



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

BMPE 5005

Damcanieithwyr ym myd Addysg Theorists in the world of Education

Darlith / Lecture 4

11/10/2021

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Trawsnewid Addysg; Trawsnewid Bywydau
Transforming Education; Transforming Lives



www.uwtsd.ac.uk

Amcanion / Aims :

- Datblygu gwybodaeth a dealltwriaeth am ddamcaniaethwyr addysgiadol amrywiol a oedd yn credu bod chwarae yn bwysig i gynnydd plentyn.
- Ystyried fel mae rhai theoriau yn dylanwadu ar addysgeg a darpariaeth.
- Creu crynodeb am dri neu pedwar ddamcaniaethwr.
- Creu crynodeb sut mae plant yn dysgu.
- To develop knowledge and understanding of various educational theorists that consider play an important aspect to learning.
- Consider various educational theorists approaches that influence educational teaching and provision.
- To create summary of three or four of the theorists.
- To create summary of how children learn.

Chwarae / Play

- I ddeall rôl chwarae yn y blynyddoedd cynnar ac yn rhan o'r Cyfnod Sylfaen.
- I ddeall pedagogeg sy' ynghlwm gyda chwarae
- I ddeall pwysigrwydd chwarae yn nhermau datblygiad corfforol plant.
- I gymryd rhan mewn amrywiaeth o weithgareddau ymarferfol / corfforol.
- To understand the role of play in the early years and in the Foundation Phase
- To understand playful pedagogy
- To understand the importance of play and movement in child development
- To experience a range of practical activities and play.

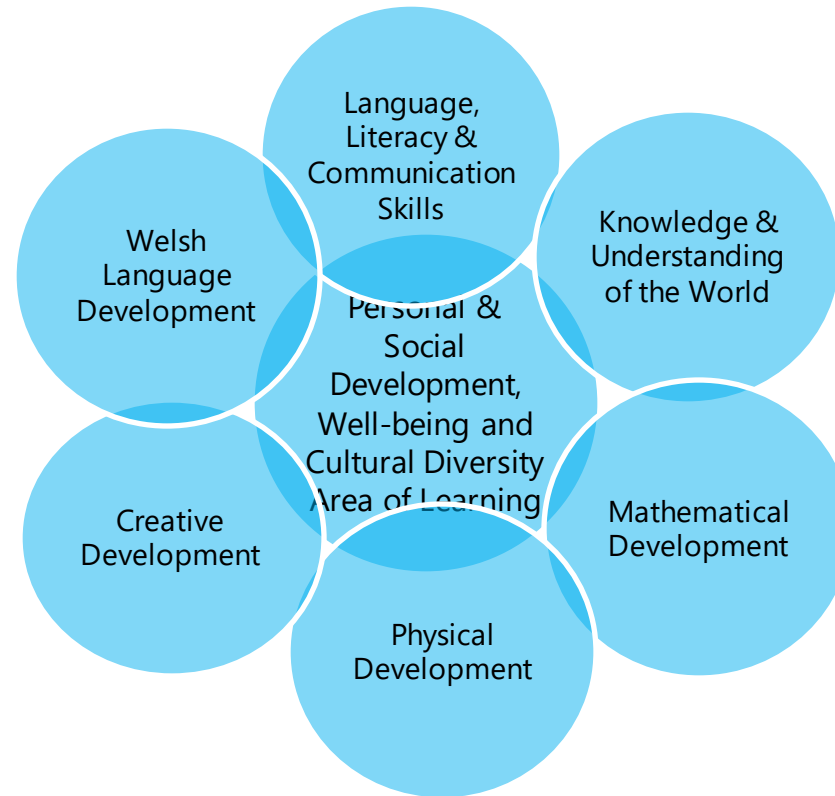
Y Cyfnod Sylfaen

The Foundation Phase

- Cwricwlwm i blant 3 – 7 oed
- Cwricwlwm seiliedig ar chwarae
- 'Mesydd Dysgu' dim pynciau traddodiadol
- Plentyn yn ganolog i'r dysgu
- Ardal tu allan yn allweddol i ddysgu effeithiol yn y Cyfnod Sylfaen.
- Curriculum for children aged 3 – 7yrs old
- Play based curriculum
- 'Areas of Learning' and with no subjects in the traditional sense.
- Child-centered learning
- The outdoors in central to the learning in the Foundation Phase

Chwech Maes Dysgu

Seven Areas Of Learning



Module Learning Outcome

Assessment Part 1/A :

LO1 Evaluate the contribution of constructivist theory and educational ideologies to early years education and the underlying principles and philosophy of the Foundation Phase and/or Successful Futures in Wales.

Beth ydy chwarae? *What is play?*

- Penderfynwch beth i chi'n credu ydy prif nodweddion o chwarae?
- *Decide what you think are the key features of play?*

Yna ...

Then...

