



Dave Morley

**Professor of Physical
Education & Youth Sport**
Liverpool John Moores University

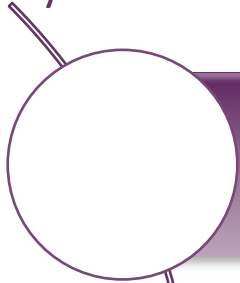


Competitive Engineering: Maximising Skill Development in Games

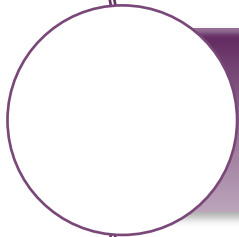


Outcomes

By the end of the session, you should be able to:



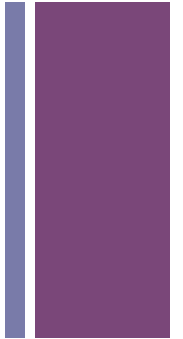
Describe Competitive Engineering (CE) and explain why you would use it.



Explore the uses of CE in a range of environments



Critically reflect on the experiences of athletes you coach and assess the potential for CE to enhance this...

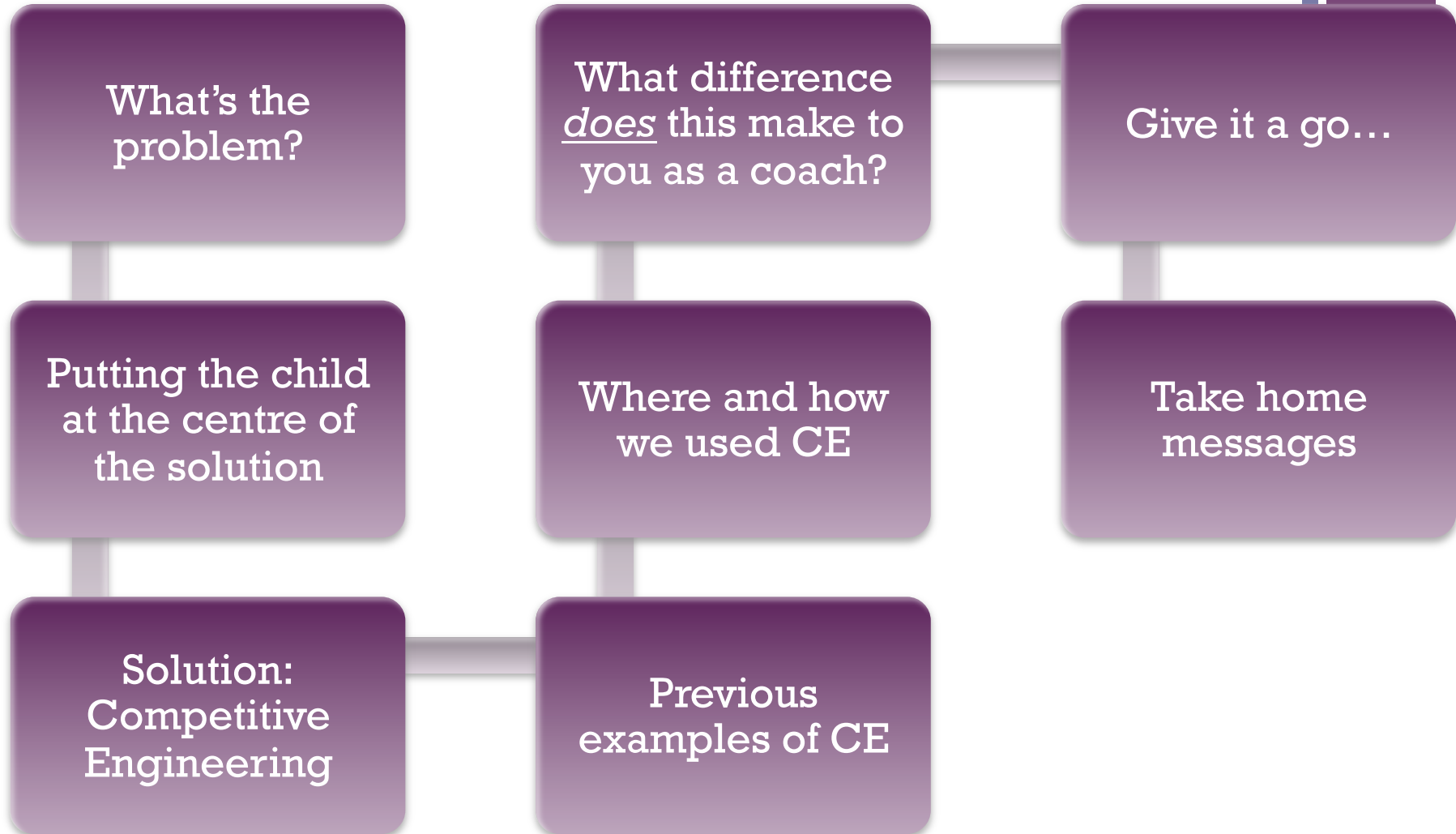


+ PRACTICAL ACTIVITY 1

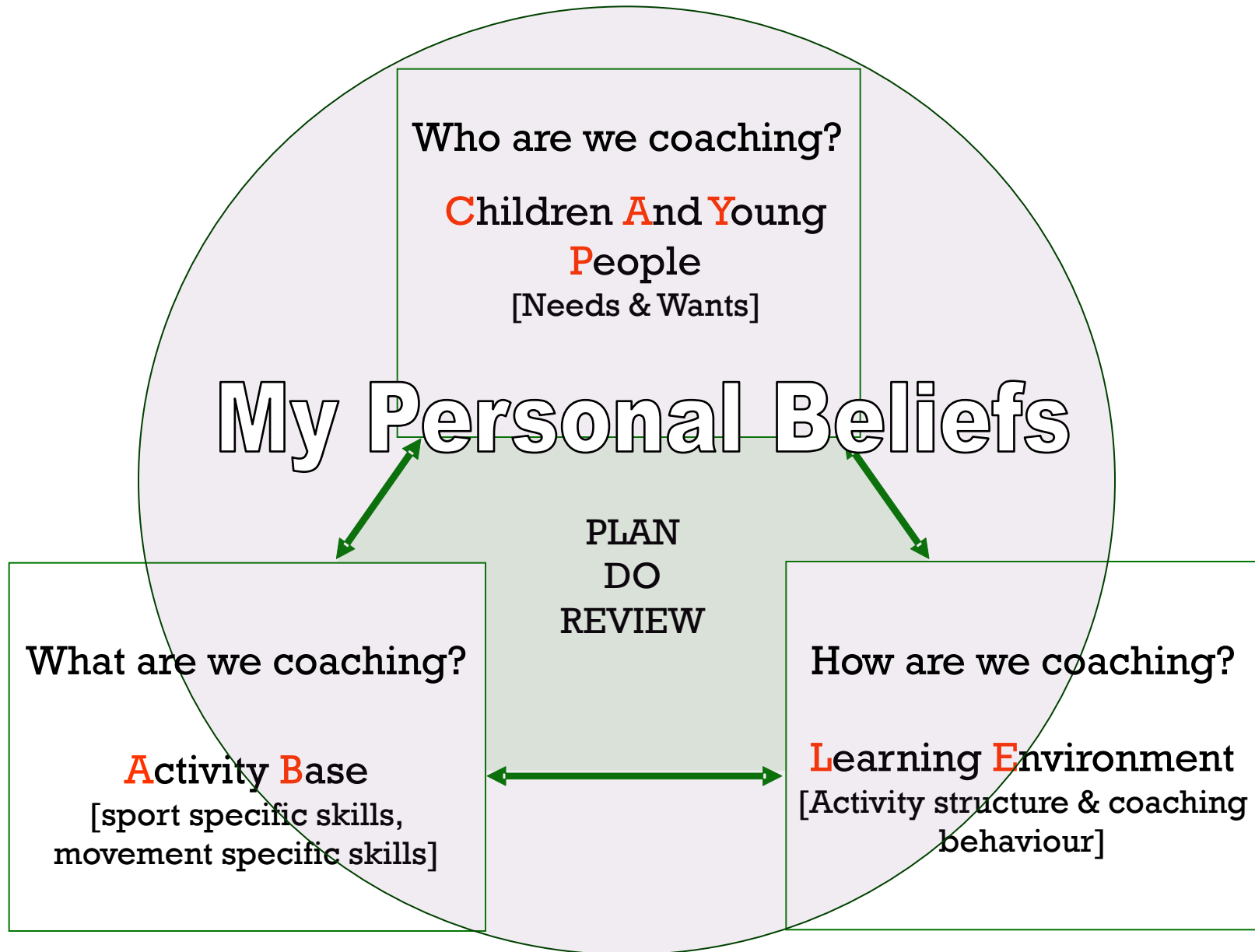


JUST PLAY

+ Presentation Overview



