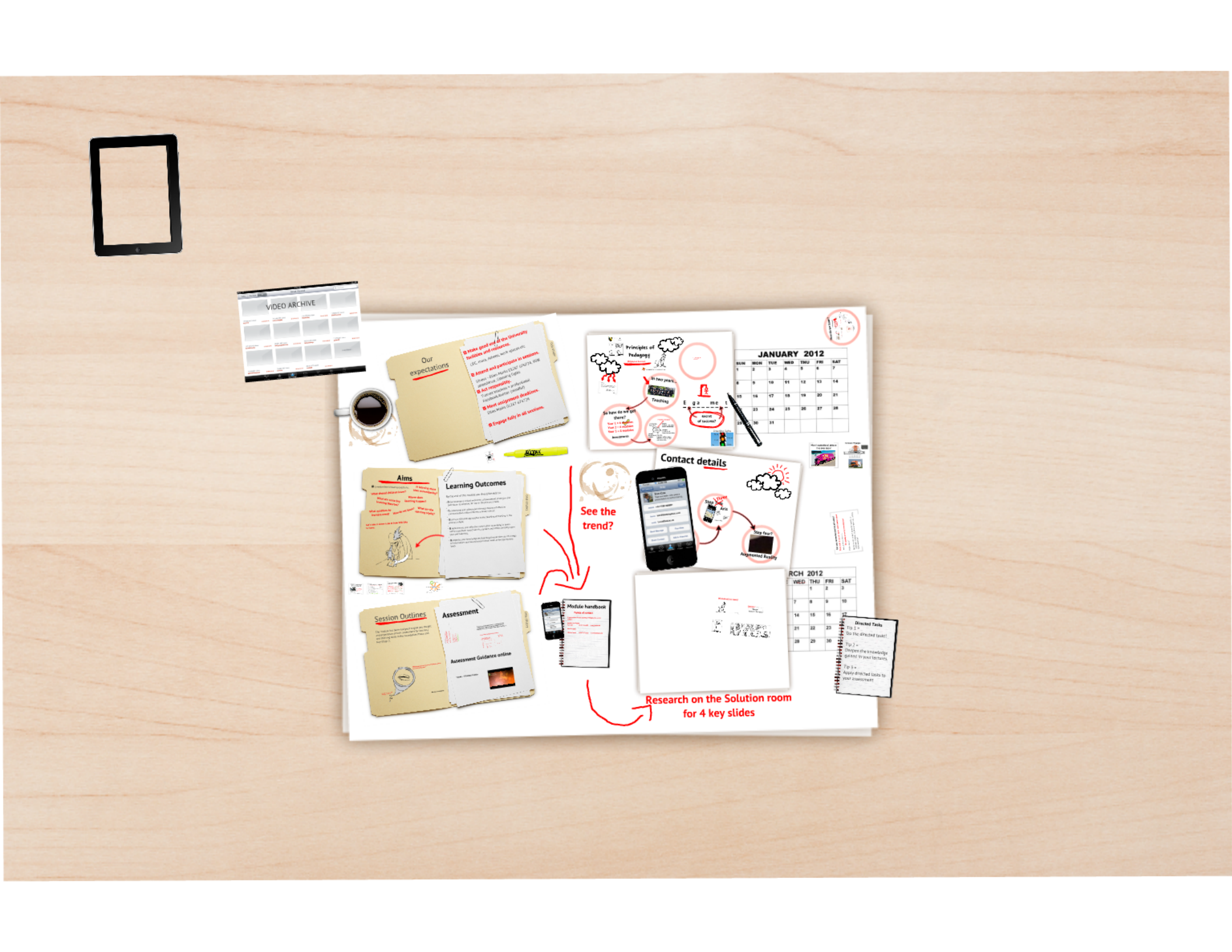
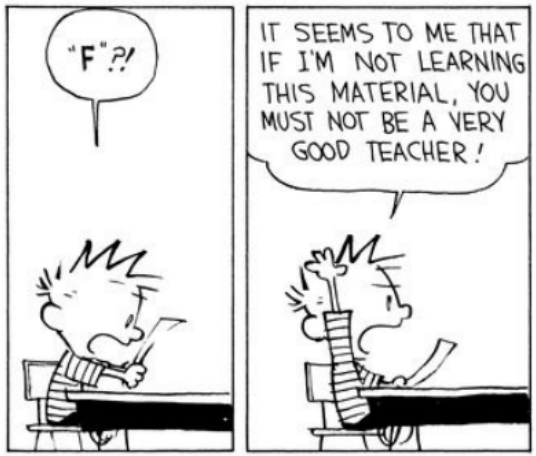

VIDEO ARCHIVE
Our expectations
Principles of Pedagogy
JANUARY 2012
Aims
Learning Outcomes
Contact details
See the trend?
Session Outlines
Assessment
Assessment Guidance online
Module handbook
Research on the Solution room for 4 key slides

PRIFYSGOL CYMRU
Y Drindod Dewi Sant
UNIVERSITY OF WALES
Trinity Saint David



Principles of Pedagogy

Children as Learners



Canolfan Addysg Athrawon De-Orllewin Cymru
The South West Wales Centre of Teacher Education

Aims

☒ Consider the following questions...

What should children learn?

Is learning more than remembering?

What are some key learning theories?

Where does learning happen?

What qualities do learners need?

How do we learn?

What are the learning Myths?

...YOU like

Is learning more than remembering?



Shall we play a game?

Thick wall it tea of Myrrh seize knots trained

Spend a few moments trying to remember the above group of words.

Learning and memory



contents structured
Lifetime

easily displaced
secs!





Once information is passed into LTM, unless it is used or recalled in some other way, it is again forgotten.



Brain judges it of no use...throws it out!

Make sense to learner

Info must be processed and structured

LTM



STM

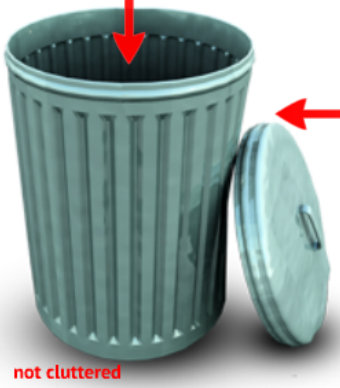
majority info stored/processed and...

other senses

New info given too quick
not enough time to process
so...



Thinking



not cluttered

Forgetting



not under direct conscious control

Aim = only retain useful info that it comes across regularly



Forgetting

Learning and Mem



ntents structured
Lifetime

easily displaced
secs!

Make sense to learner

Info must be processed
and structured

LTM



STM

majority info
stored/processed
and...

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not enough time to process
so...





Make sense to learner

and structured

M

S



majority info stored/processed and...

