Prifysgol Cymru
Y Drindod Dewi Sant
University of Wales
Trinity Saint David

BMPE4005 Physical Education and Aquatic Activities

Semester 2

- WK 2 - Learning Theories

Mara Mata

Trawsnewid Addysg; Trawsnewid Bywydau
Transforming Education; Transforming Lives

Plan for Today

- Develop an understanding of Behaviourism and Constructivism Learning Theories;

- Explore their implications in Sport and PE.

WARM UP TASK

Think back to a learning experience **where you really accomplished/mastered something**

- Describe the learning environment
- What activities were you involved in?
- What did it feel like?
- What did the educator do to develop your learning?

Check others' answers. Can you draw any tentative conclusions?

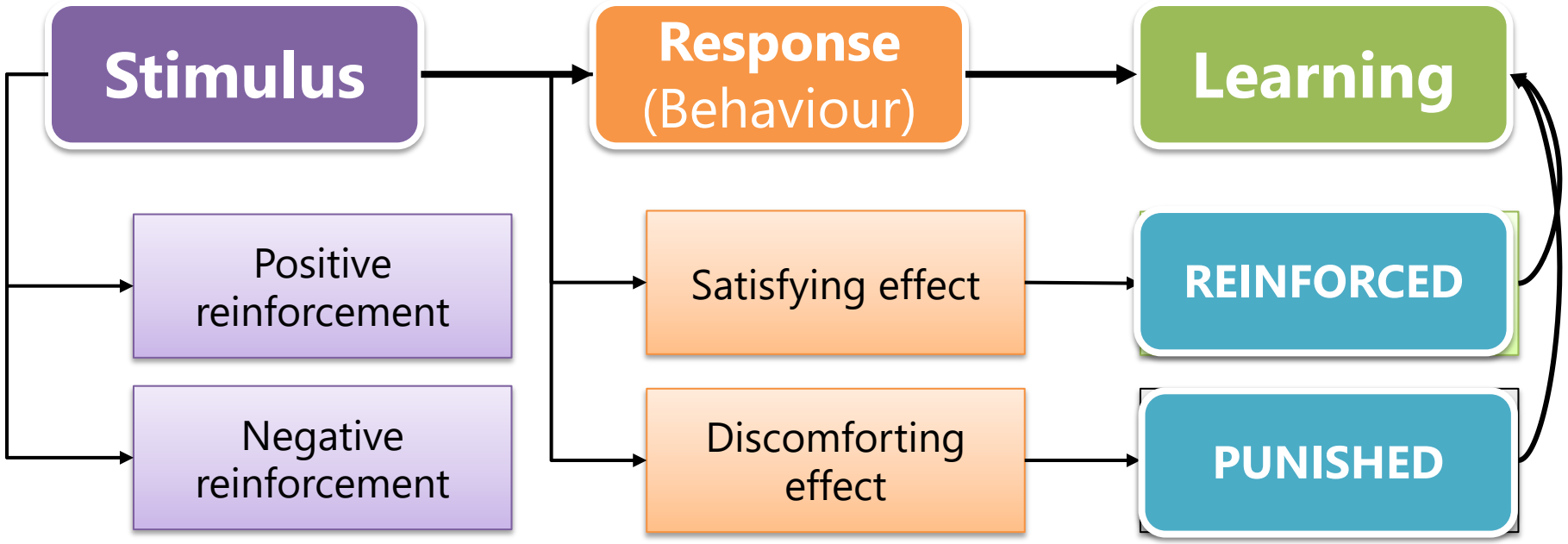
Learning Theories

Behaviourism

Constructivism

Behaviourism

Based on Thorndike's '**Law of Effect**'



(Cassidy *et al.*, 2009; Morgan and Sproule, 2013)

Behaviourism

Thorndike's work highlighted the importance of **association** in the learning process.

Learning occurs when an individual produces an **involuntary response** similar to a reflexive response.



