

USING AN MLE APPROACH TO TEACHING GAMES CONCEPTS IN ADAPTED PE



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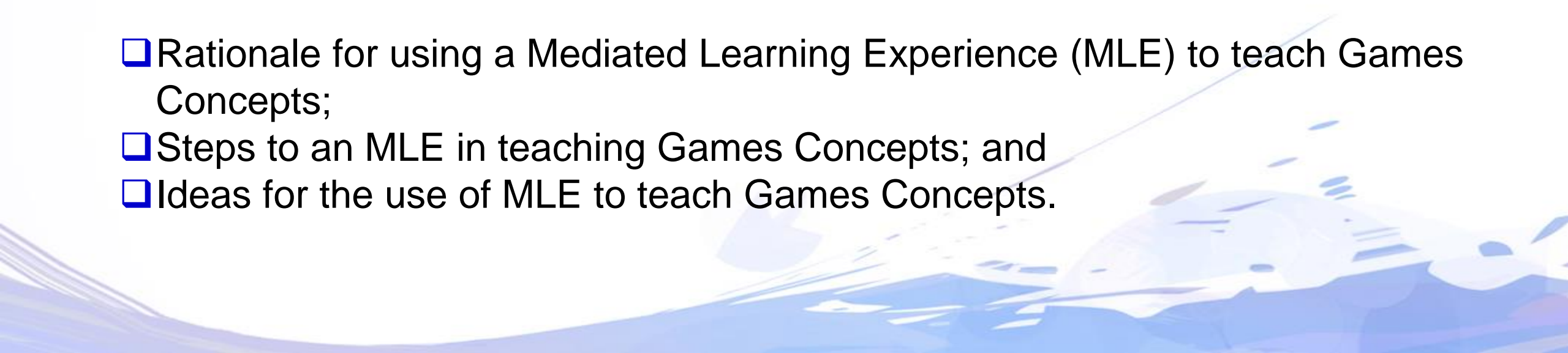
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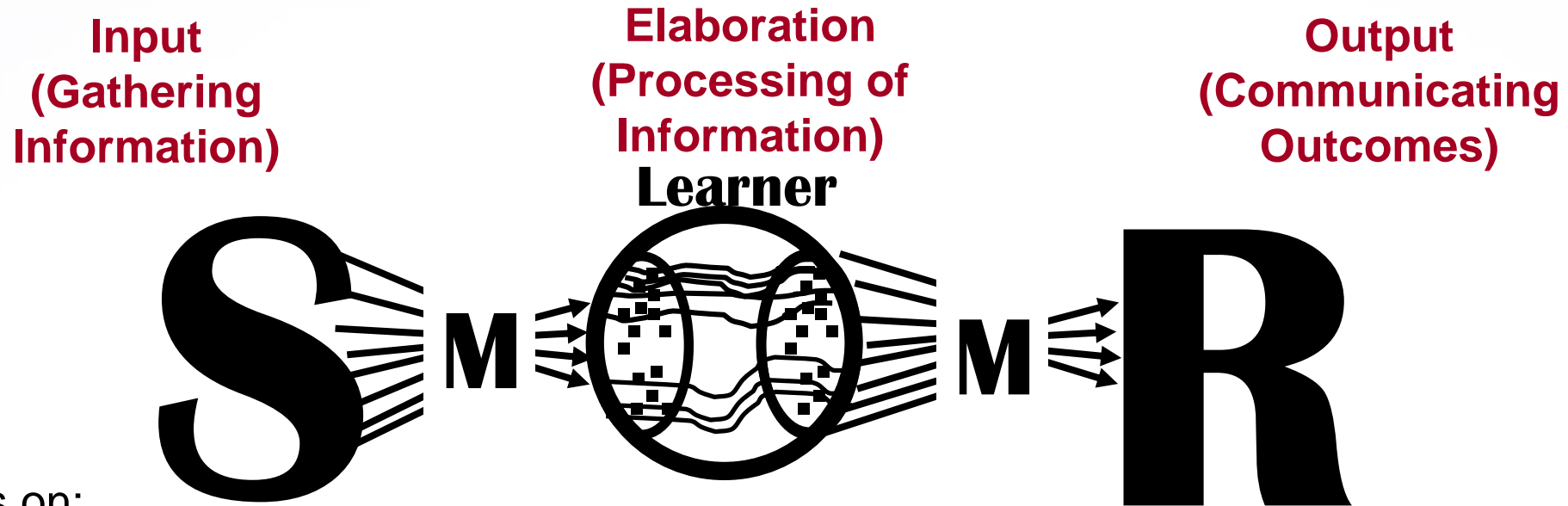
Why teach Games Concepts to students with special needs?

- ☐ Integration into society;
- ☐ Teaching 21st Century Competencies; and
- ☐ Providing Quality of Life.