BECOMING 'CAYP-AB-LE'



+ Paired activity



- List what Children and Young People get out of playing sport

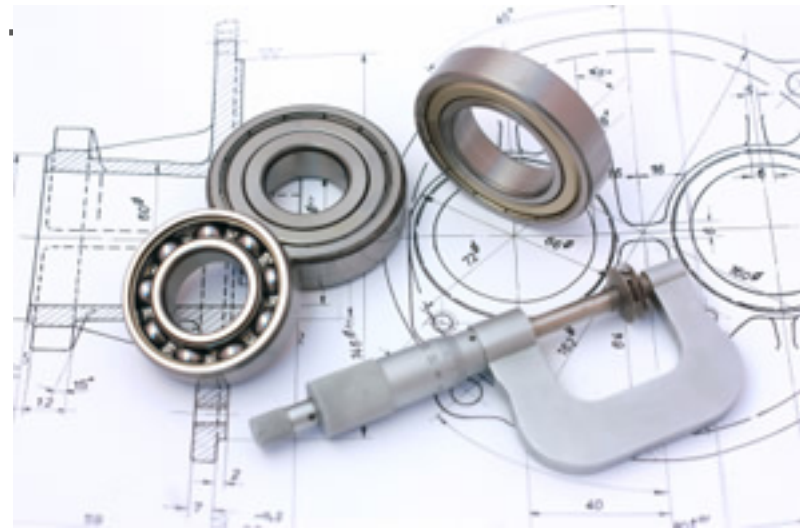


Putting the child at the centre of the solution



+ What is Competitive Engineering?

- 'A structural-based approach to changing the competitive environment of youth sports to provide more nurturing competitive experiences.
- CE attempts to enhance a variety of psychosocial outcomes by making systematic changes to the competitive environment in perform



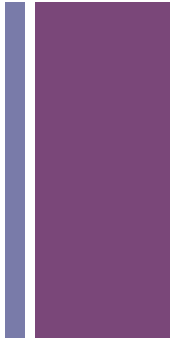
+ How does it work?

- Uses four strategies: modifying structure, rules, facilities and equipment
- To produce a number of psychosocial outcomes: increasing action and scoring, keeping scores close, enhancing personal involvement, and maintaining positive social relationships





What is CE?



Modifying the
game

Rules

Players

Pitch

Equipment

+ Why use CE?

Promote intrinsic motivation

Increase skill opportunities

Investigate what's the most appropriate competitive setting for young people



Are there previous examples of CE?



Gaelic football



Netball



Soccer (FA)



Flag Football

(Smaller ball & 3 second attack rule)

- Increase in points scored: 745 to 1158
- Increase from 27% to 47% of players scoring a goal



Rugby Football Union

(Reduced ball size, space & players)

- 55% more runs with the ball
- Approx. twice as many successful passes and tries scored

+ CE or modified games?



