



CWESTIYNU QUESTIONING



Nodau

Aims



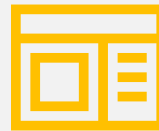
Deall y rhesymau pam mae athrawon yn gofyn cwestiynau

To understand the reasons why teachers ask questions



Ystyried tystiolaeth ymchwil ac awgrymiadau ar gwestiynu

To consider research evidence and suggestions on questioning



Ystyried tystiolaeth ymchwil ac awgrymiadau ar gwestiynu

To consider different types of effective questioning



**PAM MAE
ATHRAWON YN
GOFYN
CWESTIYNAU?**

**WHY DO TEACHERS
ASK QUESTIONS?**

Faint o resymau
gwahanol?

How many
different
reasons?

PAM BOD ATHRAWON YN GOFYN
CWESTIYNAU?

WHY DO TEACHERS ASK
QUESTIONS?

DAU RESWM DROS OFYN CWESTIYNAU

TWO REASONS TO ASK QUESTIONS



Dylan Wiliam, Emeritus Professor of Educational Assessment at the UCL Institute of Education

CASGLU TYSTIOLAETH I LYWIO
EICH ADDYSGU



TO COLLECT EVIDENCE TO INFORM
YOUR TEACHING

GWNEUD I'R DISGYBLION
FEDDWL



TO CAUSE PUPILS TO THINK



1. Beth mae e'n ei olygu, ydych chi'n meddwl, wrth 'gasglu tystiolaeth i lywio eich addysgu'?
2. Sut ydyn ni'n llunio cwestiynau sy'n ennyn tystiolaeth i arwain eich addysgu?
3. Pa fath o gwestiynau sy'n gwneud i ddisgyblion feddwl? Sut mae hyn yn edrych yn yr ystafell ddosbarth?

1. What do you think he means by 'collecting evidence to inform your teaching'?
2. How do you construct questions that elicit evidence to inform your teaching?
3. What type of questions cause pupils to think? What does that look like in the classroom?

Why do teachers ask questions?

To check pupils' knowledge	To probe pupils' understanding	To elicit evidence of learning	To enable pupils to activate prior knowledge
To help identify gaps in learning	To expose/highlight/address misconceptions	To create cognitive conflict	To provide opportunities to deepen thinking
To create a supportive environment	To maintain effective classroom management	To scaffold learning	To make learning accessible to all learners
To help learners build connections	To embed or reinforce learning	To allow pupils to articulate or unpack their thinking	To allow pupils opportunities to listen to peers' explanations
To help pupils monitor their own learning/progress	To identify if it is appropriate to move on (Hinge Questioning – pivotal points)	To help pupils consolidate their learning	To develop interest and motivate pupils
To challenge pupils' assumptions	To develop/promote pupils' critical thinking skills	To expose contradictions	To maintain pupil participation
To nurture inquiring attitudes	To help pupils explore counter arguments	To help pupils make predictions	To allow pupils to consider implications and consequences
To encourage pupils to justify their viewpoint	To allow pupils to consider a counter argument	To stimulate pupils' curiosity	To foster classroom talk



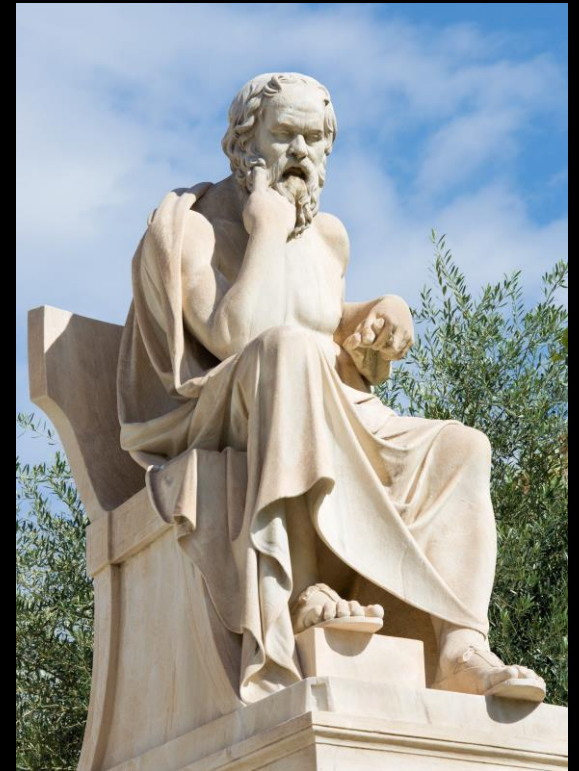
Pam mae athrawon yn gofyn cwestiynau?