- Beth ydy chwarae?
Ysgrifennwch diffiniad
- *Write what you think is a definition of play ...*

Recap lecture 2 – Fundamental Movement Skills

Ymarferol / Practical 1

- Tu allan : mewn parau (un dysgu llall disgybl & cyfnewid) teithiwch ymlaen, yn ôl ac i'r ochrau gan ...
- Cerdded, rhedeg, llamu, neidio a glanio, sgipio, loncian
- Creu cydbwysedd gwahanol siapiau
- Outside : in pairs (one teacher one pupil & swap) travel forwards, backwards and sideways whilst ...
- Walking/ running /galloping / skipping / jumping – landing / balances different shapes

Increase sophistication Prac 2

- Gyda'ch partner creuwch dilyniant o symudiadau sy'n cynnwys
 - (i)adlewyrchiad
 - (ii)symud i ffwrdd
 - (iii)dilyn
 - (iv)gwrthwyneb
- Ydych chi'n medru newid y cyflymder?
- With your partner create a sequence of movements that include (i)mirroring, (ii)moving away from, (iii)cannon and (iv)opposite movements.
- Can you also vary the speed?

Pwysigrwydd chwarae yn natblygiad plant

The role of play in child development

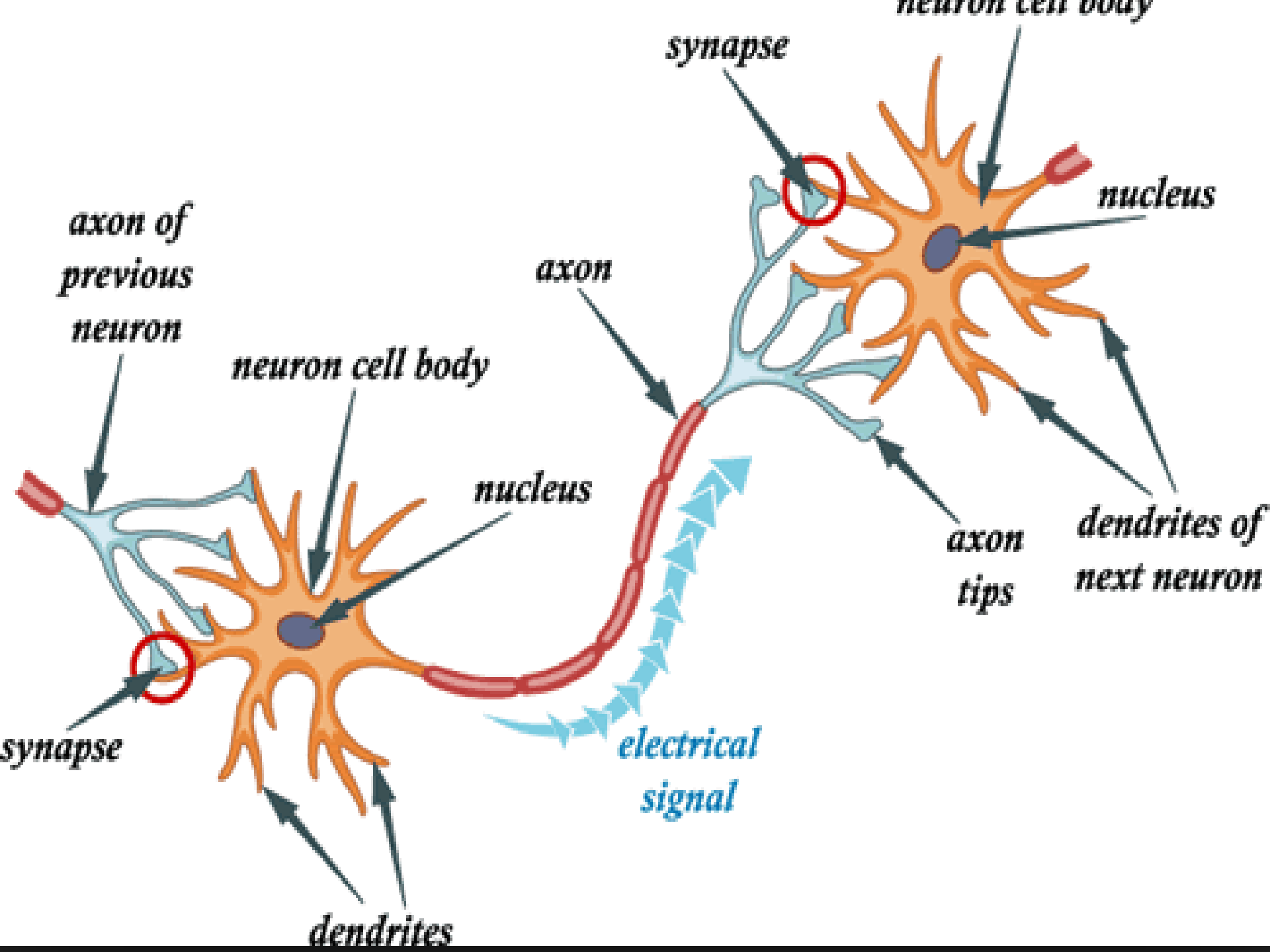
Sensorimotor integration



*Trawsnewid Addysg; Trawsnewid
Transforming Education; Tra*

Evidence from neuroscience

- 'Movement skills in childhood are inextricably linked to core aspects of development including social, cognitive and psychological.... Language emerges as children physically interact with their surroundings...'
- Studies show movement skills are linked with early language and literacy, emotional regulation, social behaviour and academic self perceptions
- Diamond, A. (2000; 2015), Iverson, J (2010), Van der Fels et al., (2015), Bedard et al., (2017)



Agweddau sylfaenol o sensorï a motor sy'n dylanwadu ar ddysgu.