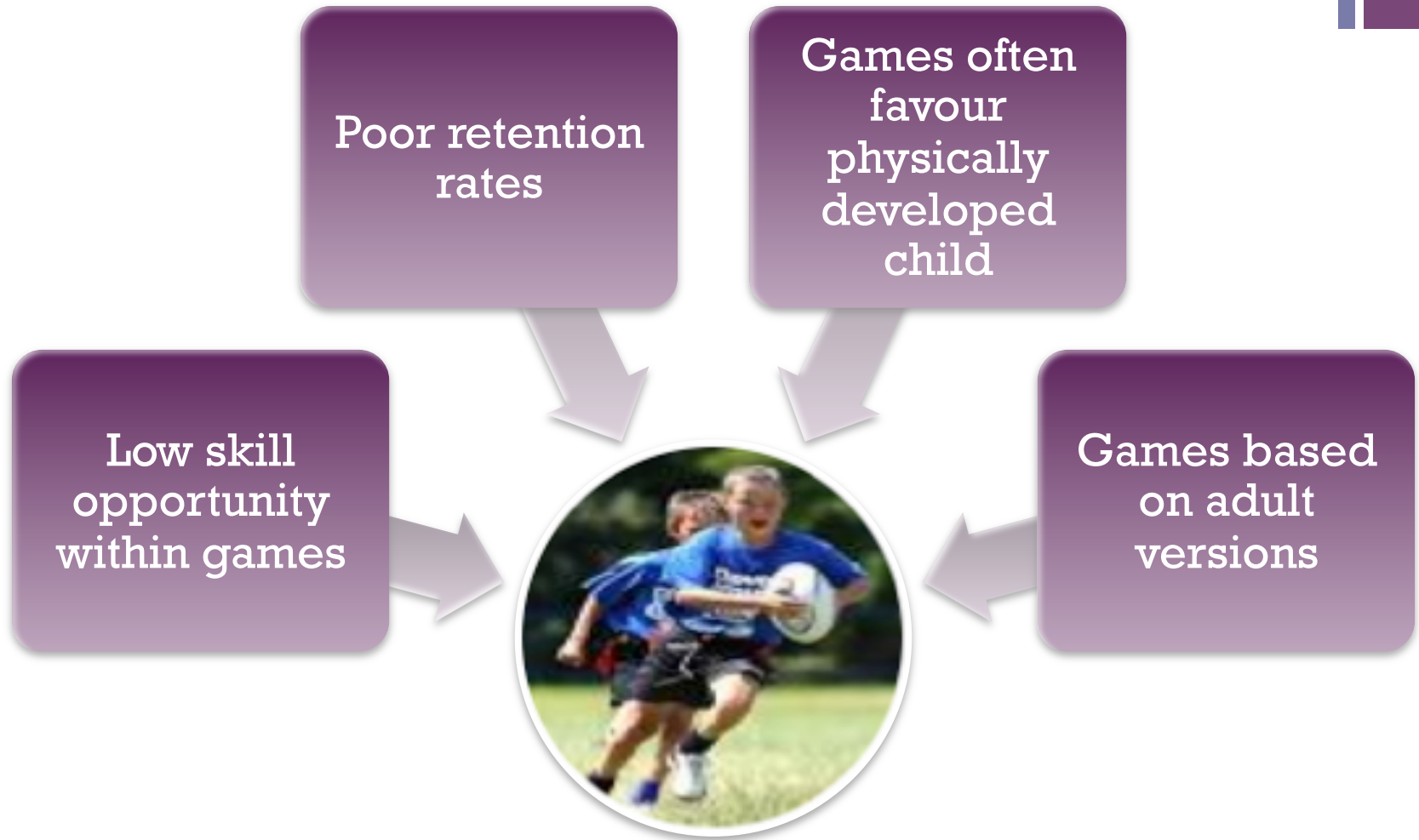
CE

- Athlete- centred
- Systematically analysed
- Individual outcomes

Modified games


- Team-focussed
- Subjective outcomes
- Coach-driven

+ What's the problem?



+ What's the problem?



Aimersoft 





The 'traditional' game of RL



	<i>Traditional</i>
Number of players	9v9
Pitch	60 x 40 m
Time	2 x 15 mins
No. of tackles	6
Type of tackle	<i>Tackle</i>
Play the ball	✓
Defending team retreat	5m
Passive marker	✓
Errors penalised	✓
Coach on pitch	✓
Player rotation	✗