I wirio gwybodaeth disgyblion	I ymchwilio dealltwriaeth disgyblion	I ennyn tystiolaeth o ddysgu	I alluogi disgyblion i roi gwybodaeth flaenorol ar waith
I helpu i nodi bylchau o ran y dysgu	I amlygu/tynnu sylw at/mynd i'r afael â chamsyniadau	I greu gwrthdaro gwybyddol	I roi cyfleoedd i ddyfnhau'r meddwl
I greu amgylchedd cefnogol	I gynnal rheolaeth effeithiol yn yr ystafell ddosbarth	I sgaffaldio'r dysgu	I sicrhau bod y dysgu'n hygyrch i bob dysgwr
I helpu dysgwyr i feithrin cysylltiadau	I wreiddio neu atgyfnerthu'r dysgu	I ganiatáu i ddisgyblion fynegi neu ddadbacio eu meddwl	I ganiatáu cyfleoedd i ddisgyblion wrando ar esboniadau cymheiriaid
I helpu disgyblion i fonitro eu dysgu/ cynnydd eu hunain	I nodi a yw'n briodol symud ymlaen (Cwestiynau colfach (<u>hinge questioning</u>) – ar adegau allweddol)	I helpu disgyblion i atgyfnerthu eu dysgu	I feithrin diddordeb ac ysgogi disgyblion
I herio rhagdybiaethau'r disgyblion	I ddatblygu/ hyrwyddo sgiliau disgyblion i feddwl yn feirniadol	I amlygu gwrth-ddywediadau	I gynnal cyfranogiad disgyblion
I feithrin agweddau <u>ymholgar</u>	I helpu disgyblion i archwilio gwrth-ddadleuon	I helpu disgyblion i wneud rhagfynegiadau	I ganiatáu i ddisgyblion ystyried goblygiadau a chanlyniadau
I annog disgyblion i gyfiawnhau eu safbwynt	I ganiatáu i ddisgyblion	I ysgogi chwilfrydedd disgyblion	I feithrin sgwrs yn yr ystafell ddosbarth



Roedd Socrates yn athronydd Groegaidd a oedd yn byw yn Athen yn y 5ed ganrif CC ac a siapiodd feddwl y Gorllewin gyda'i ddull o **gwestiynu a deialog**.