(Cassidy *et al.*, 2009; Morgan and Sproule, 2013)

Behaviourism

Classical Conditioning

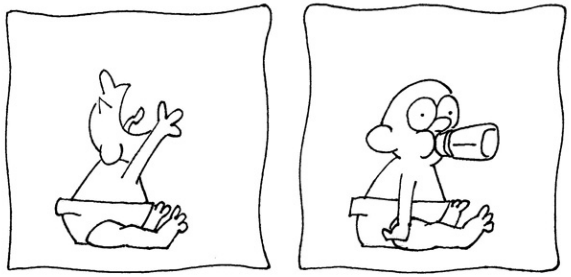
Pavlov & Watson

Is when an unconditioned stimulus and response is manipulated with a conditioned stimulus to create a conditioned response.

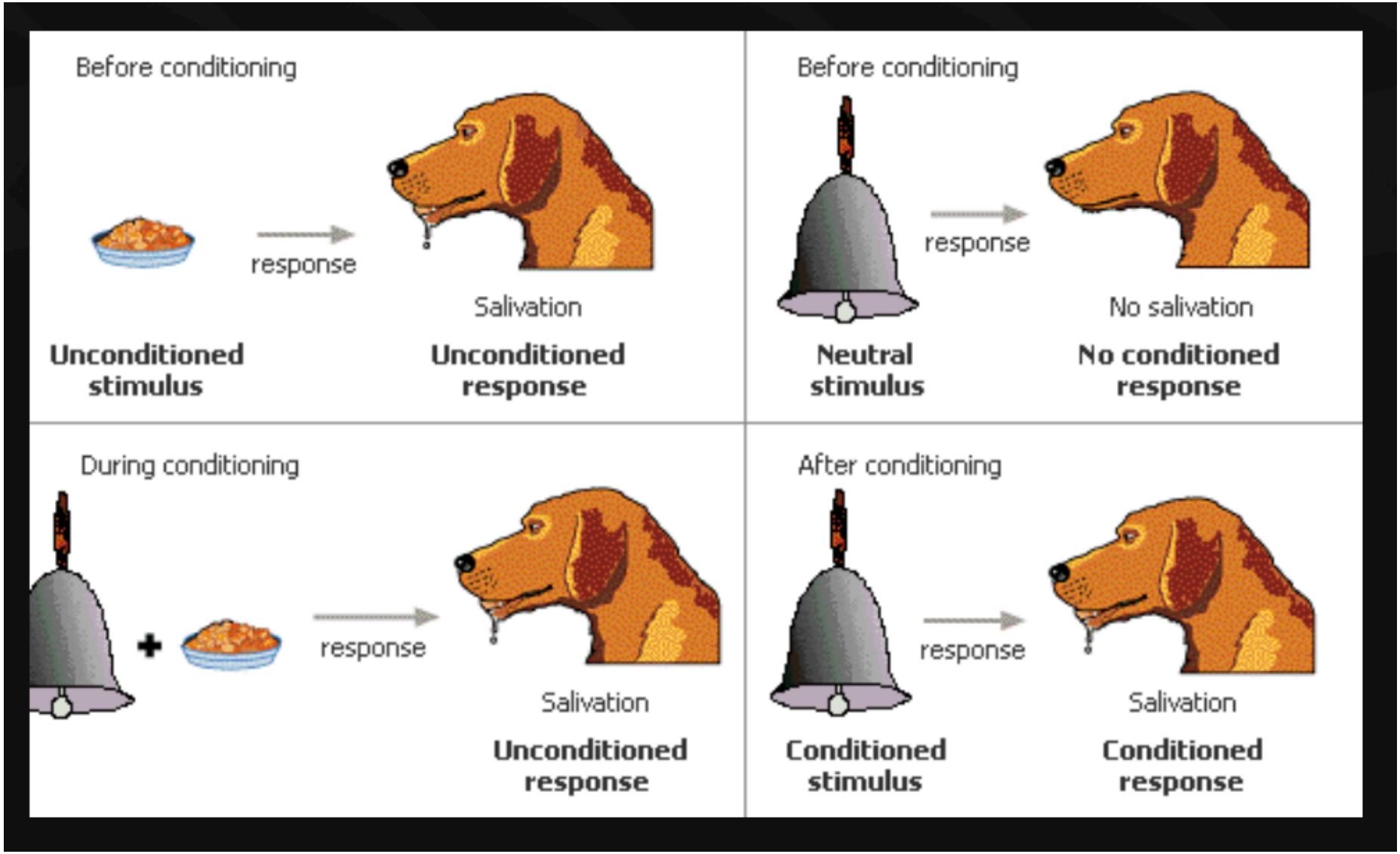
Operant Conditioning

Skinner

Is a controlled response with a reward/punishment system according to the behaviour.

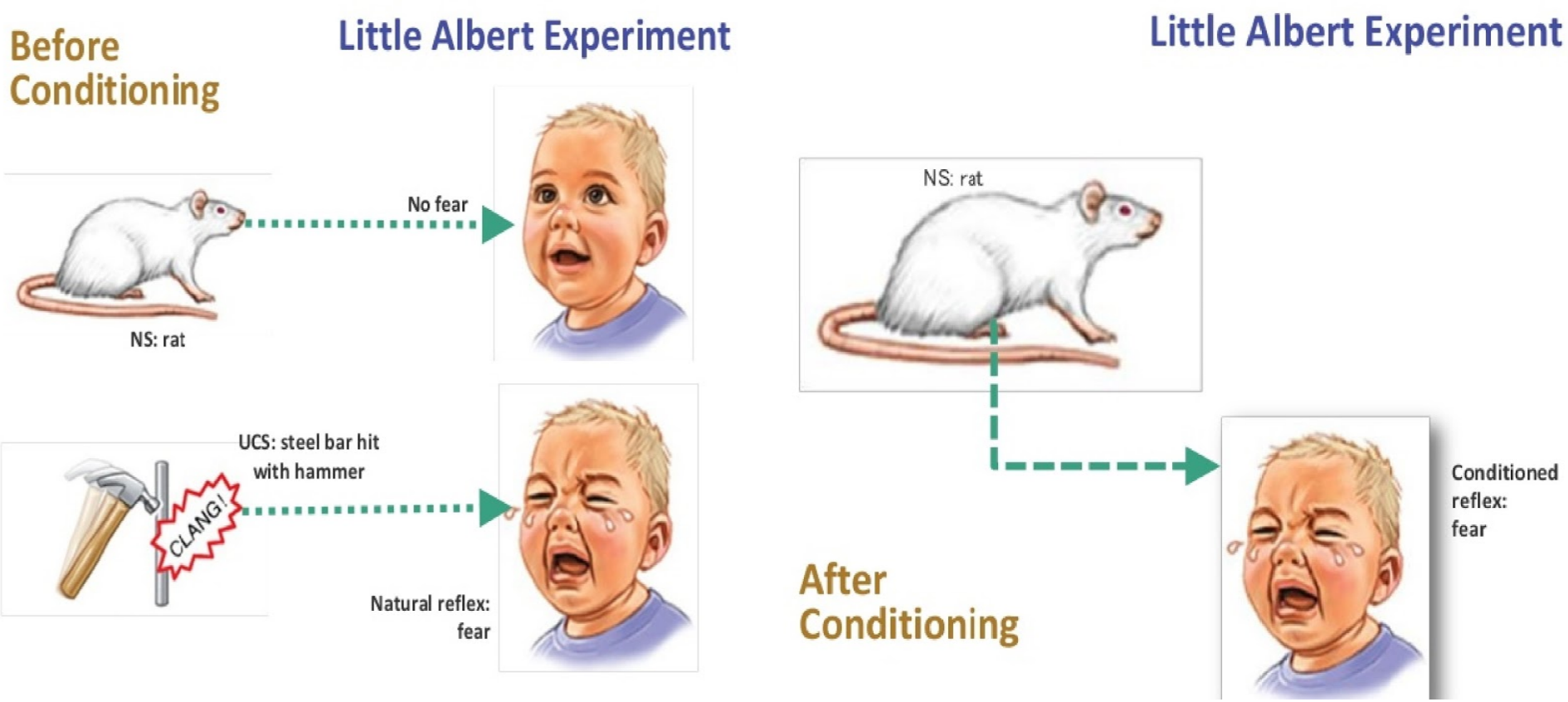


(Morgan and Sproule, 2013)