How we used CE

	<i>Traditional</i>	Under 7s	Under 8s	Under 9s
Number of players	9v9	4v4	5v5	6v6
Pitch	60 x 40 m	20 x 12 m	20 x 15 m	25 x 18 m
Time	2 x 15 mins	8 x 5 mins	8 x 5 mins	8 x 6 mins
No. of tackles	6	6	6	6
Type of tackle	<i>Tackle</i>	Touch	Touch/ tackle	Tackle
Play the ball	✓	✗	✗	✓
Defending team retreat	5m	2m	2m	4m
Passive marker	✓	✗	✗	✓
Errors penalised	✓	✗	✗	✗
Coach on pitch	✓	✗	✗	✗
Player rotation	✗	✗	✗	✓





★ THE RUGBY LEAGUE ★
OF THE

EXTRAORDINARY

The players' early rugby experiences:

Before:
(Traditional)



Before	Skill	After
38	Skill Opps	112
1	Tries Scored	3
11	Passes	37
11	Catches	35
13	Tackles	32

After:
(new format)





What we found



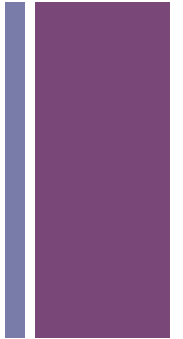
Statistically significant advantages resulting from the modified game over the traditional game



Of 51 key outcome variables, 30 indicated a superiority over the traditional game



Stronger significance was found in the under 7s and under 8s where most rules changes were introduced



★ THE RUGBY LEAGUE ★
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More
participation