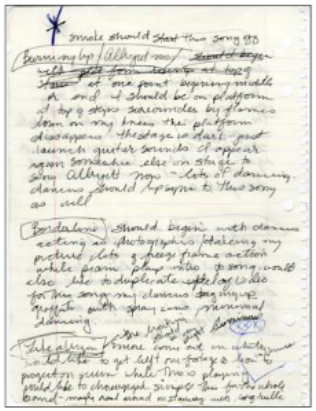
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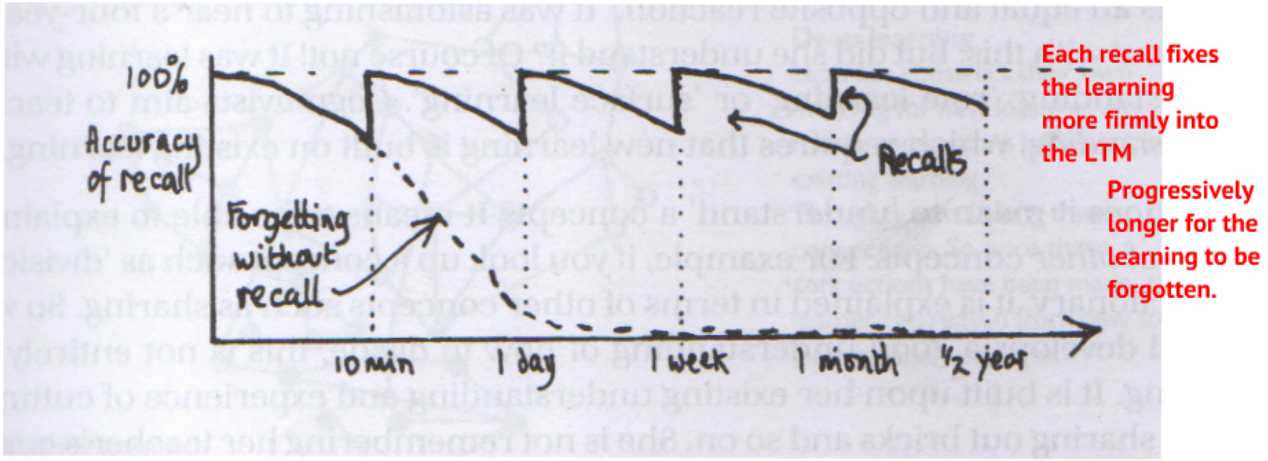
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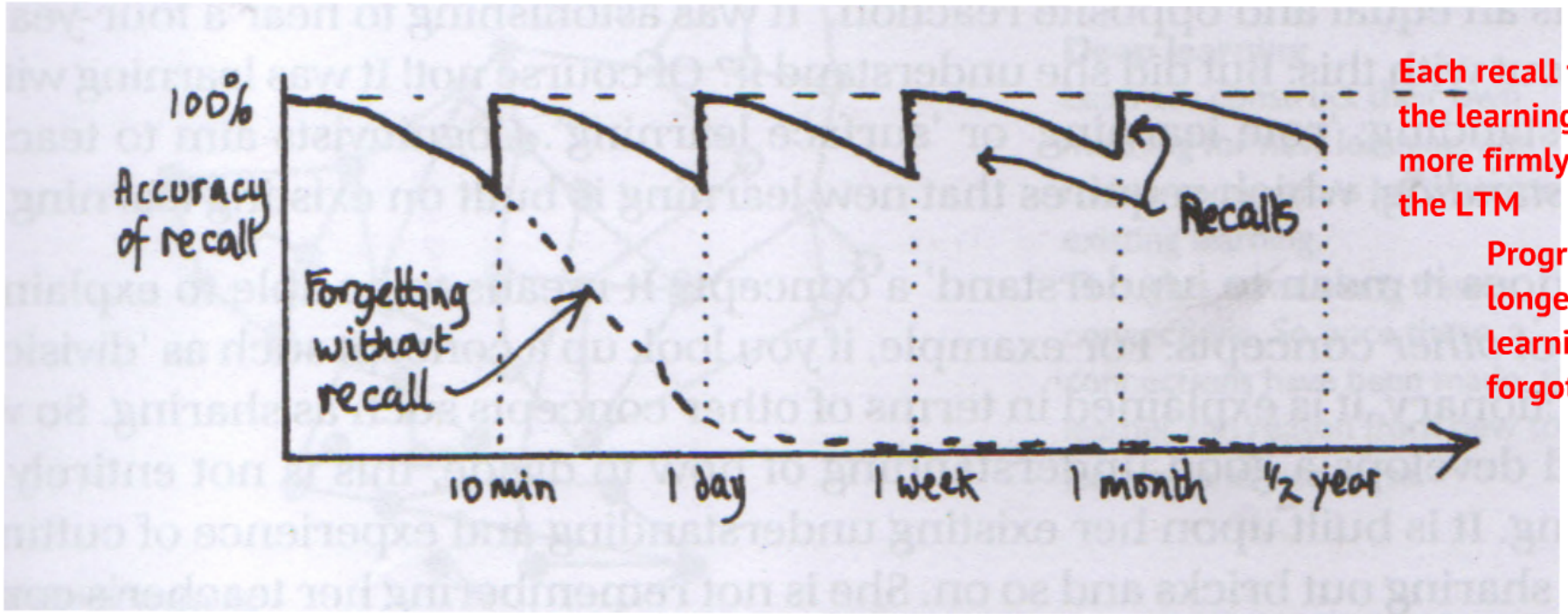
So how do we ensure our children don't forget what we teach?

Repetition

We must ensure that information is recalled and used frequently.



J.B Watson = Remembering depended on "frequency and recency"



J.B Watson = Remembering depended on "frequency and recency"

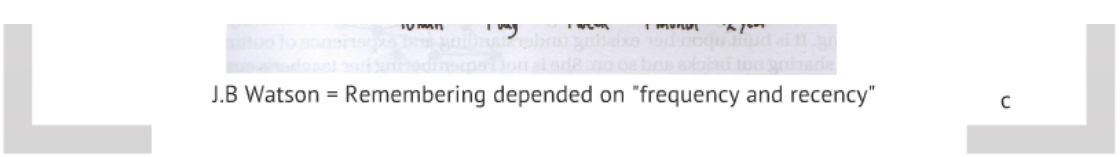
Are there any exceptions to this thinking?



Emotional significance



There are exceptions…that one off memorable experience!



Our knowledge of memory suggests the following:

- Don't cover new material too quickly
- Slow down
- Leave a silence after an importance sentence
- Children need activities which encourage them to process new material.
- Allow children to use and personally restructure the information
- For information to be stored in LTM it must be recalled and used often

How do we learn?

How do we learn?



t

Let's take a closer look at how YOU like to learn.




Desert Assignment
SAHARA
A
B
Imagine you must travel entirely alone, in a Land Rover, from A to B on the map. 100's of miles across the Sahara Desert.

Desert Assignment



Imagine you must travel entirely alone, in a Land Rover, from A to B on the map. 100's of miles across the Sahara Desert.

In order to survive you must learn one skill.



Practical skill

You must be able to dismantle, clean and reassemble the carburettor.

It is a matter of life and death that you learn effectively!

How would you want to learn this skill?

You may choose any and as many learning experiences you like…no expense spared!

Explanation (listen to a teacher explain)

Reading (relevant reading set)

Test (Simple or realistic, marked by teacher)

Class practical or exercise (Practice under supervision)

Note-taking (Notes or handouts given to provide permanent record to refer to during trip)

Demonstration (watch a teacher show how it's done)

Question and Answer (ask questions to teacher)

Watch a video (includes content on location in Sahara)

Summarising (given summary of most important aspects)

Investigation (explore the topics for yourself)

Role-play (take part in realistic simulations – even in a desert!)

Others?



What order do you want them?