Basic sensory & motor components that influence learning.

- Ymwybyddiaeth corfforol
- Cynllunio motor
- 'Perception of movement'
- Sgiliau cain
- Cyffwrdd
- Sgiliau Gweledol
- Prosesi Iaith
- Body awareness
- Motor planning
- Perception of movement
- Fine motor control
- Touch
- Visual skills
- Language processing

Nodweddion chwarae ...

Features of play ...

- Ychwanegwch at eich diffiniad o beth ydy 'chwarae'

a...

- Rhannwch gydag un arall

- *Revisit your original definition of what is 'play' – tweak/make additions*

and ...

- *Share with one other*

Tasg a thoriad / Task and break

- Dewch allan a'ch nodiadau ymchwil am ddamcaniaethwr addysgiadol
- Byddwch yn barod i rannu gyda pawb ar ôl y toriad.
- Bring out your own research about an educational theorist
- Be prepared to share with whole group after break.

Dylanwad Damcanieithwyr

Influences from Theorists

- Frederick Froebel 1782-1852
- Rudolf Steiner 1861-1925
- Maria Montessori 1870-1952
- Lev Vygotsky 1896 – 1934
- Susan Isaacs 1885 - 1948
- Jean Piaget 1896 – 1980
- Jerome Bruner. 1915 - 2016

The big 3 learning theories:

- Behaviourism
- Constructivism
- Social Constructivism

Behaviourism

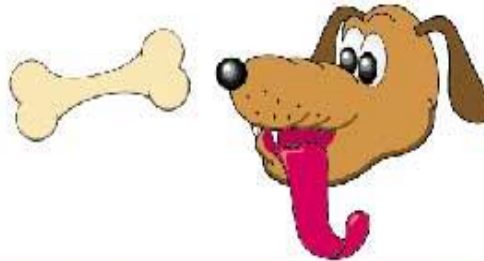
Behaviourism

(‘Through positive and negative reinforcement’)

Before conditioning

FOOD
(UCS)

SALIVATION
(UCR)



BELL

NO RESPONSE



During conditioning

BELL +
FOOD
(UCS)

SALIVATION
(UCR)



After conditioning

BELL
(CS)

SALIVATION
(CR)



Developed out of *Pavlov's work* - repeatedly pairing a neutral stimulus (one that does not elicit a response) with a potent stimulus - a response can be elicited, even when the potent stimulus is removed.

Behaviourist model

- Mae creaduriaid yn dysgu trwy gwneud cyswllt gyda phrofiad ag ymddygiad.
- Credir taw 'gwyddoniaeth o ddysgu' ...oedd dysgu sgiliau a gwybodaeth.
- Living creatures learn by building up associations between their experience, their thinking and behaviour.
- Early development of the 'science of teaching' ... where skills and knowledge are taught.



Operant conditioning

Coined by Skinner - actions followed by reinforcement are more likely to be repeated. Skinner went further than Pavlov and distinguished between reflexive actions (Classic conditioning) and learnt responses (Operant conditioning).

**B.F.
Skinner**

Positive reinforcement is given so actions are more likely to be repeated e.g. child smiles at bunny = they get a sweet.

Negative reinforcement - a negative action is removed if an action is repeated e.g. child smiles at bunny = no hammer treatment

or a positive action is removed if an action is repeated e.g. if the child cries at the sight of the bunny = no sweet

Cynlluniwch ddysgu!

Practical 3

Cynlluniwch ffordd o gael rhywun i ddysgu:

- ▶ Sut i gario / taflu a dal
- ▶ Sut i driblo / rholio / trapio a tharo
- ▶ Sut i wneud cyfres o symudiadau syml
- ▶ Gwnaethoch chi atgyfnerthu mewn modd cadarnhaol?
- ▶ A defnyddioch chi dulliau eraill sy'n gysylltiedig gyda dysgu ag addysgu?

Design some learning!

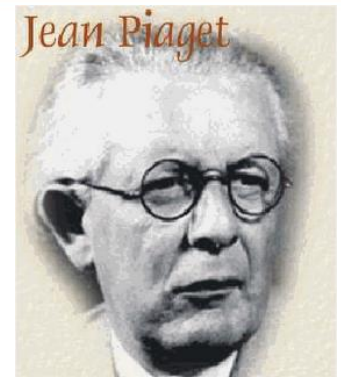
Design a way to get someone to learn:

- How to carry / throw and catch
- How to dribble / roll / trap and strike
- How to do a simple routine
- Did you provide some positive reinforcement?
- Did you also use other theoretical approaches linked with teaching and learning?