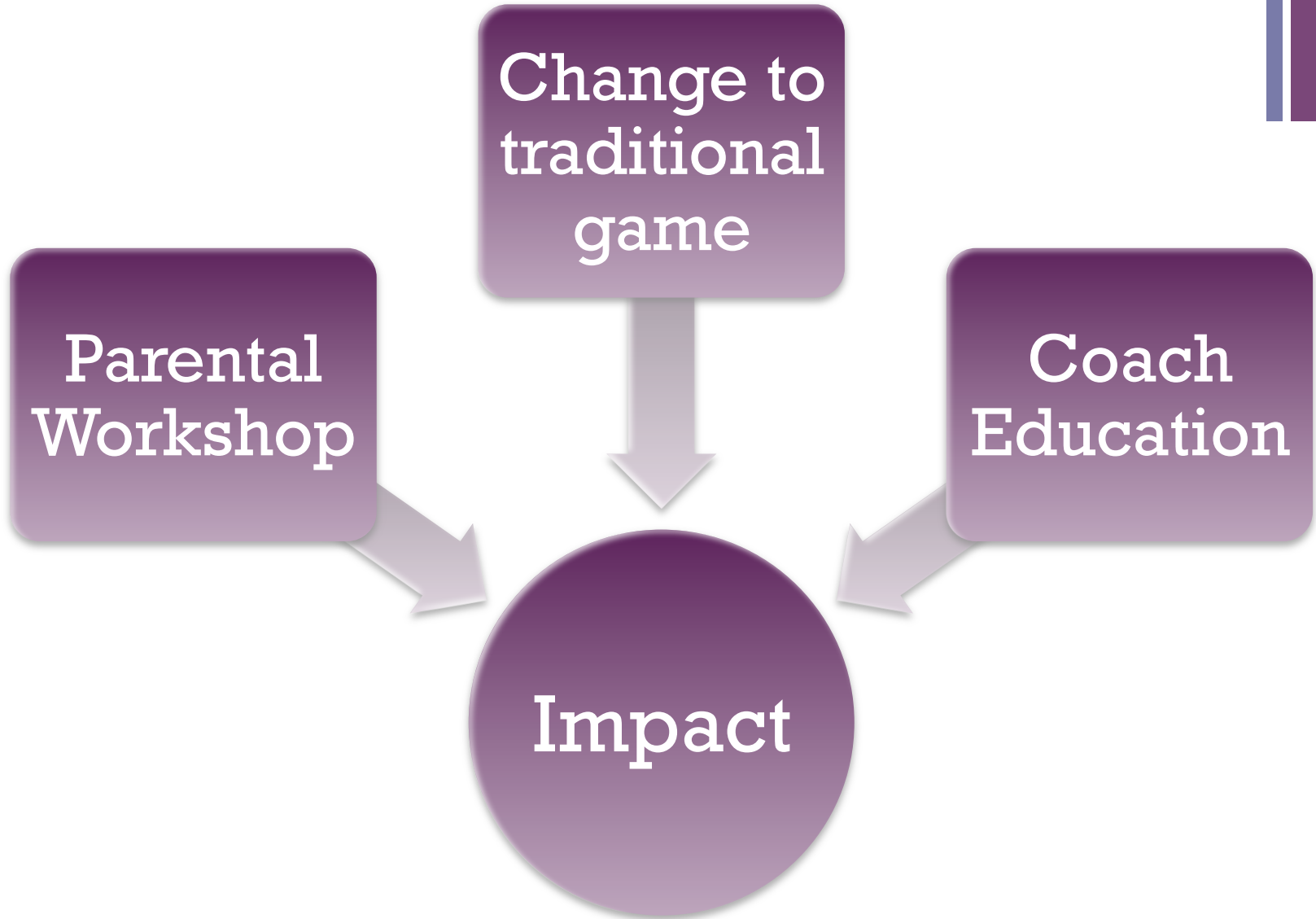
Improved
skill

More
enjoyment

**MOTIVATED
PLAYERS!**



+ Impact?



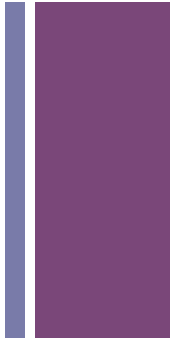
+ Rules

Primary Rules:

*Define the way a game is played –
Changing a primary rule alters
the game fundamentally.*

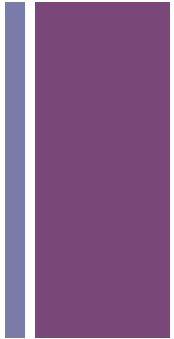
Secondary Rules:

*Those rules that can be changed
without changing the fundamental
nature of the game.*





What to engineer in team games?



Equipment	Gaining possession	Progression	Scoring
<p>Use larger balls Use slower balls.</p> <p>Use shorter handles on striking implements (e.g., hockey sticks)</p>	<p>Do not allow direct stealing of a ball from one player by another.</p> <p>Increase the ways in which a player can actually gain possession</p>	<p>Allow players some steps in games where none is allowed (e.g. Frisbee).</p> <p>Increase the time an individual player can have possession without being penalized or in which they must make a pass.</p> <p>Reduce the pressure on a player as she or he attempts to put the ball in play after an out-of-bounds play or a penalty (e.g. do not allow players to stand too close to the sideline).</p>	<p>Make a goal larger.</p> <p>Make a goal lower.</p> <p>Consider including the opportunity of scoring by progressing the ball (or object) across an end-line rather than into a specific goal.</p>