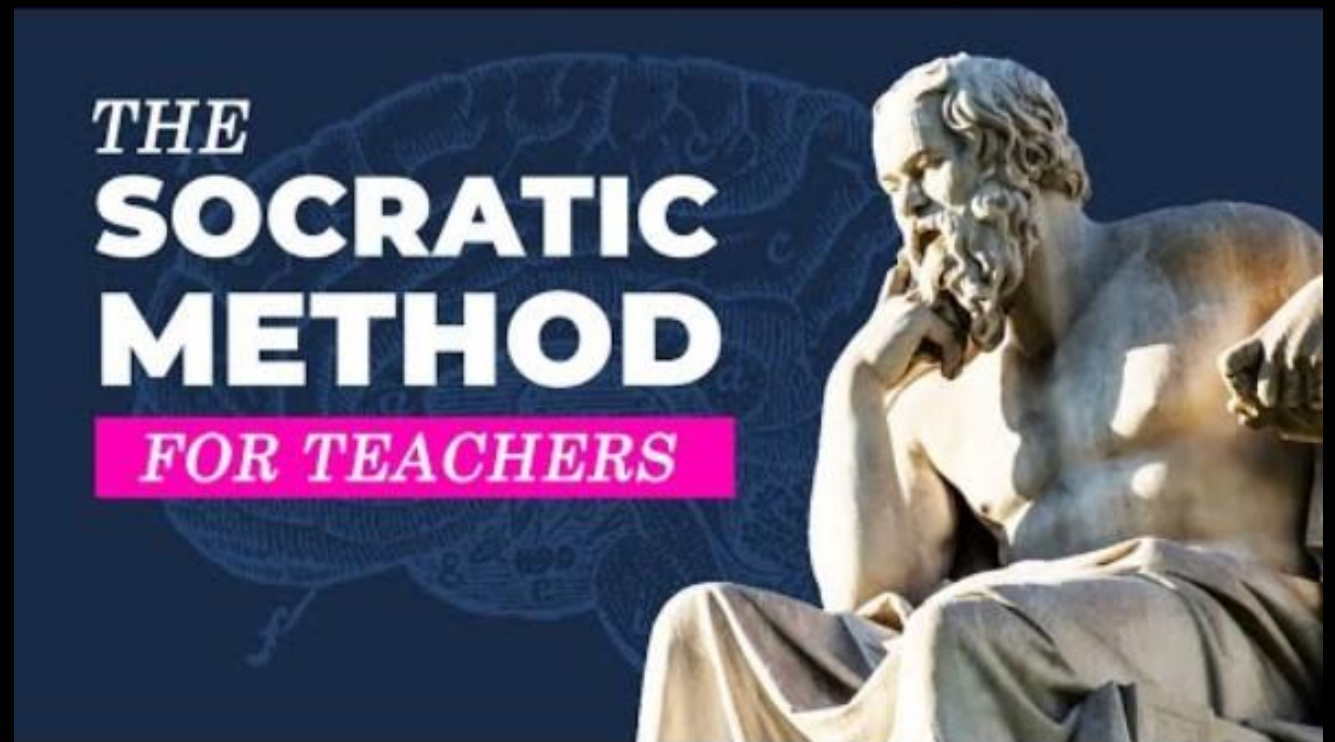
Socrates was a Greek philosopher who lived in Athens in the 5th century BCE and shaped Western thought with his method of **questioning and dialogue**





Mae'r dull Socrataidd yn ffurf
o **feddwl beirniadol** sy'n
defnyddio chwe math
gwahanol o gwestiynu

The Socratic method is a form of
critical thinking which uses six
distinct types of questioning



A DDYLECH CHI GYNLLUNIO EICH CWESTIYNAU?

SHOULD YOU PLAN YOUR QUESTIONS?

Pam?

Why?

Ble?

Where?



DILYNIANT ADDYSGU A DYSGU

(Ychwanegwch neu dynnu rhesi isod fel y bo'n briodol)

Amseru: <i>Rhannwch yr amseru yn grwpiau os yw'n briodol. Gwnewch yn siŵr fod disgyblion yn mynd ati i 'wneud' yn gyflym a bod y cyfnodau pontio'n cael eu hystyried</i>	Rôl yr athro a'r staff cymorth: <i>e.e. cwestiynau allweddol, adalw dysgu blaenorol, modelu ac esboniadau, gwirio dealltwriaeth, defnydd a fwriedir o oedolion ychwanegol</i> <i>Dewis o fodel addysgegol neu o'r 12 egwyddor addysgegol</i>	Y dysgu gan y disgyblion a'r gweithgareddau: <i>Beth fydd y disgyblion yn dysgu ei wneud a pha weithgareddau / adnoddau fydd yn hwyluso hyn?</i> <i>Cyfeiriwch at y ddogfen Dysgu Sylfaen i gael manylion y ddarpariaeth.</i>	Strategaethau Cynhwysol (yn cynnwys gwahaniaethu): <i>Y rhesymau dros sgaffaldio a manylion hynny.</i> <i>Mathau o gynrychiolaeth mewn tasgau.</i>	Gwiriwch beth mae disgyblion yn ei wybod, yn ei ddeall, ac yn gallu ei wneud: <i>Cwestiynau allweddol, mathau o ymarferion adalw, cyfleoedd i hunanasesu ac asesu cymheiriaid, cyfleoedd marcio byw, adborth a fwriedir.</i>

SEQUENCE OF TEACHING & LEARNING

(Add or remove rows below as appropriate)