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Pavlov's Classical conditioning



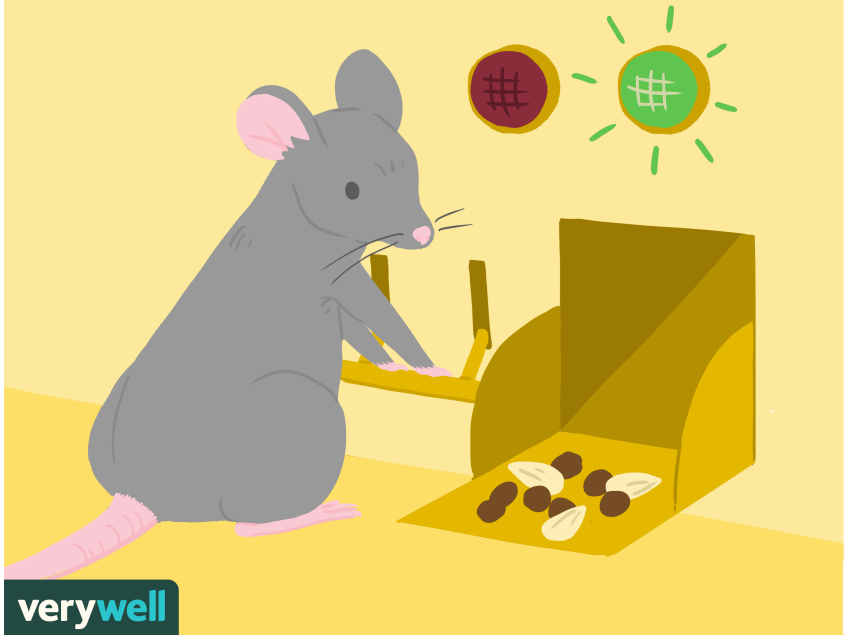
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Watson's Classical conditioning

Operant Conditioning

Specific consequences are associated with a voluntary behavior

Rewards introduced to increase a behavior



Punishment introduced to decrease a behavior



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Skinner's Operant conditioning

TASK 1

Reflect on the cartoon strips regarding Behaviourism and make notes on the following questions:

- What are the key messages?
- How does learning take place?
- What is the role of the learner?
- What is the role of the educator?

Go to Padlet!


off the mark.com
by Mark Parisi
BELL RINGS, I GET A TREAT... BELL RINGS, I GET A TREAT... IT WENT ON THAT WAY FOR DAYS. THEN, OUT OF THE BLUE ...BELL RINGS, I GET NOTHING AT ALL!! NADA! I MEAN, CAN YOU SERIOUSLY CALL MY ATTACK UNPROVOKED?
THE DARK TRUTH ABOUT PAVLOV'S DOG