To learn how to clean a carburettor



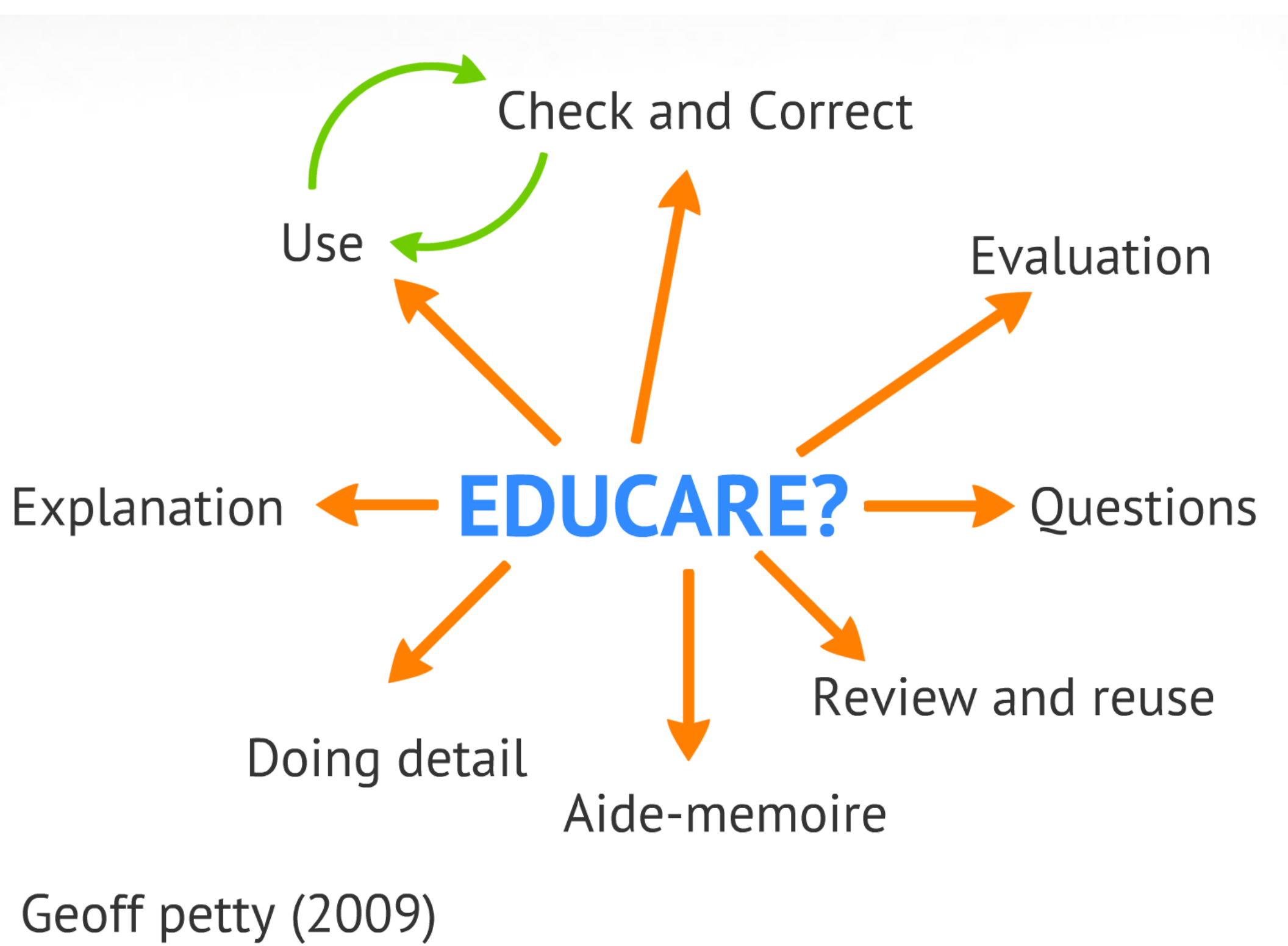
1) Explanation – Function/ where it is/ how it works/ plenty of visual aids and specific handouts (Land Rover). **Understanding**

2) Demonstration – Removal/ dismantling/ cleaning/ reassemble/ notes with warnings and tips and hints. **Actively working it out for themselves**

3) Class practice – Do 2) themselves under supervision. **Doing-detail**

4) A realistic field practice test – In desert, unsupervised/ assessed by teacher (emergency support please) **Skill evaluated**

We all have learning NEEDS…which must be met.



Geoff petty (2009)

What should we learn?



Latin = Education

c

Educate ?

What does it actually mean?

The root of 'Educate in Latin

'Ducere'

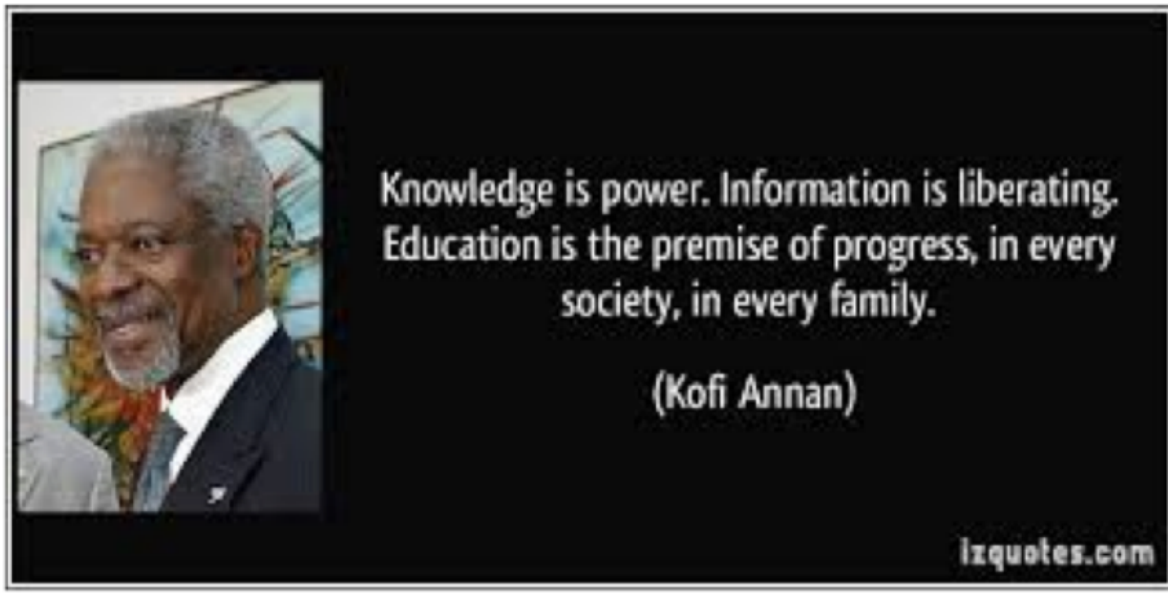


From one place
to another

'Educare' = "to nourish"