Timing: <i>Break down timings into groups if appropriate. ensure pupils are 'doing' quickly and that transitions are taken into account</i>	Role of the teacher & support staff: <i>e.g., key questions, retrieval of prior learning, modelling and explanations, checking understanding, planned use of additional adults.</i> <i>Choice of pedagogical model or of the 12 pedagogical principles</i>	Pupils' learning and activities: <i>What will the pupils be learning to do and what activities / resources will facilitate this?</i> <i>Please refer to Foundation Learning planning document for details of continuous provision.</i>	Inclusive Strategies (including differentiation): <i>Reasons for and details of scaffolding.</i> <i>Types of representation in tasks.</i>	Check what pupils know, understand, and can do: <i>Key questions, types of retrieval practices, self and peer assessment opportunities, purposeful AfL strategies, live marking opportunities, planned feedback.</i>

QUALITY OF QUESTIONING

1. Beth yw manteision cwestiynu effeithiol yn yr ystafell ddosbarth?
2. Sut gallwn chi wneud yn siwr bod eich cwestiynau yn effeithiol?
3. Beth yw'r heriau/cyfyngiadau?



1. What are the benefits of effective questioning in the classroom?
2. How can you ensure that your questions are effective?
3. What are the challenges/limitations

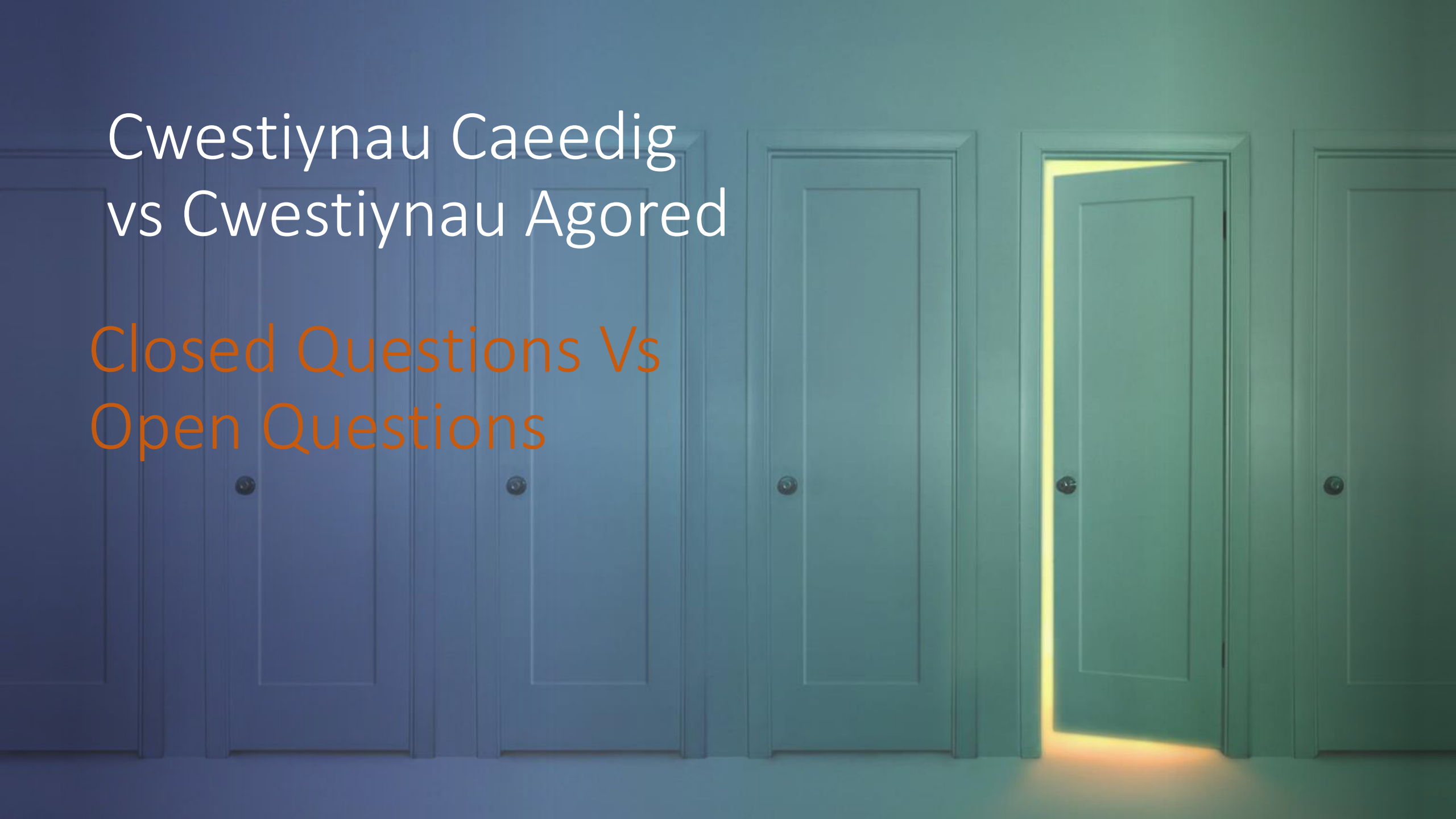


Beth sy'n
gwneud
cwestiwn yn
effeithiol?