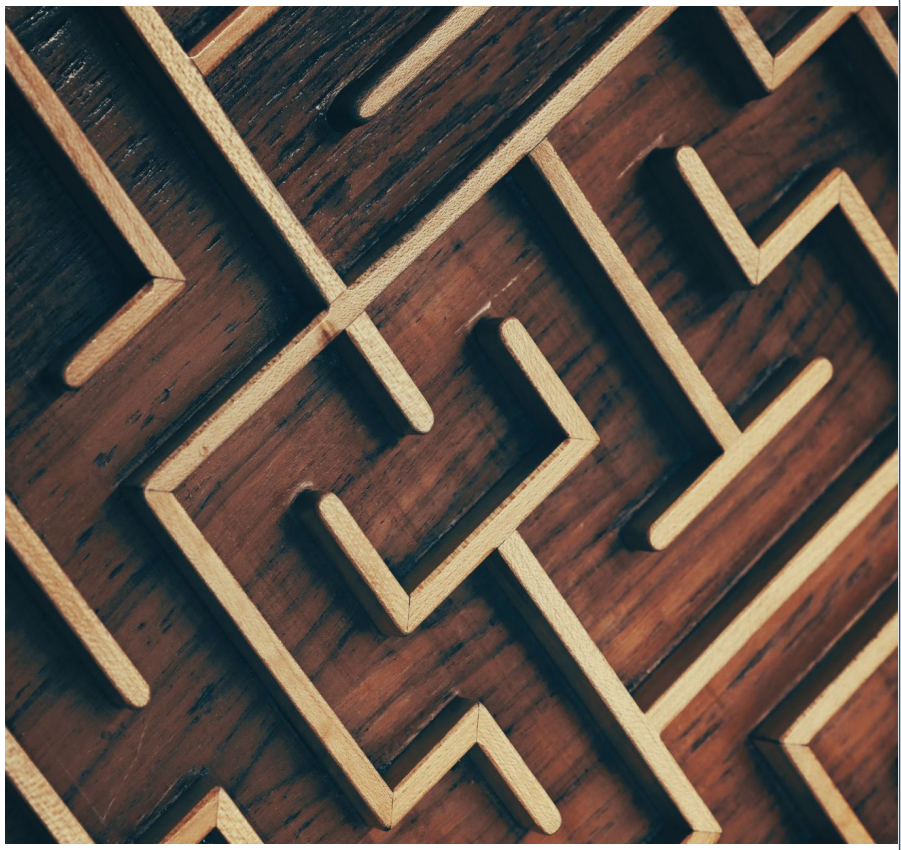

Snapshots
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"They took my pellets, man, I been hittin' that lever all day, they took my PELLETS!"


I FEEL SORRY FOR THE GUY.. WE TAP A BUTTON, WE GET A PELLET. HE TAPS THOSE BUTTONS A MILLION TIMES A DAY. NEVER A PELLET.
ACME LABS
rhymeswithorange.com
HILARY B. PRICE


PEANUTS
THE EARS HEAR THE CAN OPENER..
RIGHT AWAY THE STOMACH KNOWS THAT SUPPER IS COMING..
HOW DO THE EARS TELL THE STOMACH?
I'VE NEVER BEEN ABLE TO FIGURE THAT OUT..
5-17
PEANUTS reprinted by permission of United Feature Syndicate, Inc.

Behaviourism

- Logical progression from **basic to more advanced skills**
- Behaviourists believes learner **behaviour is shaped by positive** reinforcement and **negative reinforcement.**



(Chambers, 2011; Morgan and Sproule, 2013; Purdy, 2018)