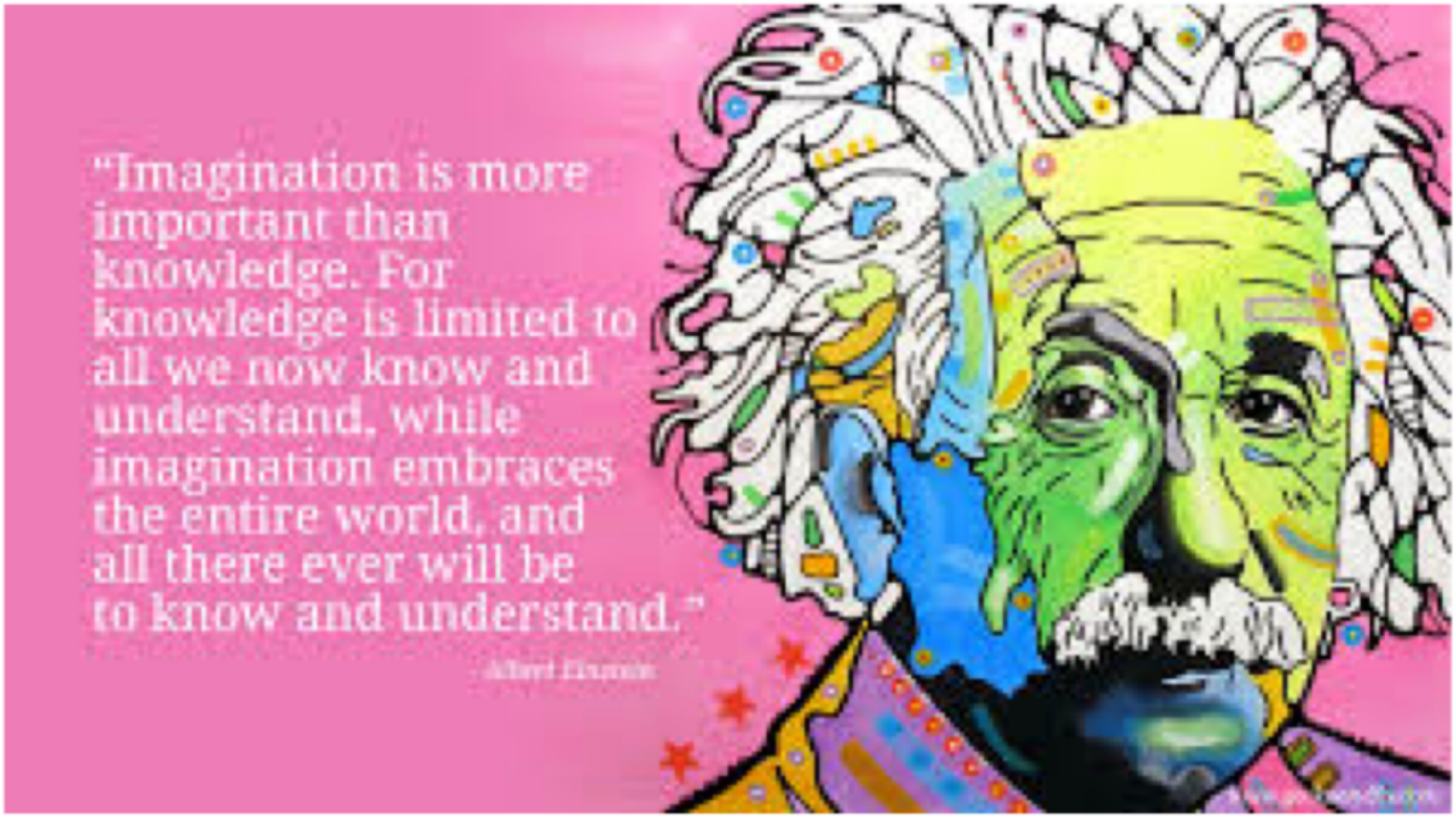
What should children learn?

The function of education is to
teach one to think intensively
and to think critically.
Intelligence plus
character - that is the
goal of true education.
Martin Luther King, Jr.
VERYBESTQUOTES.COM



Llywodraeth Cymru
Welsh Government

Right you, outside, let's sort this out in the alley!





Balance:

- A.S.K.


Triangle of Success
Goal Setting
Time Management
Reasoning
Communication
Inter-personal Skills
Skills
Attitudes
Knowledge
Self-Motivation
Self-Confidence
Integrity
Honesty
Optimism
Enthusiasm
Co-Operative
Commitment
Basics, Theories, Information, Facts, Figures,
Descriptions, Learning, Science etc.

What qualities do learners need?



c



c

www.todaysmeet.com/pgcepop

NEVER GIVE UP!

t



When we no longer know what to do we have come to our real work and when we no longer know which way to go we have begun our real journey.



The mind that is not baffled is not employed.

Wendell Berry

Who?

What?

Why?

How many?

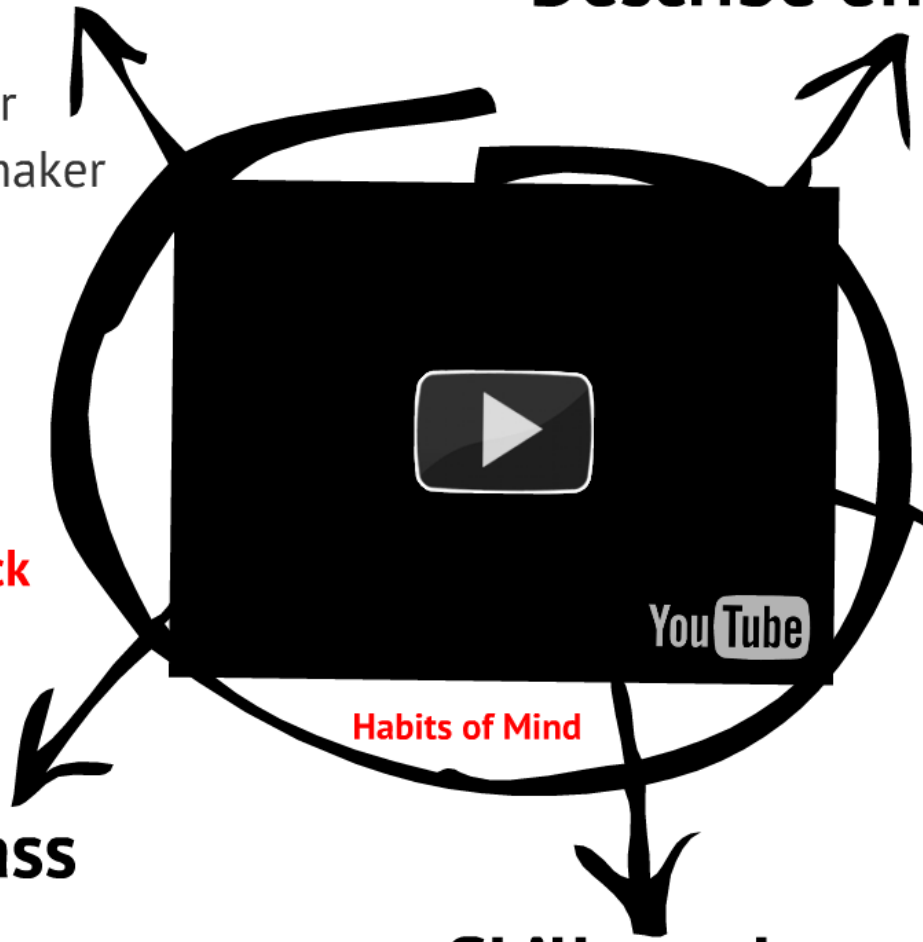


Habits of Mind

Set of dispositions

- Expert problem solver
- Thoughtful decison maker
- Creative thinker

Describe effective thinkers



Art Costa + Bena Kallick

Guide decisions in day to day life

Internal compass

- Solving problems
- Resolving conflict

Skills and strategies used when the answer is not known

The 16 Habits of Mind


















The 16 Habits of Mind

1. Persisting



2. Managing Impulsivity



3. Listening with understanding & empathy



4. Thinking Flexibly



5. Thinking about thinking (metacognition)



6. Striving for accuracy



7. Questioning and posing problems



8. Applying past knowledge to new situations



9. Thinking & communicating with clarity and precision



10. Gathering data through all senses



11. Creating, imagining, innovating



12. Responding with wonderment and awe



13. Taking responsible risks



14. Finding humour



15. Thinking interdependently



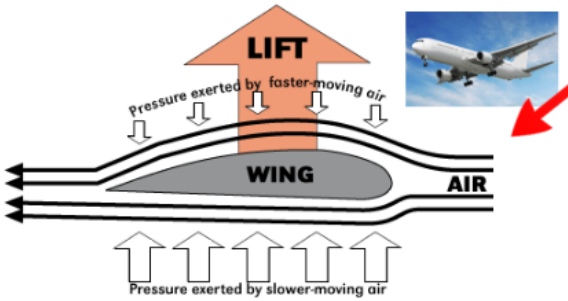
16. Remaining open to continuous learning



Most inspirational picture I've ever seen!