Links with Mosston & Ashworth's Spectrum of Teaching Styles

Constructivism

Constructivism



- Key theorists: Bruner, Piaget, Montessori.
- People, as 'lone scientists' actively 'make meaning'.
- Piaget observed his children's cognitive development and thinking and concluded that the human infant actively seeks to make sense of the world.
- Learning is a result of the child's exploration of and interaction with the environment but importantly that learning is the result of internal processes rather than external stimuli.
- Children pass through stages in which different types of learning occur – implying that children are only able to learn certain information and skills once they have reached a certain stage in their development. He linked this to the age of a child.

Jean Piaget 1896 – 1980

Constructivism

- Interest in epistemology – aspect of philosophy concerned with knowledge.
- **constructivist theory** is based on the belief that children are active participants who construct learning by interacting with their environment and making connections between new experiences and previous learning
- children as active not passive learners
- There is *assimilation* when a child responds to a new event in a way that is consistent with an existing schema.

Jerome Bruner 1915 – 2016

Constructivism

- identified three broad modes of learning: enactive (actions), iconic (pictures) and symbolic (words and numbers).
- stressed the importance of adult intervention to support or '**scaffold**' learning and enable a child to make progress
- Bruner proposed / introduced the idea of a '**spiral curriculum**', wherein a topic can be re-introduced at a more complex level as thinking skills develop

Task

Think of an activity that you can do well i.e. surfing, caving, horse riding, abseiling, mountain climbing, kayaking, coasteering, mountain biking, swimming, cycling ...

- (i) imagine that you see someone having a go at one of these.
- (ii) What if you saw they were having some difficulty with a specific skill within the activity (choose one)
- (iii) How would support someone else to learn the skill/ technique needed – scaffolding - to enable the person to make progress?

Bruner's theory of Cognitive Development

- Bruner's interest in the process of how children form concepts led him to extend Piaget and Vygotsky's thinking.
- He believed that learning is initiated and enhanced by a 'more knowledgeable other' through scaffolding e.g. guiding, prompting, discussing, questioning and providing stimulus materials



Social constructivism

Ymarferol / Practical 4

- **Gyda** un person arall cynlluniwch a chwaraewch gêm syml sy'n cynnwys targed
- Medrwch defnyddio sialc i dynnu llun o'r darged
- Ystyriwch Ble (lleoliad/uchel/isel?) a Sut?
- **With** one other person design and play a target game
- You may use chalk to draw the target
- You may consider Where (location/high/low?) How (overarm/underarm/under/over?)

Social Constructivist Model

Through interaction with others

- All cognitive functions originate in **social interaction** and are then internalised on an individual level.
- Learners actively 'make meaning', and their social world is fundamental to this process.
- Language and play are central components. Learning becomes internalised. Speech development are important factors in the learning process.

Social constructivism

- Broadhead (2006:2) suggests that the more cooperative children's play is, the more they are likely to connect with other children and understand their knowledge along with a 'deeply fulfilling emotional engagement with the world around them.'



Lev Vygotsky 1896 – 1934

Social Constructivism



- Through communication and social interaction with adults or more knowledgeable peers children can achieve higher levels of understanding than they would independently
- gap between what children can achieve unaided and what they can achieve with support and guidance he called the '**Zone of Proximal Development**'
- emphasised the role of the practitioner in matching learning activities to the child's level of development

Lev Vygotsky 1896 - 1934

- Mae datblygu sgiliau i siarad a chwarae yn agweddau pwysig iawn yn y broses dysgu.
- Trwy gyfathrebu a chymysgu'n cymdeithasol gydag oedolion neu plant sy'n mwy wybodus na hwy mae modd llwyddo i safon uwch o ddealltwriaeth na pe byddant ar ben eu hun.
- Mae bwlch rhwng plant yn medru llwyddo heb gymorth a beth maent yn medru cyflawni gyda chefnogaeth yn cael ei alw yn ôl ef '**Zone of Proximal Development**'
- Pwysleisiwyd pwysigrwydd bod yr oedolyn yn cyfateb y weithgareddau gyda lefel nesf yn nadtblygiad y plentyn.

Ymarferol / Practical 5

Gyda un person arall :