Behaviourism



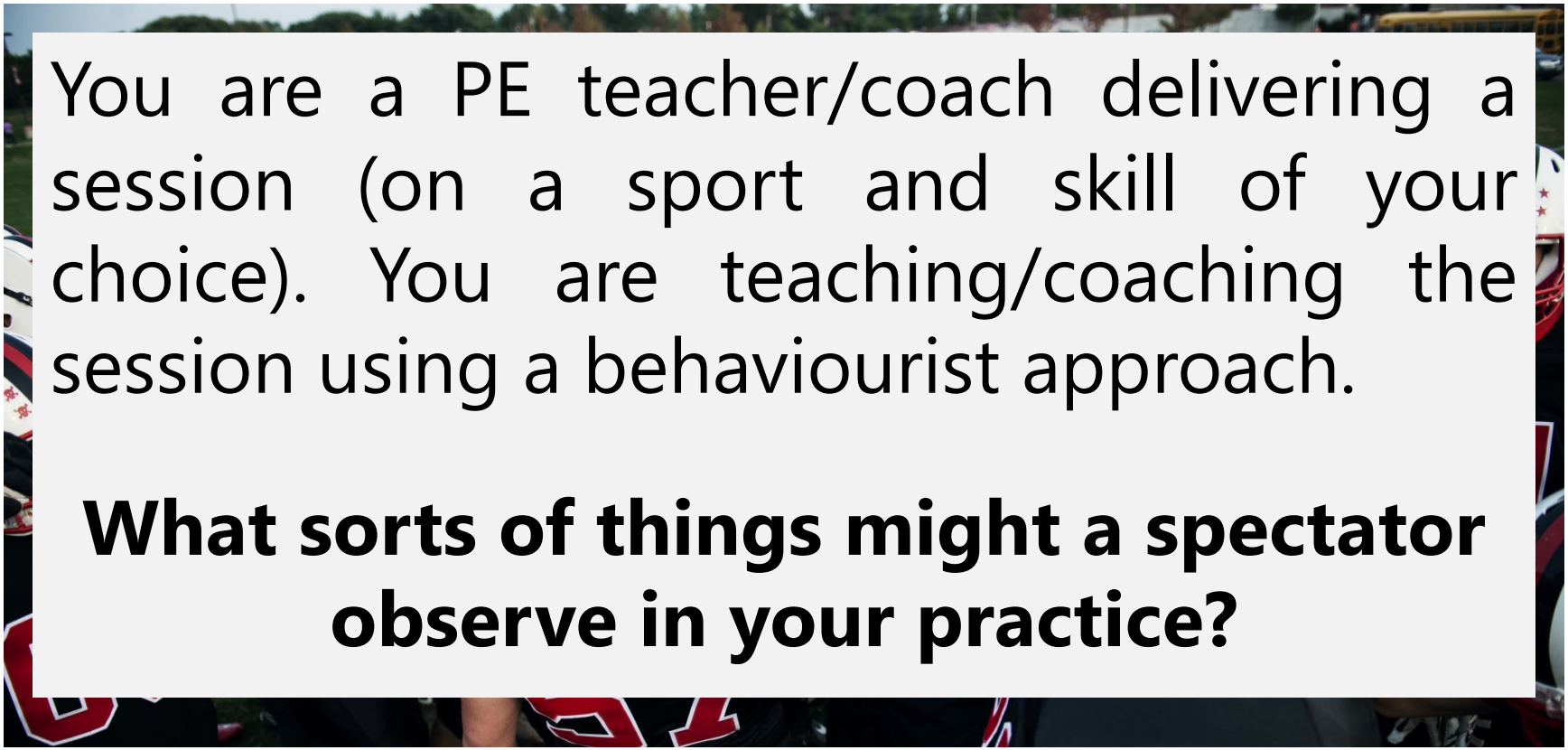
(Chambers, 2011; Morgan and Sproule, 2013; Purdy, 2018)

Learner assumes a **passive role**

Teacher assumes an **active and direct role**, maintaining the control of the pace, sequence and content of the session.

Learner **does not have any opportunity** for evaluation or reflection with in the learning process.

Putting it into a Sporting Context



You are a PE teacher/coach delivering a session (on a sport and skill of your choice). You are teaching/coaching the session using a behaviourist approach.

What sorts of things might a spectator observe in your practice?

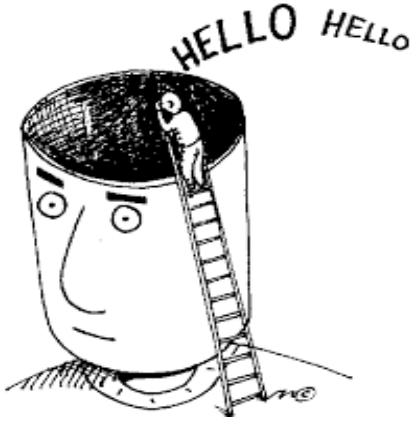
TASK 2

What aspects of Behaviourism can be seen within these coaching sessions?

Go to Padlet!