Bernoulli Principle



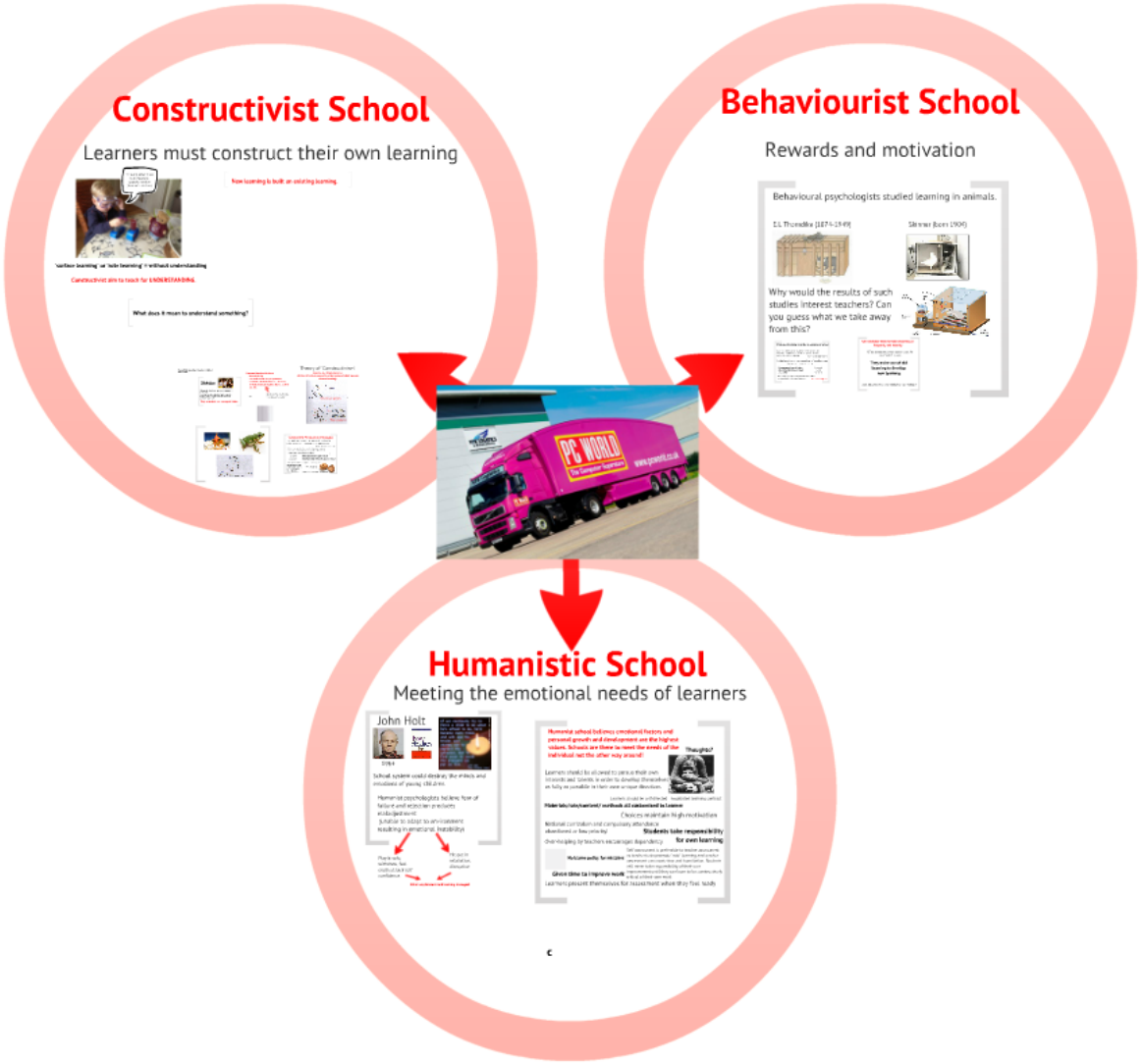
Educational Theory

Memory
Cognitivist school
Behavioural school
Humanist school



Keep in mind your classroom

Shall we play a game?



Three schools of learning in psychology

Constructivist School

Learners must construct their own learning

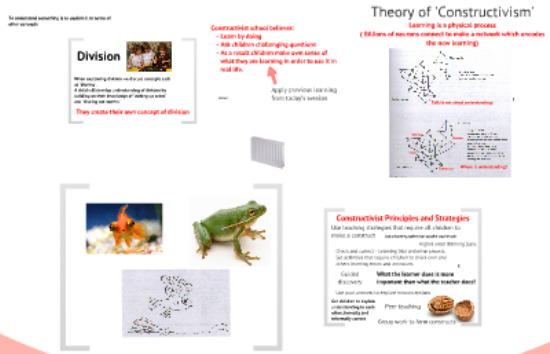


'surface learning' or 'rote learning' = without understanding

Constructivist aim to teach for UNDERSTANDING.

New learning is built on existing learning.

What does it mean to understand something?







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Constructivist aim to teach for UNDERSTANDING.

ning – without understanding

each for UNDERSTANDING.

What does it mean to understand something?

To understand something is to explain it in terms of other concepts

Division

onstruct their c

New learning is built on existing learning.

Division



When explaining division we discuss concepts such as 'sharing'.
A child will develop understanding of division by building on their knowledge of 'cutting up cakes' and 'sharing out sweets'

They create their own concept of division

Constructivist school believes:

- **Learn by doing**
- **Ask children challenging questions**
- **As a result children make own sense of what they are learning in order to use it in real life.**



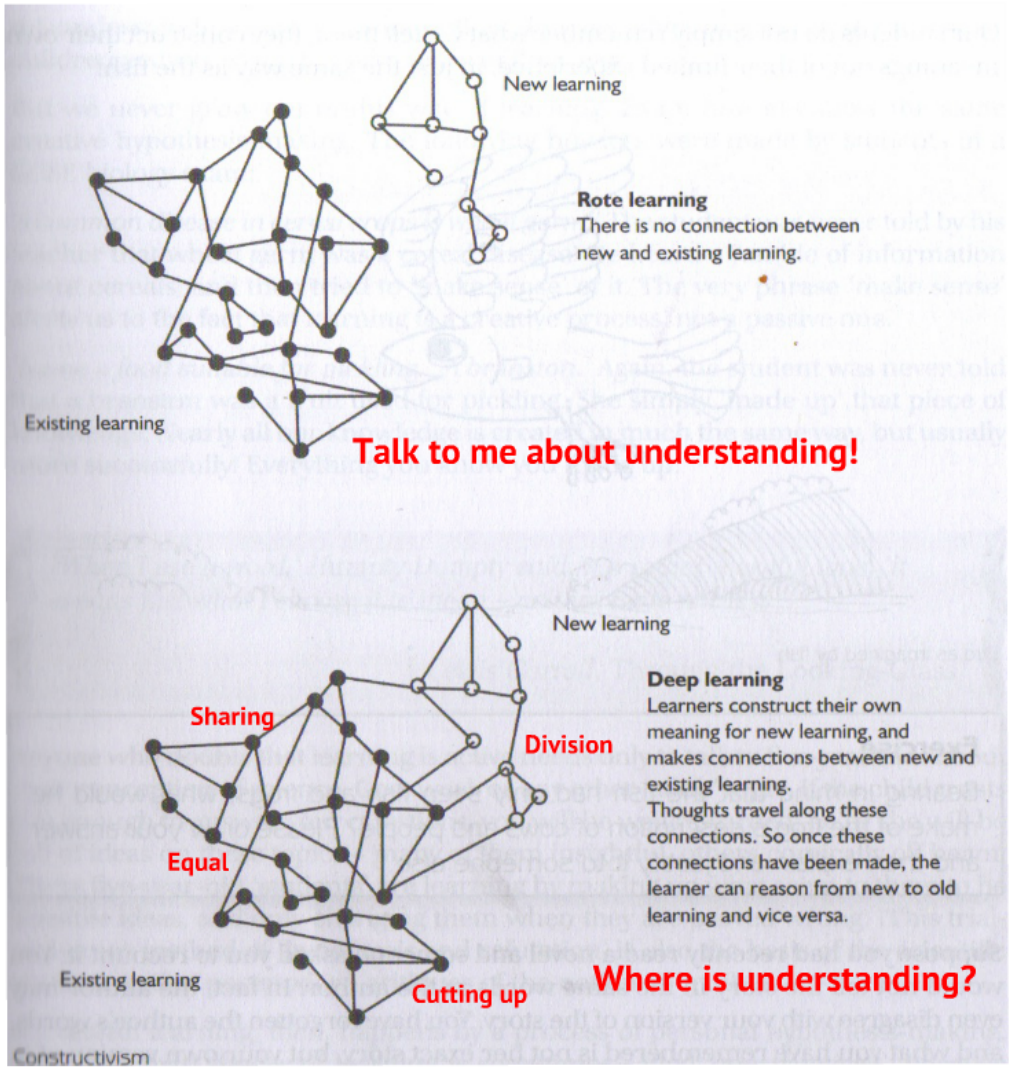
Apply previous learning from today's session