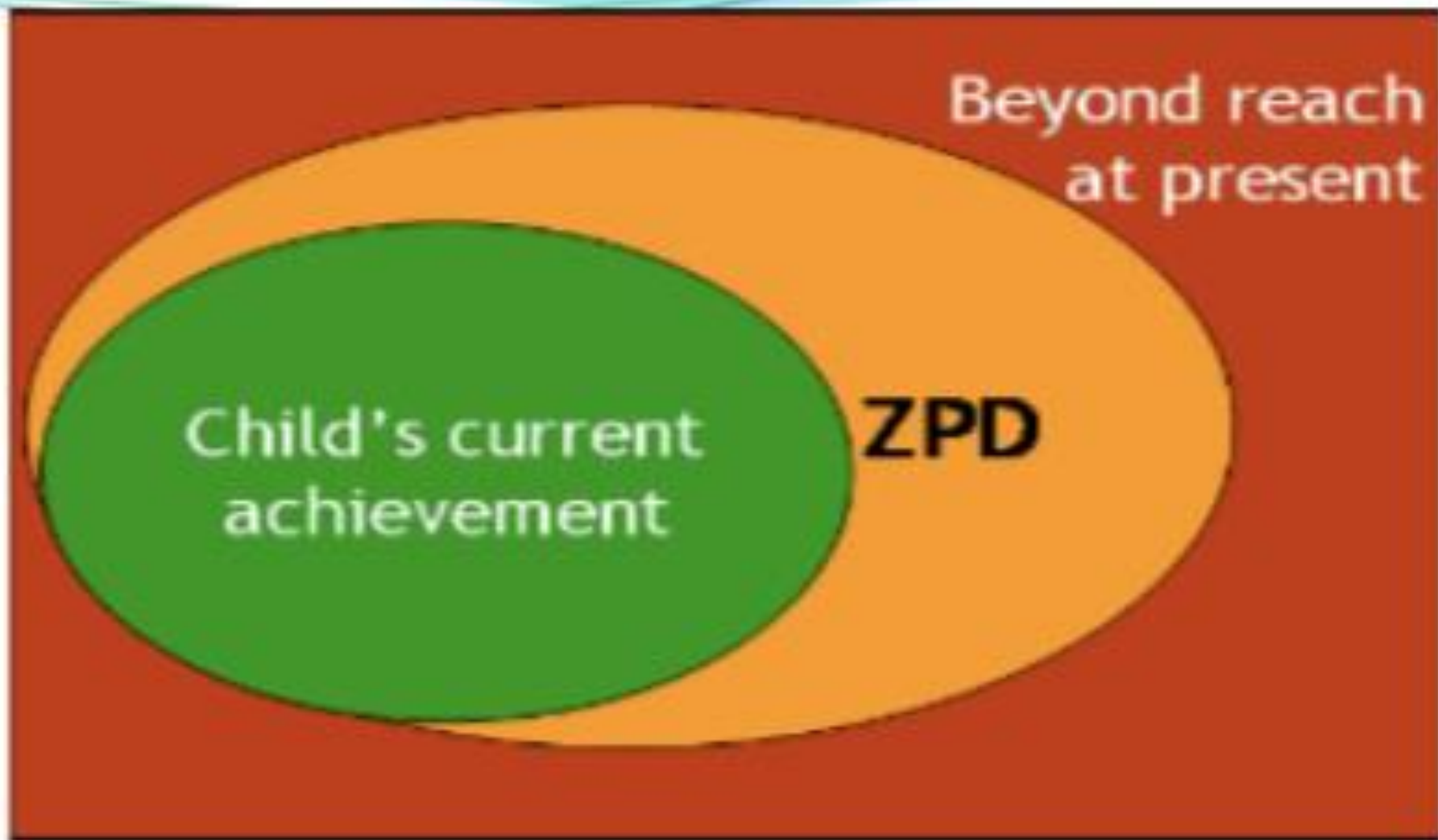
- creuwch a chwaraewch cwrs rwystr syml gan gynnwys (i) arddodiadau (ii) amrywiaeth o offer fel rhwystrau (iii) hefyd ydych chi'n medru cynnwys gwahanol ffordd o deithio ar hyd eich cwrs rhwystr?

With one other person :

- create and play a simple obstacle course using (i) prepositions and (ii) various items as obstacles (iii) can you also include different ways of traveling along your circuit?

Theorists and play

- Vygotsky (1967) argued play's importance in creating its own zone of proximal development and from the time of early educational pioneers and theorists such as Rousseau, Dewey, Froebel, Montessori, MacMillan and Steiner, play has been recognised as having an important role in children's early education.



LEVEL UP

Watch the video clip on the 'Zone of Proximal Development' – Lev Vygotsky – and you could summarise the key points by our next session:

<https://www.youtube.com/watch?v=Du6vqSOj7UU>

Cinio / Lunch

Chwarae – i beth? / Play – so what?

- Sut mae chwarae'n dylanwadu ar blentyn yn fewnol ac yn allanol?
- How does play effect a child internally (emotionally) and externally (physically)?
- Gwnewch amlinelliad o berson a nodwch
- Write within the outline of a person

Who's theory does this quote remind us of? ...

- 'sociable and cooperative endeavours expose children to other children's perspectives and they become experts for one another, scaffolding their own and peers' learning experiences' (Broadhead, 2006:202).

Is playing a form of learning for children in the early years?