What makes a
question
effective?

Cwestiynau Caeedig
vs Cwestiynau Agored

Closed Questions Vs
Open Questions





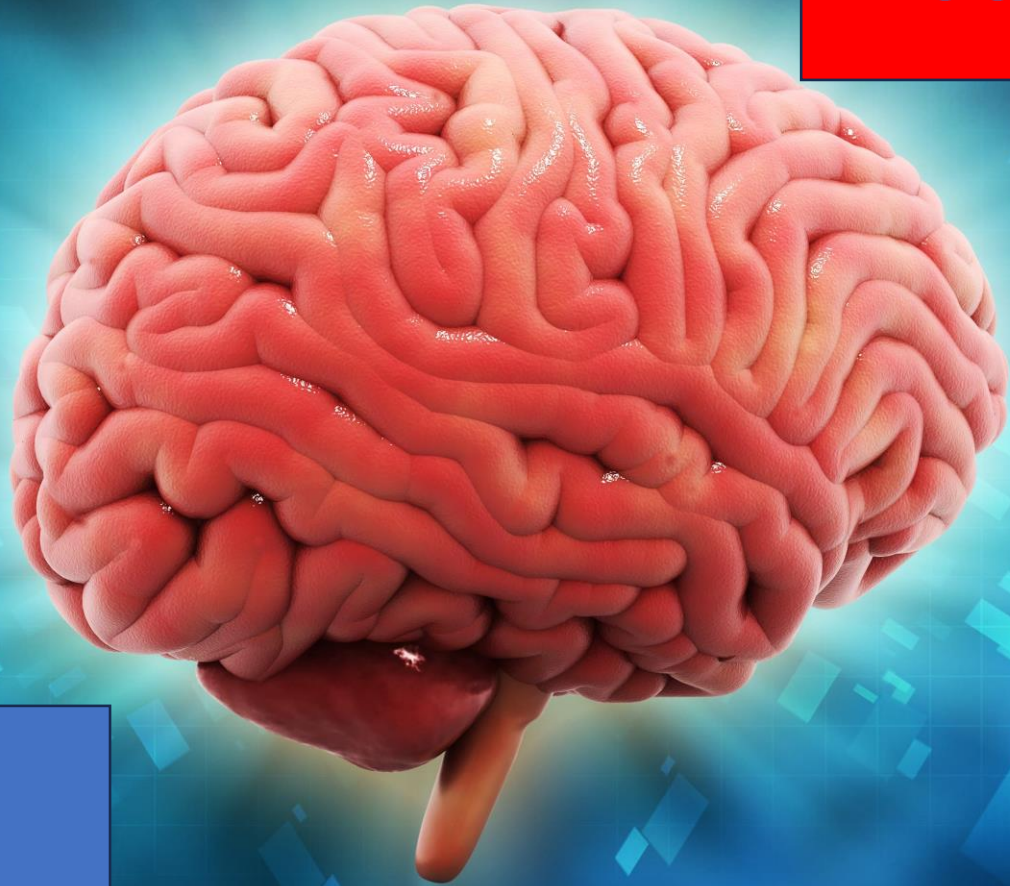
Tasg/Task

Amser aros

Wait time

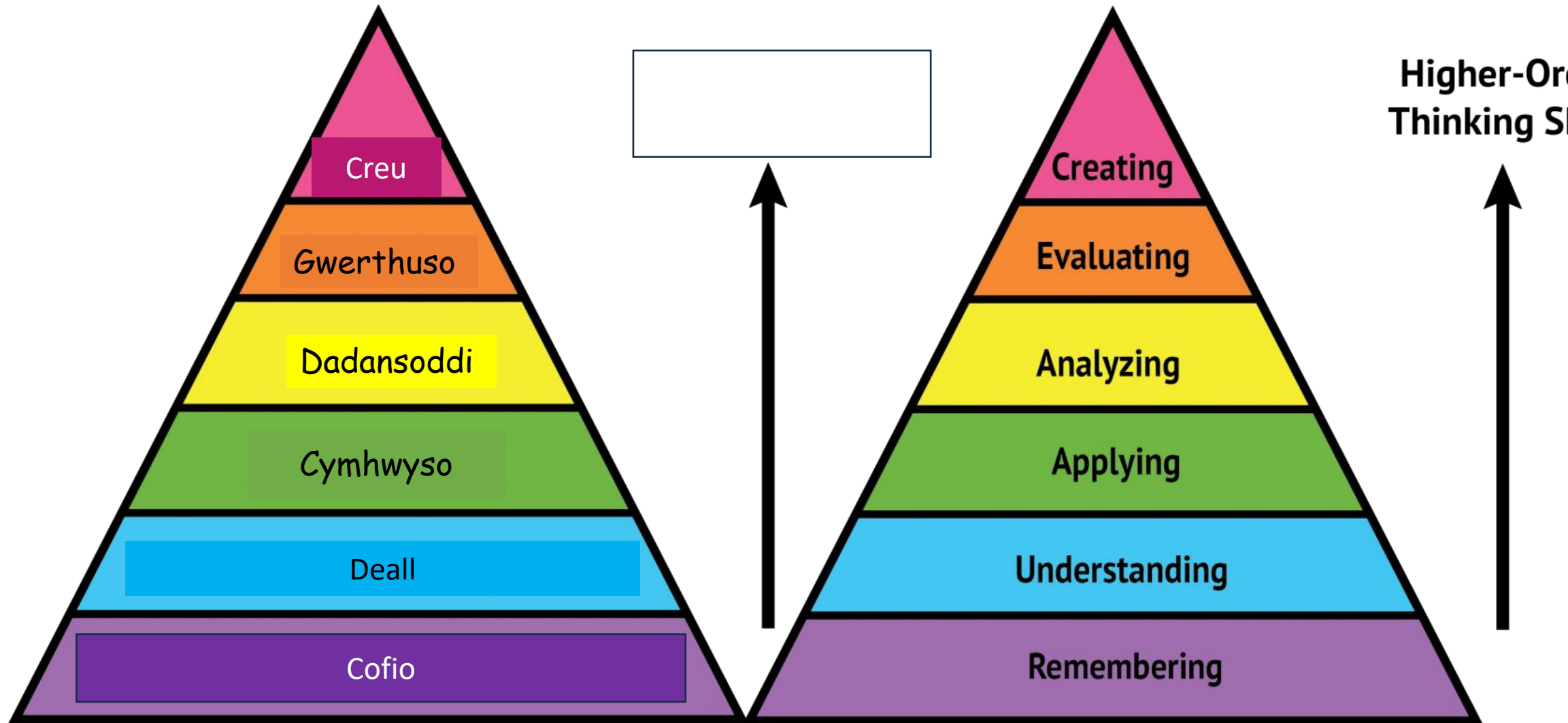


**Lefel Uwch
High Order**

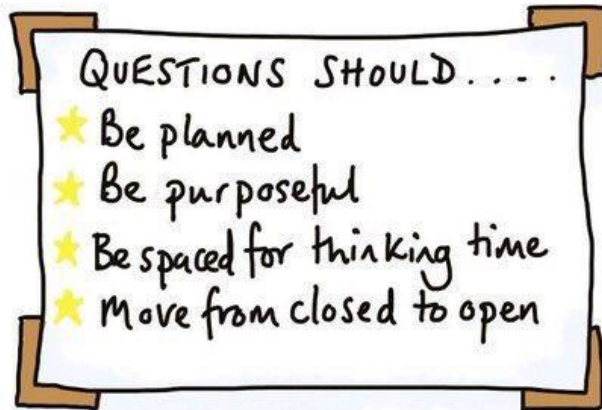


**Lefel Is
Low Order**

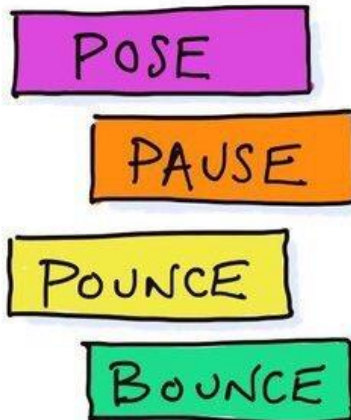
Bloom's Taxonomy



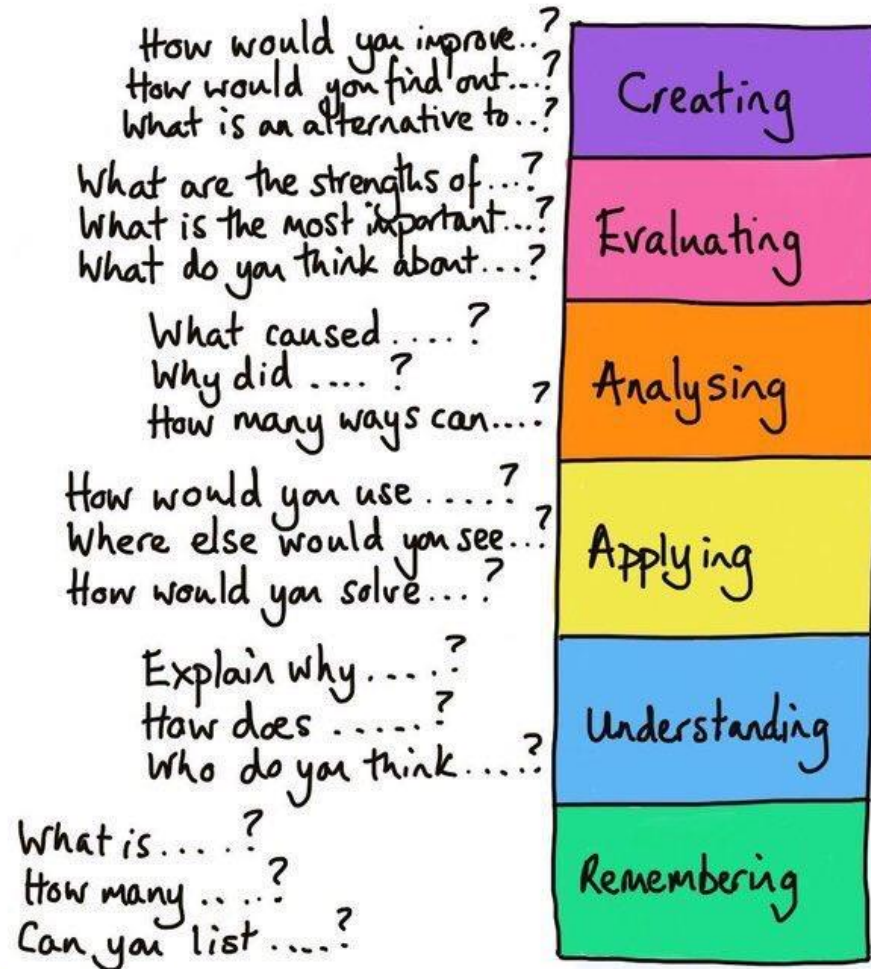
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"The art and science of asking questions,
is the source of all knowledge."
Thomas Berger



QUESTIONING for PROGRESS



QUESTION HIERARCHY - Bloom's Taxonomy

Don't ask more than 1 question at a time, give pupils time to think



Inside the black box

Standards through classroom as



VISIBLE LEARNING FOR TEACHERS

MAXIMIZING IMPACT ON LEARNING

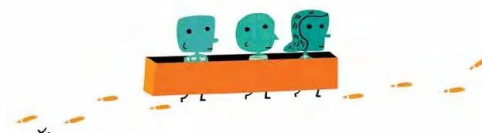
JOHN HATTIE



BETH SY'N GWNEUD ADDYSGU GWYCH?

WHAT MAKES GREAT TEACHING?

Principles of Instruction Research-Based Strategies That All Teachers Should Know



By BARAK ROSENSHINE

This article presents 10 research-based principles of instruction, along with suggestions for classroom practice. These principles come from three sources: (a) research in cognitive science, (b) research on master teachers, and (c) research on cognitive supports. Each is briefly explained below.