Names!

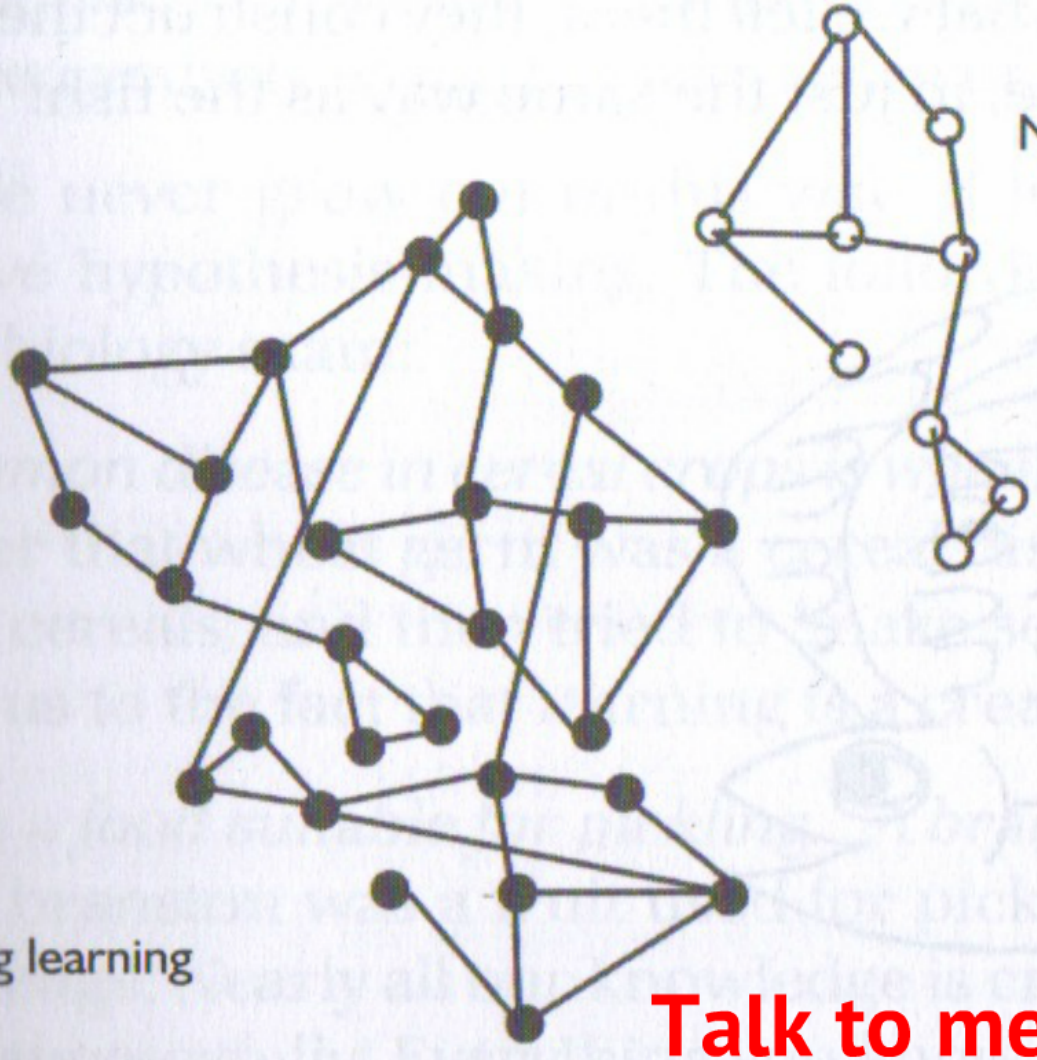
Theory of 'Constructivism'

Learning is a physical process

(Billions of neurons connect to make a network which encodes the new learning)



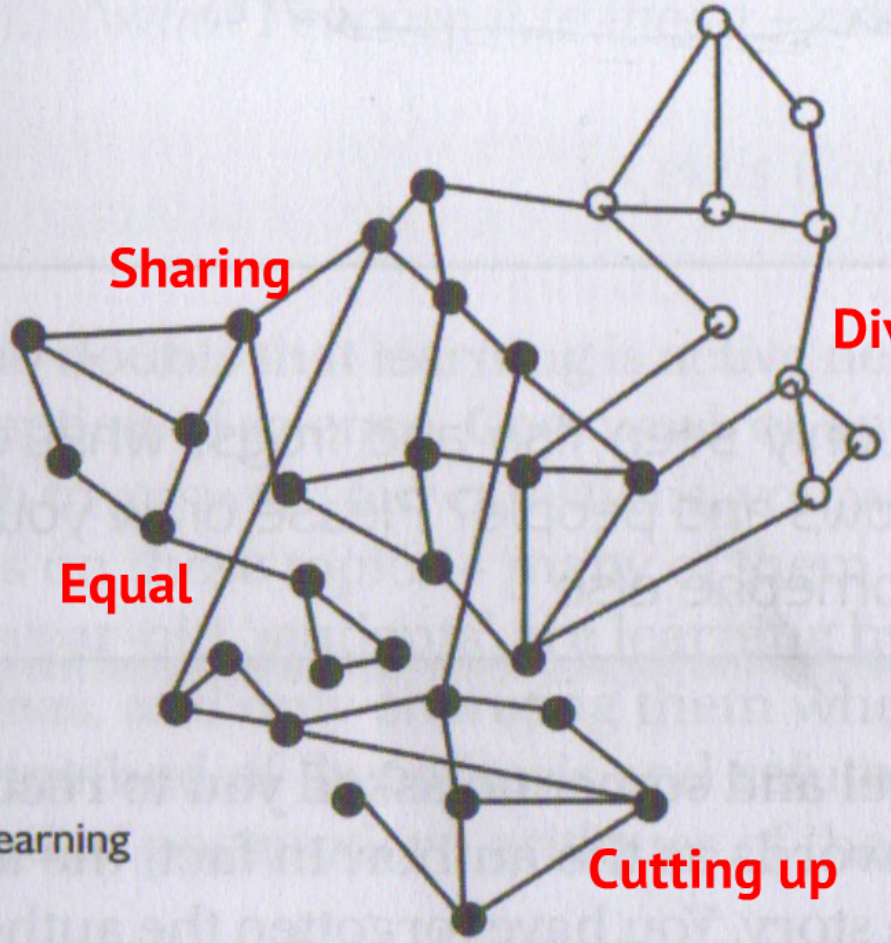
the new learning)



Rote learning
There is no connection between new and existing learning.