Key tenets of Behaviourism

- Emphasis on learner **doing** (behaviour) as **opposed to thinking** (cognition)
- Emphasis on **repetitive drills** (association)
- Emphasis on **educator's feedback** as reinforcement / punishment / ignoring as a way of **modifying the behaviour** of learners





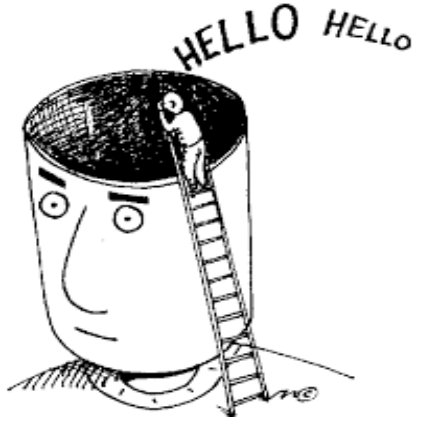
(Chambers, 2011)

DOES NOT PROMOTE UNDERSTANDING

Key tenets of Behaviourism

Examples of the application of Behaviourism

- Repetitive drills (e.g. skills against a wall)
- Teacher/coach-led session
- Participation points
- Verbal reinforcement
- Push-ups/Laps as punishments





(Chambers, 2011)

DOES NOT PROMOTE UNDERSTANDING

Perception break!

Does our current session reflect aspects of Behaviourism?

YES? NO?

WHY SO? WHY NOT?

Learning Theories

Behaviourism

Constructivism

Constructivism

Views learning as a

Contextualised PROCESS



CONSTRUCTION of Knowledge

(there is no acquisition, there is construction)

(Chambers, 2011; Morgan and Sproule, 2013; Purdy, 2018)

Constructivism

Cognitive Constructivism

Piaget (1936)

Explains how individual's constructs a mental model of the world. He disagreed with the idea that intelligence was a fixed trait and regarded cognitive development as a process which occurs due to **biological maturation and interaction with the environment**.

Social Constructivism

Vygotsky (1978)

Believed human development is **socially situated and knowledge is constructed through interaction with others**.

Unlike Piaget, he believed that Cognitive maturation developed after learning.

Constructivism

- Suggests the **world is inseparable from us** and we can know it only as we experience it.

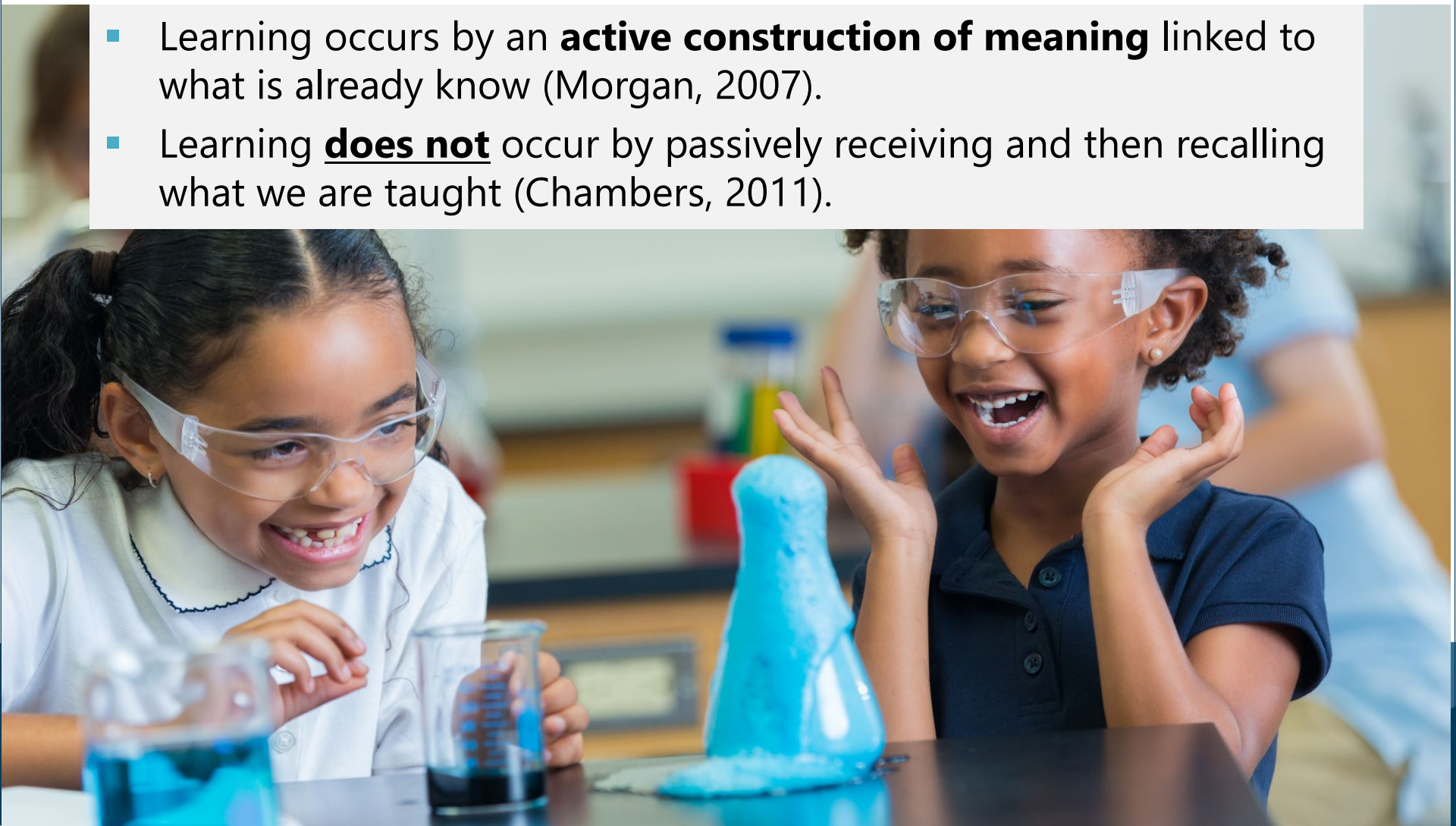
- Learning is not reduced to simple components but is instead seen as being essentially **complex**.