+ PRACTICAL 3



ANALYSE ENGINEERING



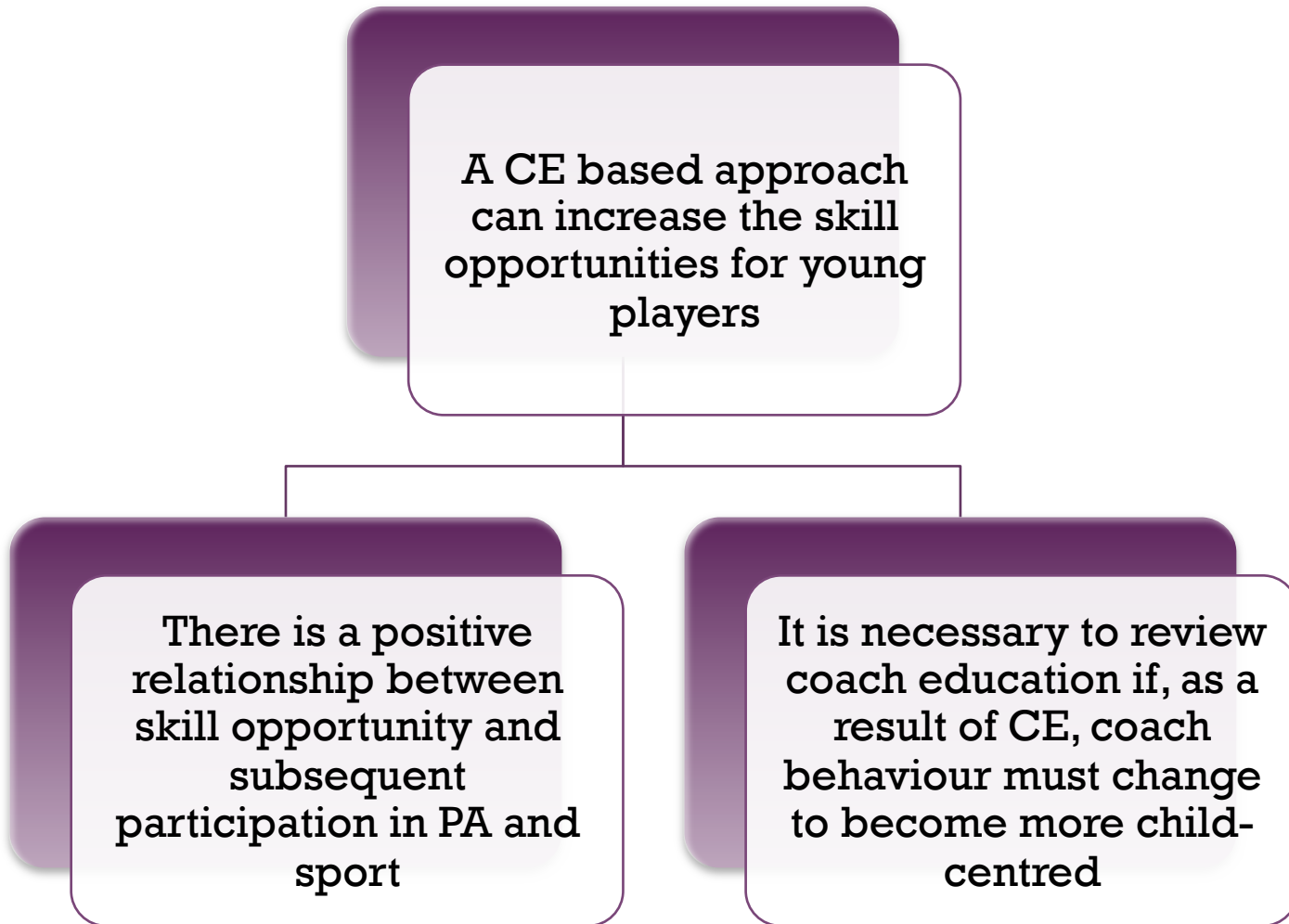
+ Discussion

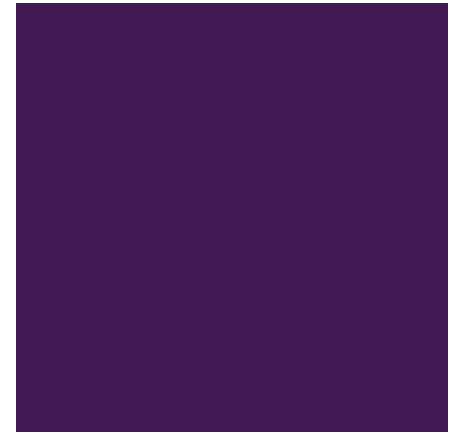
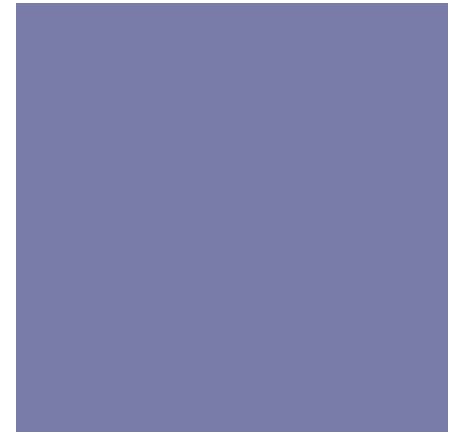


- What worked/ didn't work well? How do you know?
- Which of the four engineering options are harder/easier to use? Why?
- Which Athlete Engagement Goals are easier/ harder to analyse? Why?
- Could CE have an impact on your future coaching practice? If so, how? If not, why?



What are the take home messages?





Questions?