What We hope to Share During This Session:

- ☐ Rationale for using a Mediated Learning Experience (MLE) to teach Games Concepts;
 - ☐ Steps to an MLE in teaching Games Concepts; and
 - ☐ Ideas for the use of MLE to teach Games Concepts.
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What's a Mediated Learning Experience or MLE?



- Focus on:
 - Potential for learning;
 - Using mediating factors to modify student learning directly;
 - 3 areas – input, elaboration and output; and
 - Supports development of cognition.

The quality of interaction between the individual and the environment via an intentional human being (the teacher) plays a pivotal role in the cognitive development of the individual (Tan, 2003, p55)

What does teaching Games Concepts to students with special needs look like?

- ☐ Receive (Input)
- ☐ Do I sense it?
- ☐ How am I sensing it?
- ☐ What am I sensing?

- Interpret (Elaboration)
- ☐ Do I understand the meaning of what I am sensing?
 - ☐ Have I experienced this before?

- Decide and Do (Output)
- ☐ What should I do?
 - ☐ Do I know what I should do?
 - ☐ Do it!

**External
Information
/ Stimuli**



**Sight
Hearing
Touch
Balance
Spatial
Awareness
Movement**



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Conditioned to Unconditioned



What is the teacher's role in this?

Ideation

- Forming an idea of what to do
- Using a known movement to achieve the expected outcome?

Planning

- Planning the actions required to enact the idea

Execution

- Performance of the planned actions

Feedback and Adaptation

- Reflection on the feedback so that movement can be adapted in the future
- Reinforcement of the desired actions

Is the output a movement issue or a manifestation of learning issues?

What kind of modifications, feedback or reinforcement is needed?

Things to Consider...

| Scenario | MLE Parameters | Key Observations about Learners and the Teacher |
|----------|---|--|
| Stage 1 | <input type="checkbox"/> Goal-seeking and Achieving (GO) <input type="checkbox"/> Intention and Reciprocity (IR) | <input type="checkbox"/> The Learners: There was expectation, curiosity and excitement. <input type="checkbox"/> The Teacher: There were clear learning objectives, meticulous planning, and creative design of the learning environment. |
| Stage 2 | <input type="checkbox"/> IR <input type="checkbox"/> Individual Esteem (IU) | <input type="checkbox"/> The Learners: They received a good idea of what they would be learning. <input type="checkbox"/> The Teacher: There was clarity of intention and she/ he ensured that every individual was with her/ him |
| Stage 3 | <input type="checkbox"/> Meaning (ME) <input type="checkbox"/> IR | <input type="checkbox"/> The Learners: They could see meaning and relevance in the learning. <input type="checkbox"/> The Teacher: There was clarity of explanation, impartation of meaning and engagement of students' attention and interest. |

Source: Tan Oon Seng, 2003. REACT Vol. 22 p53-63

Things to Consider...

| Scenario | MLE Parameters | Key Observations about Learners and the Teacher |
|----------|--|---|
| Stage 4 | <ul style="list-style-type: none"> <input type="checkbox"/> Reflective Practice (RP) <input type="checkbox"/> Challenge of Novelty (NC) <input type="checkbox"/> Interdependency and Sharing (IS) | <ul style="list-style-type: none"> <input type="checkbox"/> The Learners: They were stimulated to recall, think and connect knowledge. They saw something new. They had to learn with and from others. <input type="checkbox"/> The Teacher: She/ he provided challenge and facilitated thinking. She/ he provided opportunities for engaging learning in different modes thus catering to different learning styles. She/ he gave opportunities for pair and group learning. |
| Stage 5 | <ul style="list-style-type: none"> <input type="checkbox"/> Feeling of Competence (FC) <input type="checkbox"/> Search for Alternatives (OA) <input type="checkbox"/> Change Awareness (CA) <input type="checkbox"/> Transcendence (T) | <ul style="list-style-type: none"> <input type="checkbox"/> The Learners: They were developing the sense of “now I know”, “I can do it” and “I have learnt something important”. <input type="checkbox"/> The Teacher: She/ he got the learners to feel and be competent. She/ he presented innovative problems to demonstrate that there are alternatives and different possibilities to a solution. She/ he empowered learners to transfer their learning to relevant situations. |

What is Systematic Instruction?

How do we give these critical cues to bring about student's grasp of the games concepts?