Talk to me about understanding!

Talk to me about understanding!

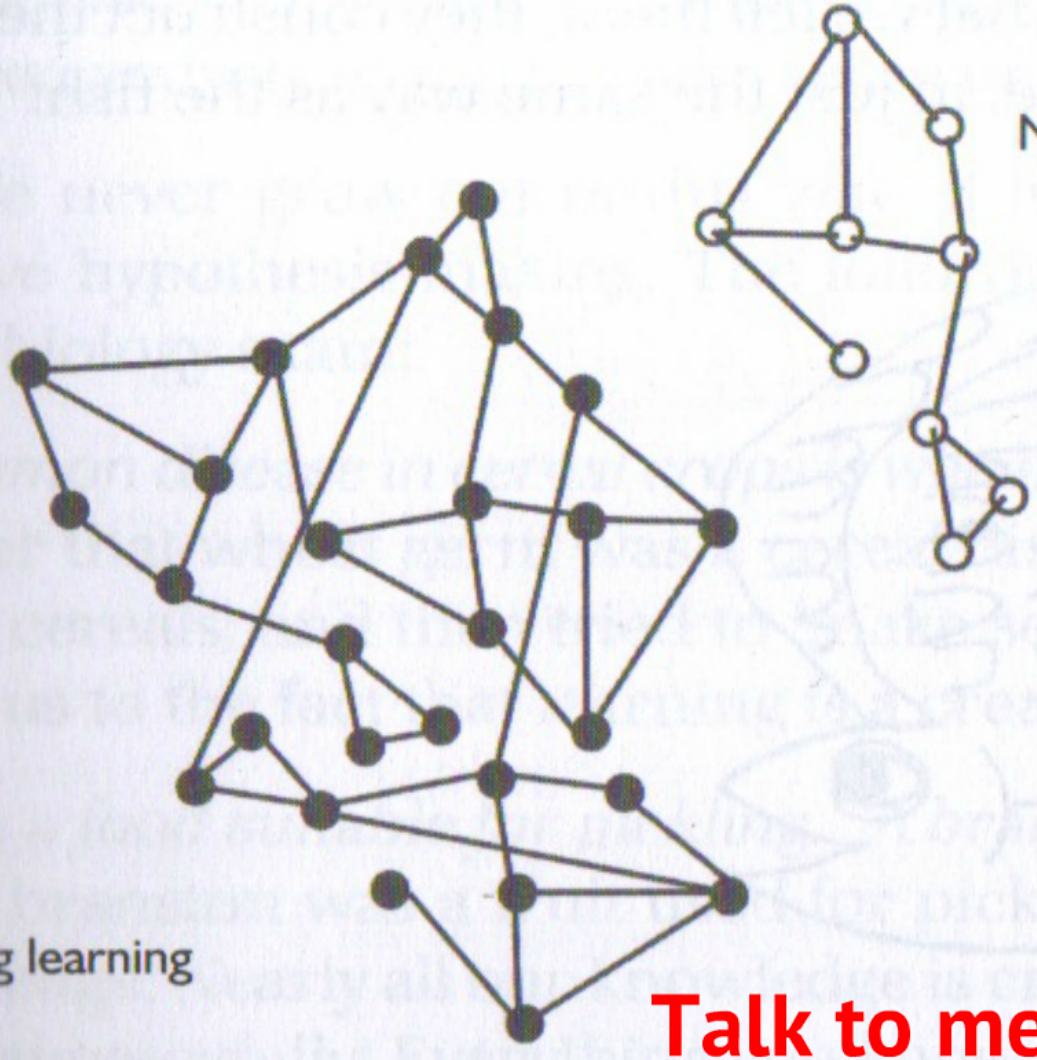


Deep learning
Learners construct their own meaning for new learning, and makes connections between new and existing learning.
Thoughts travel along these connections. So once these connections have been made, the learner can reason from new to old learning and vice versa.

Where is understanding?

onstructivism

the new learning)



Rote learning
There is no connection between new and existing learning.

Talk to me about understanding!



Constructivist Principles and Strategies

Use teaching strategies that require all children to make a construct

Active learning rather than passive teacher talk

Higher order thinking tasks

Check and correct - Learning trial and error process.
Set activities that require children to check own and others learning errors and omissions

c

Guided discovery

What the learner does is more important than what the teacher does!

Use poor answers to explore misconceptions

Get children to explain understanding to each other..formally and informally correct

Peer teaching



Group work to form constructs

Behaviourist School

Rewards and motivation

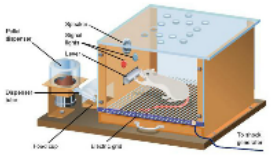
Behavioural psychologists studied learning in animals.

E.L Thorndike (1874-1949)



Skinner (born 1904)





Why would the results of such studies interest teachers? Can you guess what we take away from this?



Principles of learning according to behaviourist school

Divide long tasks into a number of smaller ones

Reinforcement should follow the desired behaviour as soon as possible.

Feedback



We remember what we have experienced frequently and recently

Effective teachers stress key points at the start/ end of lessons

They make use of old learning to develop new learning

Does education violate the behaviourists' findings?



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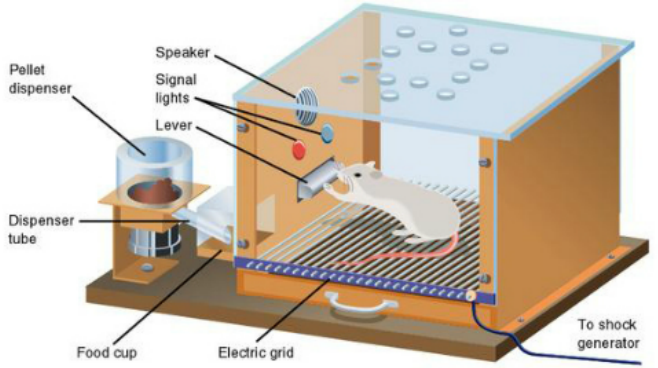
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Set achievable tasks for learners

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Make sure learners are successful regularly

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feedback while working!

Learning is step by step not all at once and is strengthened by repeated success

No success = soon give up!

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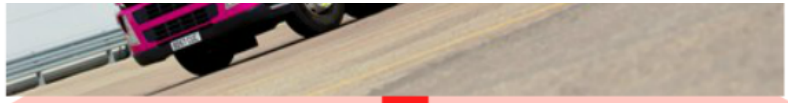
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Humanistic School

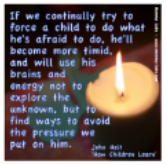
Meeting the emotional needs of learners

John Holt



1964





School system could destroy the minds and emotions of young children.

Humanist psychologists believe fear of failure and rejection produces maladjustment
(unable to adapt to environment resulting in emotional instability)

Play it safe, withdraw, feel crushed, lack self confidence.

Hit out in retaliation, disruptive

Either way learners and learning damaged!

Humanist school believes emotional factors and personal growth and development are the highest values. Schools are there to meet the needs of the individual not the other way around!

Thoughts?



Learners should be allowed to pursue their own interests and talents in order to develop themselves as fully as possible in their own unique direction.

Learners should be self directed - negotiated learning contract

Materials/rate/content/ methods all customised to learner

Choices maintain high motivation

National curriculum and compulsory attendance abandoned or low priority!