After lunch 1.30 – 3pm lecture

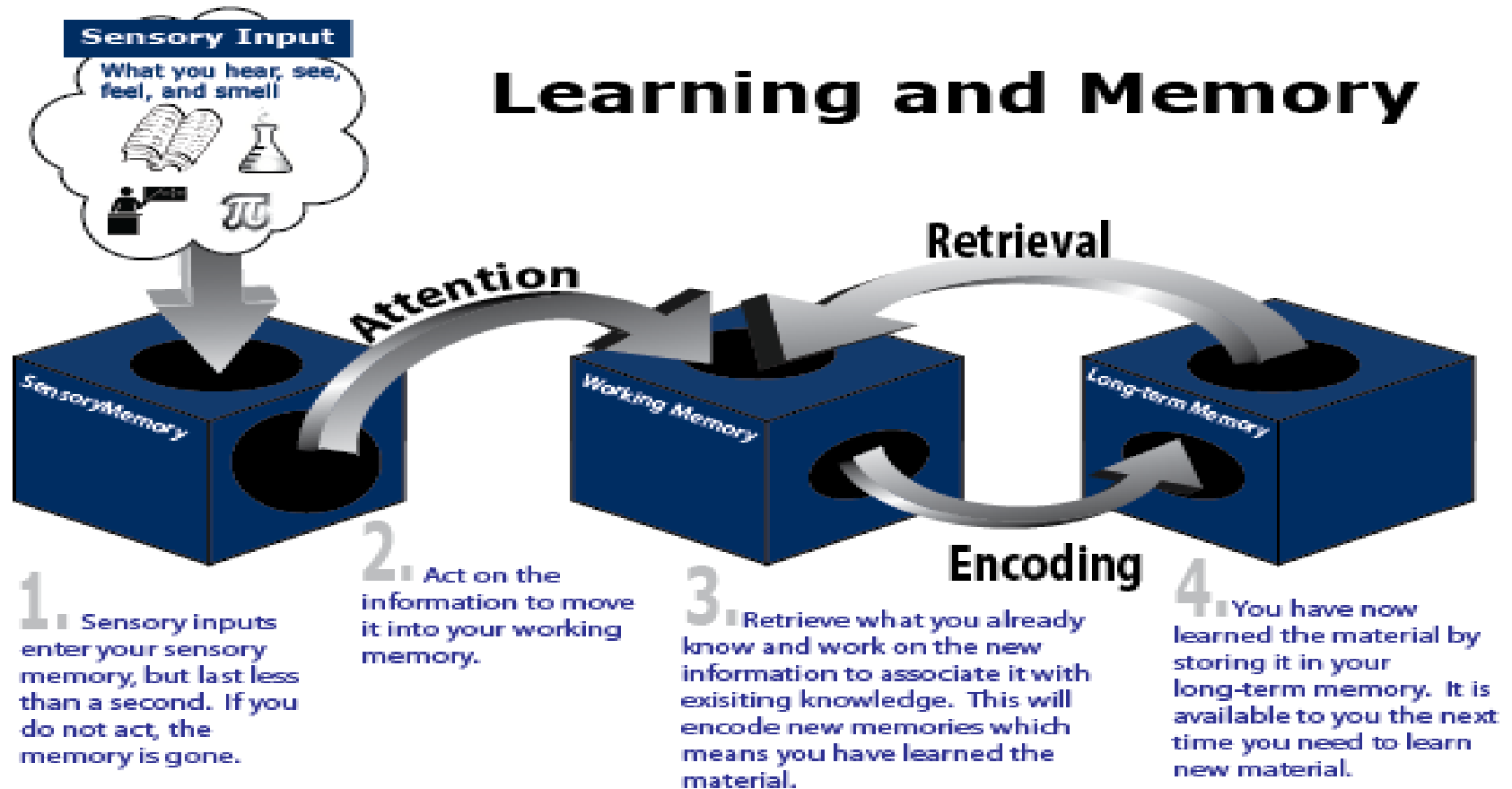
- Sut i ni'n dysgu?
- Gall dysgwr fod yn 'weithredol ymddygiadol' ond nid yn 'wybyddol weithredol'... beth yw'ch barn?
- How do we learn?
- Learners may be 'behaviourally active' but not 'cognitively active' ... what are your thoughts?

Memory

Ydych chi'n cofio? Do you remember?



Learning and Memory



Cues that children use to distinguish between play and work

Howard and McInnes's(2010:35)

Play		Work	
Emotional cues	Environmental cues	Emotional cues	Environmental cues
Voluntary	On the floor	Compulsory	At a table
Under child's control	Lacks adult involvement No adult evaluation	Under adult control	Includes adult involvement Includes adult evaluation
Easy	Can be continued-focus on the process	Hard	Has to finish-focus on the product
Fun	Physical	Can be fun	Not physical



