<u>Pre-U 1 to Pre-U 2/3:</u> 2 hours per week

Movement Skills & Games Concept Framework within Developmental Stages in Games Teaching and Learning (Rink, 2014)



Territorial-Invasion Category

Goal 1: Acquire a range of motor skills to participate in a variety of physical activities.				
Goal 2: Understand and apply movement concepts, principles and strategies in a range of physical activities.				
Offence Keeping Possession		Situational Game	Defence Regaining Possession	
Skill execution (how to do it)	Learning Outcomes (what to do)		Learning Outcomes (what to do)	Skill execution (how to do it)
	<p><u>Note:</u></p> <p><u>On-the-ball attacker</u> The decision is to request for support so that the situational game changes to a 2vX before the imposed time limit</p>	<p>1v1</p> <p>Condition</p> <ul style="list-style-type: none"> • Propelling is not allowed • Time limit imposed on ball possession • Tackling is not allowed 	<p><u>Note:</u></p> <p><u>On-the-ball defender</u> Wait for time to run out or anticipate the situational game to change to 2vX</p>	
<ul style="list-style-type: none"> • Shield the ball from the defender • Dribble while keeping away from a defender 	<p><u>On-the-ball attacker</u></p> <ul style="list-style-type: none"> • Protect the ball from on-the-ball defender by placing the body between the ball and the on-the-ball defender • Move beyond the personal space of the on-the ball defender 	<p>1v1</p> <p>Condition</p> <ul style="list-style-type: none"> • Propelling is allowed • Tackling is allowed  <p>Direction of attack</p>	<p><u>On-the-ball defender</u></p> <ul style="list-style-type: none"> • Move into the personal space of the on-the-ball attacker to get the ball back 	<ul style="list-style-type: none"> • Move into position to tackle

Situational Games

Refers to:

- the context of which a specific number of players from both teams are interacting in offence and defense,
- with conditions to the game played, and
- where players in the offence and defense have to decide what to do (i.e., decisions) specifically and to translate that decision into (how to do) movement skills.

Net-Barrier Category

Goal 1: Acquire a range of motor skills to participate in a variety of physical activities.

Goal 2: Understand and apply movement concepts, principles and strategies in a range of physical activities.

Offence Winning the Point		Situational Game ¹⁹	Defence Defending against an Attack	
Skill execution (how to do it)	Learning Outcomes (what to do)		Learning Outcomes (what to do)	Skill execution (how to do it)
<ul style="list-style-type: none"> Strike/Serve/Volley the object in the intended direction and move to the desired position 	<ul style="list-style-type: none"> Send the object into space that is located at either back (close to boundary) or front (close to the net or service line) away from the opponent to prevent the opponent from returning the object 	<p>1v1</p> <p>Shot placement to opponent's side (depth)</p>	<ul style="list-style-type: none"> Find the central base position to maximise court coverage Move from the central base position to return the shot Recover to the central base position after returning the object to maximise court coverage 	<ul style="list-style-type: none"> Move into position to strike/volley an object

Striking-Fielding Category

Goal 1: Acquire a range of motor skills to participate in a variety of physical activities.				
Goal 2: Understand and apply movement concepts, principles and strategies in a range of physical activities.				
Offence Sending into Space		Situational Game ²¹	Defence Defending Space	
Skill execution (how to do it)	Learning Outcomes (what to do)		Learning Outcomes (what to do)	Skill execution (how to do it)
<ul style="list-style-type: none"> • Strike/Kick/ Throw a ball so that it travels in the intended direction and move to the desired position 	<p><u>Hitter</u></p> <ul style="list-style-type: none"> • Send the ball²² into open space, away from the bases that the runners are approaching 	<p>2 and 4 bases</p>	<p><u>Before ball is sent</u></p> <ul style="list-style-type: none"> • Maximise coverage of the space as a team <p><u>After ball is sent</u></p> <ul style="list-style-type: none"> • Fielder closest to the ball fields the ball and throws towards the base the runner is approaching • Fielder closer to base to be in position to be ready to receive a fielded ball • Remaining fielders to support the fielding by being available to : <ul style="list-style-type: none"> ○ relay the pass when the ball is too far out in the outfield ○ retrieve the ball in the event of a fielding error 	<ul style="list-style-type: none"> • Move into position • Receive and send a ball to a teammate

Recreational Games (Secondary & Pre-University)

Game	Secondary	Pre-University
Badminton	Singles game with appropriate rules	Doubles game with appropriate rules
Volleyball	4v4 game with appropriate rules	
Softball	6v6 game with appropriate rules	
Basketball	3v3 half-court game with appropriate rules	3v3 half-court game with FIBA 3x3 rules
Floorball	4v4 game without goalkeeper with appropriate rules	
Football (soccer)	5v5 game without goalkeeper with appropriate rules	

Basketball Recreational Games

Games-related Concepts	Learning Outcomes (LO) What to do	Skills How to do
<p>Keeping possession of the ball</p>	<ol style="list-style-type: none"> 1. Pass the ball when guarded to a teammate who is free, dodge the defender and move into open space to receive the ball. 2. (Dodge the defender and move into open space), receive the ball with a jump or stride stop and pivot to a ready position to shoot, pass or dribble. 	<ul style="list-style-type: none"> • Footwork <ul style="list-style-type: none"> - 1-foot landing - 2-foot landing - Pivoting • Dodging <ul style="list-style-type: none"> - Body feint - L-cut - V-cut • Passing <ul style="list-style-type: none"> - Chest pass - Bounce pass - Overhead pass • Receiving

Future Directions

- MOE introduced the Assessment Resource Guide (ARG) (2019) to help PE specialists conducted formative assessment for learning in their teaching.
- Refer to Mr. Teng Tse Sheng (Master Teacher, PESTA) 'Assessing Games Performance & Understanding' presentation recorded on 19 March 2022 (URL: <http://www.tgfu.info/40th-anniversary-webinars.html>)

Acknowledgment & Thank You

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