Students take responsibility for own learning

Over-helping by teachers encourages dependency

No blame policy for mistakes

Self assessment is preferable to teacher assessment as teacher tests promote 'rote' learning and teacher assessment can create fear and humiliation. Students will never take responsibility of their own improvement until they can learn to be constructively critical of their own work.

Given time to improve work

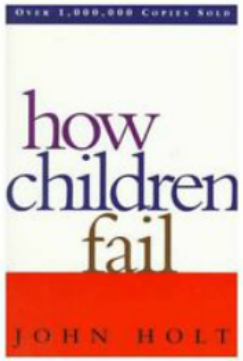
Learners present themselves for assessment when they feel ready

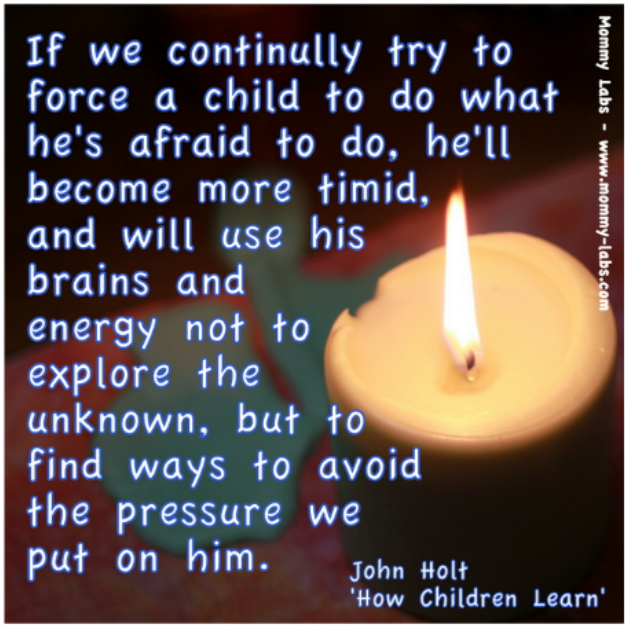
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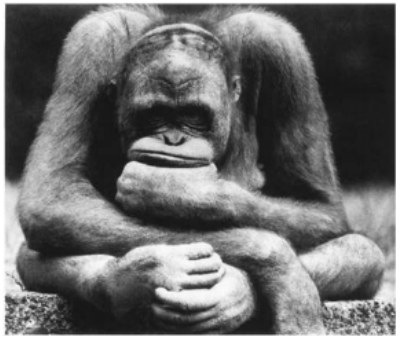
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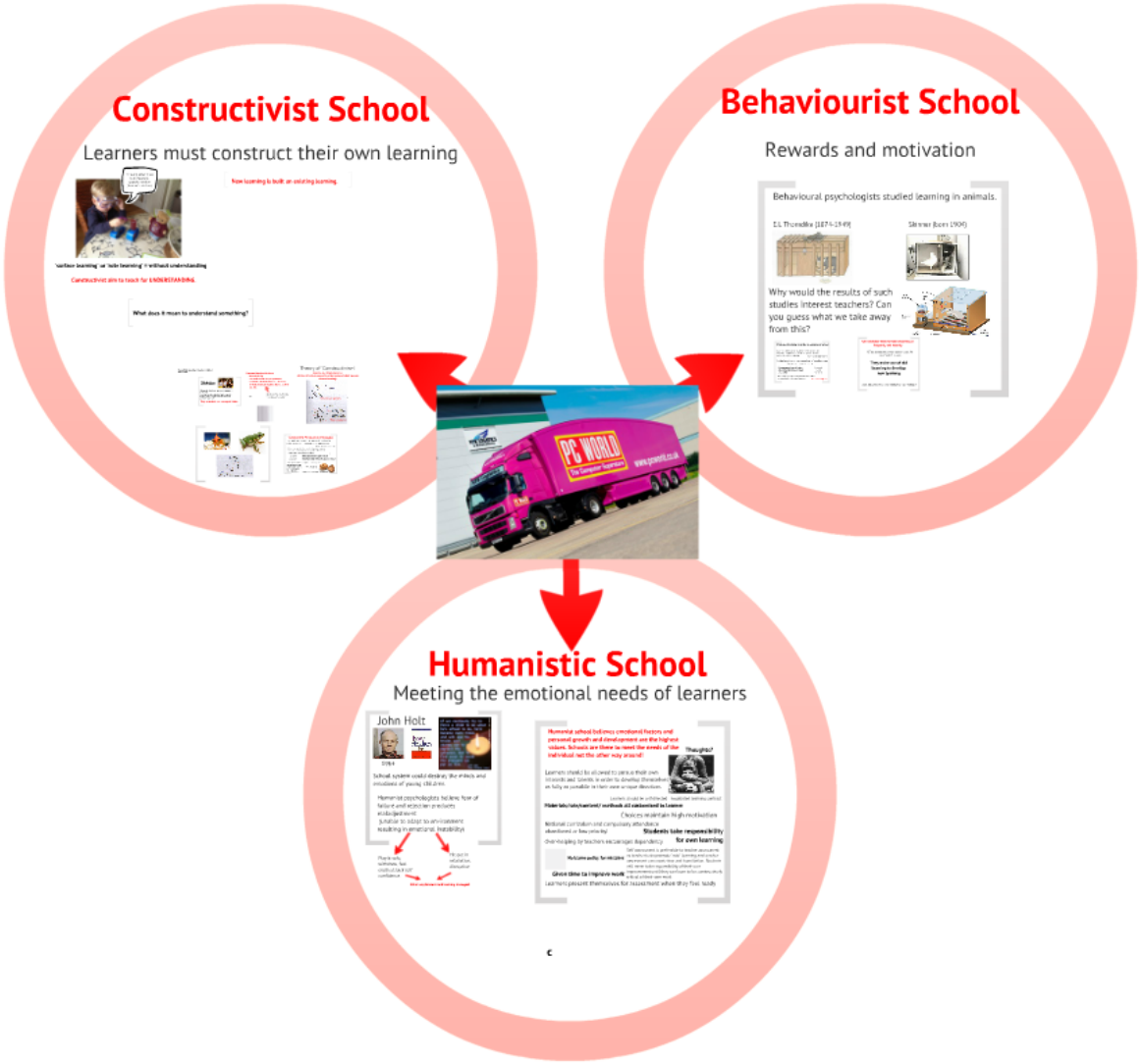


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Three schools of learning in psychology

Can you remember the list of words?

Thick wall it tea of myrrh seize knots trained

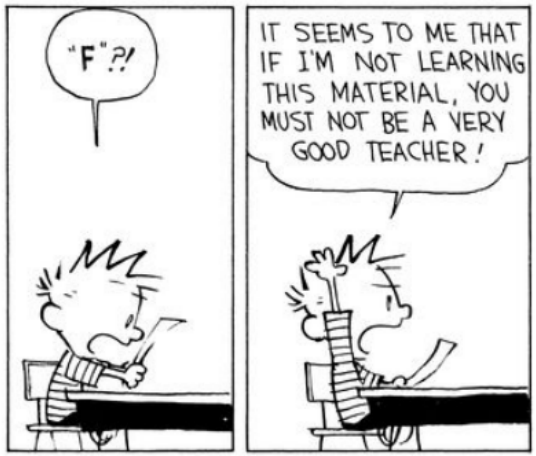
Nearly phonetically identical to...

The quality of mercy is not strained

Makes sense?

On the whole we don't remember words, we remember meanings and these meanings we must make ourselves!

PRIFYSGOL CYMRU
Y Drindod Dewi Sant
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Principles of Pedagogy

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