Prif bwyntiau / *Main points*

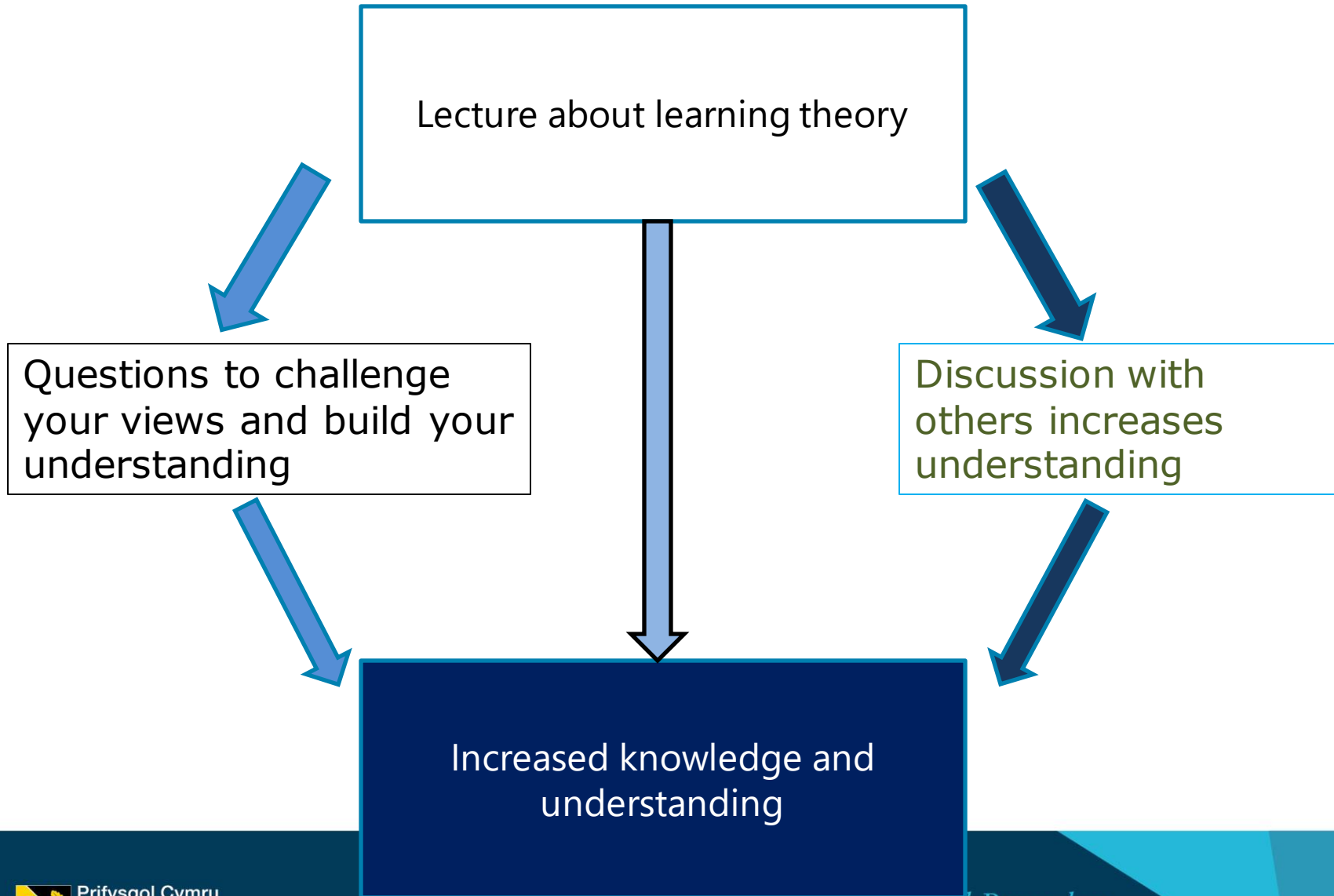
- * Dysgu drwy brofiadau uniongyrchol a chwarae /
Learning through experiential activities & play
- Rôl yr oedolion / The Adult's role
- Tu allan / The outdoors
- Plentyn ganolog / Child centred
- O fewn cyd-desun / Within context
- Annog dysgu gydol oes / Encourage lifelong learners

Y plentyn yn arwain y dysgu

Child led learning

- <https://dysgu.hwb.gov.wales/playlists/view/62ca7ec4-b6a2-485c-bf47-7f396550d0ab/en#page3>

Social Constructivism ('Through interaction with others')



- Group work
- Discovery/Enquiry
- Experience
- Personalisation
- Choice
- Skills
- Projects/PBL
- Peer assessment
- The guide on the side
- Desks in groups
- Role play
- Co-construction
- Empathetic writing
- Relationships
- Resilience, Reciprocity
- Direct instruction
- Guided instruction
- Expert Knowledge
- Probing questioning
- Rigour
- Challenge
- Marking
- Facts and Testing
- The sage on the stage
- Desks in rows
- Teacher at the front
- Didactic