Systematic instruction (Collins, 2012)

- ❑ Attentional Cues – General & Specific
 - Where's your opponent? (General)
 - Show me where you see your opponent (Specific)
- ❑ Prompts – Verbal, Gestural, Physical & Controlling
 - What coloured zone is your opponent in? (Direct Verbal)
 - What colour is that zone? The colour starts with “Buh” (Indirect Verbal)
 - Where should you throw the ball? (Teacher gestures/ points)
 - Teacher uses physical guidance to direct student (Physical)
 - Combination of prompts e.g. Verbal and Physical (Controlling)

Net Barrier Games

How do we plan an MLE?

| | |
|--|--|
| Selected Unit Learning Outcome | Games & Sports: Offence – Setting up an Attack |
| Selected Lesson Objective | Attacker: <input type="checkbox"/> Send the object into open space that is located close to the side boundaries and away from the opponent to prevent the opponent from returning the object. |
| Selected Lesson Objective for SPED Students | Attacker: <input type="checkbox"/> Send the ball into space close to the net, deep to the sides or behind the opponent to prevent the opponent from getting the ball. |

How do we plan an MLE?

| Initial Assessment (Input, elaboration & output phase) | Conditioned Stimuli (based on critical cues for Lesson objective and initial assessment – facilitates input phase) | Task/ Strategy Design – Conditioned Response (with focus on critical cues and desired response to support elaboration phase) | Expected Unconditioned Response (+ve within output phase) |
|--|--|--|--|
| <ul style="list-style-type: none"> <input type="checkbox"/> Able to catch and throw the ball with some level of competence <input type="checkbox"/> Tends to throw the ball directly to the opponent <input type="checkbox"/> Ability to identify open space not apparent <input type="checkbox"/> Tends to focus on part of the instruction | <ul style="list-style-type: none"> <input type="checkbox"/> Colour-code play area to direct focus to where opponent is or is not <input type="checkbox"/> Cues to be specific to where to throw the object – by zone; extended from “by zone” to “by position of opponent” | <ul style="list-style-type: none"> <input type="checkbox"/> Use of Systematic Instruction <ul style="list-style-type: none"> <input type="checkbox"/> Student to throw object to identified colour-coded zone – with teacher direction, then teacher-directed questions <input type="checkbox"/> Student to throw object to identified opponent position – with teacher direction, then teacher-directed questions | <ul style="list-style-type: none"> <input type="checkbox"/> Student navigates opponent’s position to place throw in open space away from opponent |



Impact of MLE

Case Studies: Send Object into Open Space Away from Opponent

| Case No | Difficulties | Pre-Intervention (5min) | | Post-Intervention (5min) | |
|---------|---------------|-------------------------|---------------|--------------------------|---------------|
| | | Appropriate | Inappropriate | Appropriate | Inappropriate |
| 1IN | ASD | 2 | 10 | 8 | 0 |
| 2JH | Down Syndrome | 0 | 6 | 22 | 5 |
| 3SH | MOID | 1 | 13 | 18 | 5 |
| 4JU | GDD | 1 | 10 | 22 | 5 |
| 5KI | MOID | 7 | 0 | 23 | 0 |
| 6JW | GDD | 0 | 5 | 23 | 2 |

Territorial Invasion Games

How do we plan an MLE?

| | |
|--|---|
| Selected Unit Learning Outcome | Games & Sports: Offence – Keeping Possession |
| Selected Lesson Objective | On-the-ball Attacker: <ul style="list-style-type: none"><input type="checkbox"/> Move beyond the personal space of the on-the-ball defender; and<input type="checkbox"/> Protect the ball from the on-the-ball defender by placing the body between the ball and the on-the-ball defender. |
| Selected Lesson Objective for SPED Students | On-the-ball Attacker: <ul style="list-style-type: none"><input type="checkbox"/> Protect the ball from the on-the-ball defender by placing the body between the ball and the on-the-ball defender. |

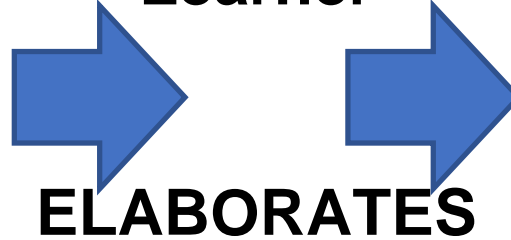
| Initial Assessment (Input, elaboration & output phase) | Conditioned Stimuli (based on critical cues for Lesson objective and initial assessment – facilitates input phase) | Task/ Strategy Design – Conditioned Response (with focus on critical cues and desired response to support elaboration phase) | Expected Unconditioned Response (+ve within output phase) |
|---|---|--|---|
| <ul style="list-style-type: none"> <input type="checkbox"/> Able to dribble stationary and on the move <input type="checkbox"/> Ability to recognise location spots <input type="checkbox"/> Ability to identify keep body between defender and ball not apparent <input type="checkbox"/> Needs prompting of the instruction given | <ul style="list-style-type: none"> <input type="checkbox"/> Colour-code play area to direct focus to where: <ul style="list-style-type: none"> ○ the defender is; ○ the ball should be; and ○ the attacker should be. <input type="checkbox"/> Cues to be specific to where: <ul style="list-style-type: none"> ○ to keep the ball; and ○ the attacker's body should be to prevent the defender from getting the ball. | <ul style="list-style-type: none"> <input type="checkbox"/> Use of Systematic Instruction <ul style="list-style-type: none"> <input type="checkbox"/> Ball and Body position identified by colour-coded location – with teacher direction, then teacher-directed questions <input type="checkbox"/> Ball and Body position identified by defender's position – with teacher direction, then teacher-directed questions | <ul style="list-style-type: none"> <input type="checkbox"/> Student navigates movement keeping his/ her body between the defender and the ball to keep possession. |