(Morgan, 2007)

Constructivism

- Learning occurs by an **active construction of meaning** linked to what is already know (Morgan, 2007).
- Learning **<u>does not</u>** occur by passively receiving and then recalling what we are taught (Chambers, 2011).



Constructivism

- Rather than an acquisition of knowledge, learning is a process of **social** participation.
- Learners may collaborate with **others** to organize their ideas and **learn from each other** to construct their own knowledge.

(Chambers, 2011)



Constructivism

"Learners construct their own learning"

(Davis and Sumara, 2003, p. 129)

So… what is the role of the teacher?

Task 3

What elements of Constructivism can be seen within this coaching session?

Go to Padlet!

The educator's role



- Act as a **facilitator**
- Create appropriate opportunities for learning by **manipulating the environment**.
- **Student-centred** interactive environment.
- Learner is self directed , creative and innovative in nature.
- Develop **problem solving skills** gained from experimentation and direction.

(Chambers, 2011; Morgan and Sproule, 2013)

The Teacher:

- Watching and listening
- Positive
- Asking (good) questions
- Flexible
- Creatively incorporate contextualised and interactive activities
- Students work in small groups/individually

(Chambers, 2011; Morgan and Sproule, 2013; Purdy, 2018)





Take home reflections…

Which learning theory aligns mostly with your current practice?

Based on what you now know, do you want to develop and change your current practice?

What questions have you got?

Thank you
Diolch
Obrigada

See you next week!

References

Cassidy, T., Jones, R.L. and Potrac, P. (2016) '*Understanding Sports Coaching: The pedagogical, social and cultural foundations of coaching practice*' (3rd ed). Oxon: Routledge

Chambers, F. (2011) 'Learning theory for effective learning in practice', in K. Armour, K. (ed.), *Sport Pedagogy: An Introduction for Teaching and Coaching*, Oxon: Routledge

Morgan, K. and Sproule, J. (2011) 'Pedagogy for Coaches', in R. Jones and K. Kingston (ed.), *An Introduction to Sports Coaching: Connecting Theory to Practice*, Oxon: Routledge

Purdy, L. (2018) *Sports Coaching: the basics*. Oxon: Routledge