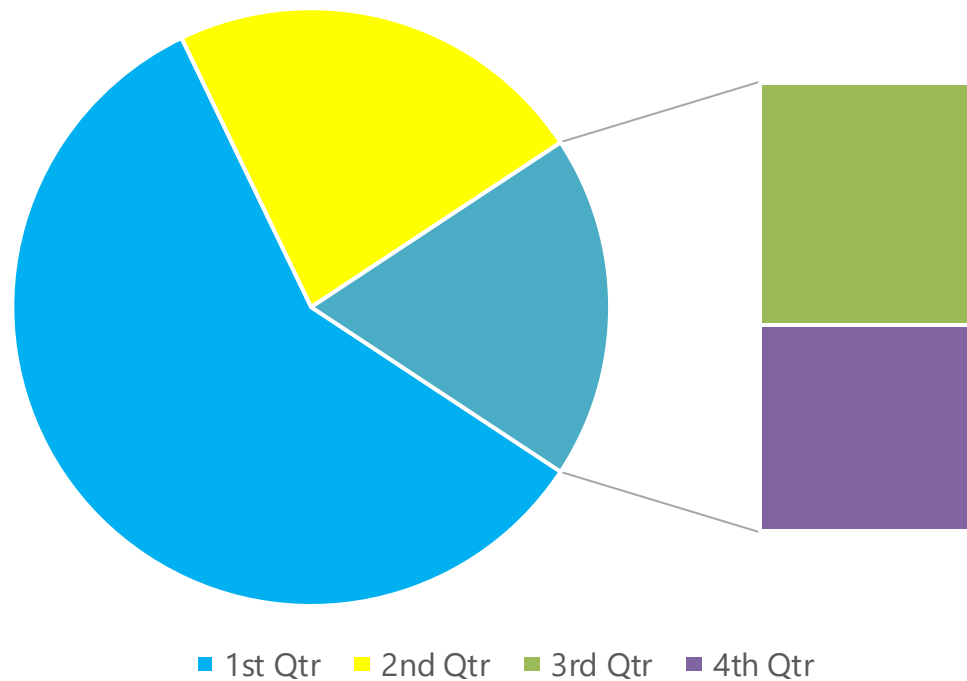
**Traditional
vs. Education
Progressive**

Formal	Progressive
passive	active
isolated	social
competitive	collaborative
delivered	constructed
standardized	personalized

Beth ydy chwarae? *What is play?*

- Revisit your definition of play ...
- Make additions / tweaks / refinements
- You may want to convey your thoughts / notes as a chart ? ... or a diagram ? ...

Sales



Beth ydy chwarae? *What is play?*

- See 'hand out' of various definitions about play and the power of play
- Does your definition resonate with another author's thoughts?



Sut wyf yn dysgu?

How do I learn?

- Gwneud
- Arbrofi
- Llwyddo
- Methu
- Gwyllo
- Cael hwyl
- Ymchwilio
- Ail adrodd

- Doing
- Experimenting
- Achieving
- Failing
- Watching
- Enjoying
- Investigating
- Repeating



Sut i ni'n dysgu? / How do we learn?

- Gwneud
- Cael hwyl
- Arbrofi personol
- Trwy ryngweithio ag eraill
- Datrys problemau (i)wrth fethu a llwyddo (ii)ymchwilio
- Gwyllo – athro'n arwain neu o gyfoedion
- Ailadrodd Pwrpasol
- Datblygu sgiliau trwy ehangu ar wybodaeth mewn gweithgareddau amrywiol.
- Doing
- Enjoying
- Personal Experimentation
- Through interaction with others
- Problem solving by (i)failing and achieving (ii) investigating
- Watching – teacher directed or peers
- Purposeful Repetition
- Develop skills through knowledge based activities

Sut i ni'n dysgu? / How do we learn?

- **Beth am ysgrifennu eich datganiad / crynodeb eich hun am 'sut i ni'n dysgu?'**
- **How about having a go at writing a statement about 'how we learn?'**

Simple theories of learning



- Learning is hard – learning is uncomfortable, difficult, can feel overwhelming at the beginning.
- Not knowing – know - knowing
- Lead from the front and facilitate from the sides or the back - supporting learners construct meanings individually or with others socially.

Damcaniaethau syml o ddysgu

- Mae dysgu'n anodd – pan rydych yn dysgu mae'n anghyfforddus, anodd ac mae'n medru teimlo'n llethol ar y dechrau.
- Dim gwybod – gwybod – gwybod sut i...
- Arwain y dysgu a chefnogi o'r ochr / cefn – wrth i ddysgwyr llunio ystyr ar ben ei hun ag / neu gydag eraill.



Foundation Phase – a play based curriculum

The Foundation phase advocates a holistic child-centered approach. Well-being underpins the Foundation Phase, the learning being through 'first hand experiential activities with the serious business of play providing the vehicle' (DCELLS, 2008a:4).

Dylanwad Damcanieithwyr

Influences from Theorists

- Frederick Froebel 1782-1852
- Rudolf Steiner 1861-1925
- Maria Montessori 1870-1952
- Lev Vygotsky 1896 – 1934
- Susan Isaacs 1885 - 1948
- Jean Piaget 1896 – 1980
- Jerome Bruner 1915 - 2016

Ymestynwch eich
ysgrifennu am un neu
ddau o ddamcanieithwr
rydych wedi dewis trafod.

Extend the blurb you've
written about one or two
of the theorists that
you've chosen.

**Dydd Mawrth / Tuesday
19 / 10 / 2021
Campus based lecture –
SKIP training day
Studio 9.20 to start 9.30am prompt
Lunch 12 – 1. Finished 3.30pm**

Ymarferol

Dillad addas

Potel dwr personol.

Practical

Dress appropriately

Bring own water
bottles