Moderator

S



Learner



ELABORATES

Moderator



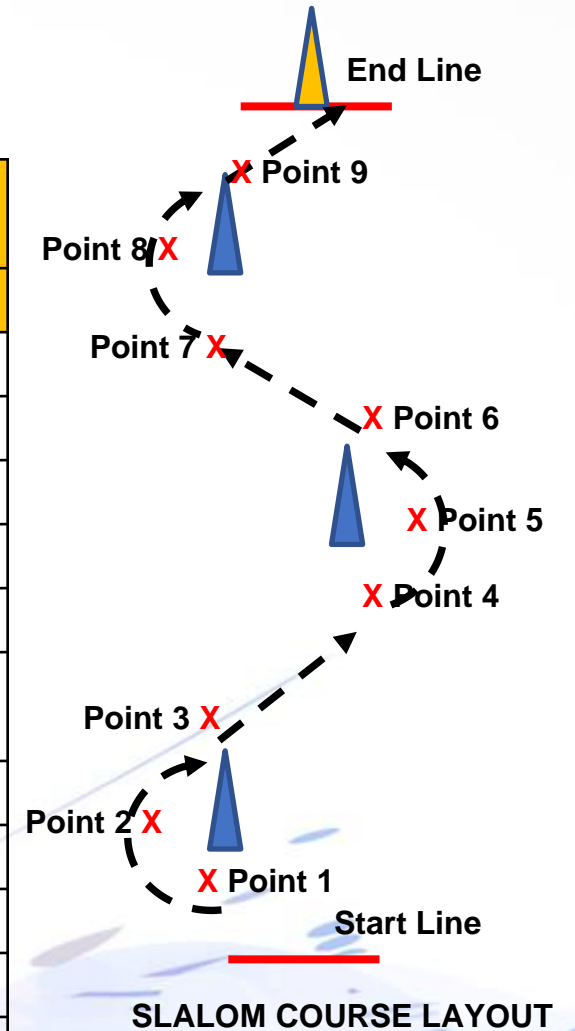
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- ☐ What's the Stimuli to focus on?
- ☐ How do we move students from input to elaborate to output as a moderator?
- ☐ How do we make the change from conditioned to unconditioned response?

Impact of MLE

Case Studies: Keeping Possession – Body between Ball and Defender

| Case No | Difficulties | Pre-Intervention (Slalom-3 Defenders/ 9 points) | | Post-Intervention (Slalom-3 Defenders/ 9 points) | |
|---------|----------------------|--|---------------|---|---------------|
| | | Appropriate | Inappropriate | Appropriate | Inappropriate |
| 1T | MSID | 0 | 9 | 4 | 5 |
| 2H | MSID | 0 | 9 | 3 | 6 |
| 3WJ | MSID | 0 | 9 | 9 | 0 |
| 4JY | MSID | 1 | 8 | 8 | 1 |
| 5KJ | MID/ ADHD | 0 | 9 | 5 | 4 |
| 6HR | MSID/ Down Syndrome | 0 | 9 | 9 | 0 |
| 7YP | MSID | 0 | 9 | 5 | 4 |
| 8Bi | MID | 0 | 9 | 9 | 0 |
| 9IC | MSID | 4 | 5 | 9 | 0 |
| 10H | MSID | 0 | 9 | 3 | 6 |
| 11Ba | MSID/ Downs Syndrome | 0 | 9 | 3 | 6 |



Using an MLE Approach to Games Concepts Teaching...

- ❑ Decide on extend of Games Concept to focus on;
 - What is it?
 - Where's it going to lead to?
- ❑ Determine students' profile (input phase) and skill level/ issue;
 - Diagnostic with modified GPAI – for concept/ skill level
- ❑ Design MLE plan
 - Expectations for Input, Elaboration, Output – conditioned and unconditioned;
 - Strategy to use:
 - Environment;
 - Systematic Instruction – Attentional cues (general/ specific), Prompts (verbal, gestural, physical, controlling)
 - Progression flow
- ❑ Intervention weeks
- ❑ Post-testing - impact

Small successes → Engaged learning

Significant improvement

QUALITY OF LIFE

**If a child can't learn the way we teach,
maybe we should teach the way they learn!**

~ Ignacio Estrada ~

**THANK
YOU**