A: Research in cognitive science: This research focuses on how our brains acquire and use information. This cognitive research also provides suggestions on how we might overcome the limitations of our working memory (i.e., the mental "space" in which thinking occurs) when learning new material.

B: Research on the classroom practices of master teachers: Master teachers are those teachers whose classrooms made the highest gains on achievement tests. In a series of studies, a wide range of teachers were observed as they taught, and the investigators coded how they presented new material, how and whether they checked for student understanding, the types of support they provided to their students, and a number of other instructional activities. By also gathering student achievement data, researchers were able to identify the ways in which the more and less effective teachers differed.

C: Research on cognitive supports to help students learn complex

Even though these are three very different bodies of research, there is no conflict at all between the instructional suggestions that come from each of these three sources. In other words, these three sources supplement and complement each other. The fact that the instructional ideas from three different sources supplement and complement each other gives us faith in the validity of these findings.

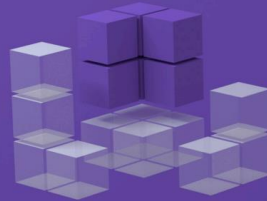
Education involves helping a novice develop strong, readily accessible background knowledge. It's important that background knowledge be readily accessible, and this occurs when knowledge is well rehearsed and tied to other knowledge. The most effective teachers ensured that their students efficiently acquired, rehearsed, and connected background knowledge by providing a good deal of instructional support. They provided this support by teaching new material in manageable amounts, modeling, guiding student practice, helping students when they made errors, and providing for sufficient practice and review. Many of these teachers also went on to experiential, hands-on activities, but they always did the experiential activities *after*, not before, the basic material was learned.

The following is a list of some of the instructional principles that have come from these three sources. These ideas will be described and discussed in this article:

- Begin a lesson with a short review of previous learning.



04



Great teachers
present content,
activities and
interactions that
activate their
students' thinking

3

Questioning: using questions and dialogue to promote elaboration and connected, flexible thinking among learners (e.g., 'Why?', 'Compare', etc.); using questions to elicit student thinking; getting responses from all students; using high-quality assessment to evidence learning; interpreting, communicating and responding to assessment evidence appropriately

Rosenshine on questioning

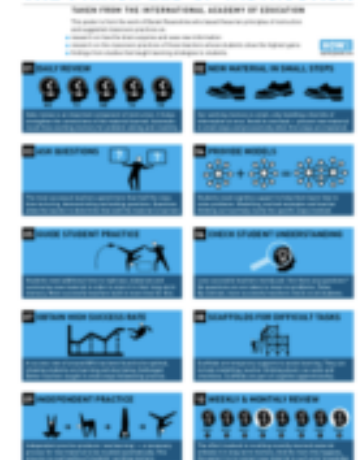
17 Principles of Effective Instruction



Professor Barak Rosenshine

1. Begin a lesson with a short review
2. Present new material in small steps
3. Limit the amount of material students receive at one time
4. Give clear and detailed instructions and explanations
5. Ask a large number of questions and check for understanding
6. Provide a high level of active practice for all students
7. Guide students as they begin to practice
8. Think aloud and model steps
9. Provide models of worked out problems
10. Ask students to explain what they learned
11. Check the responses of all students
12. Provide systematic feedback and corrections
13. Use more time to provide explanations
14. Provide many examples
15. Re-teach material when necessary
16. Prepare students for independent practice
17. Monitor students when they begin independent practice.

THE PRINCIPLES OF INSTRUCTION



Link to pedagogical principles:

1. Good teaching and learning maintains a consistent focus on the overall purposes of the curriculum
2. Good teaching and learning challenges all learners by encouraging them to recognise the importance of sustained effort in meeting expectations that are high but achievable for them
3. Good teaching and learning means employing a blend of approaches including direct teaching
4. Good teaching and learning means employing a blend of approaches including those that promote problem solving, creative and critical thinking
5. Good teaching and learning sets tasks and selects resources that build on previous knowledge and experience and engage interest
11. Good teaching and learning supports social and emotional development and positive relationships

Egwyddorion Addysgegol :

1. Mae addysgu a dysgu da yn canolbwyntio'n gyson ar ddibenion cyffredinol y cwricwlwm
2. Mae addysgu a dysgu da yn rhoi her i'r holl ddysgwyr drwy eu hannog i gydnabod pwysigrwydd ymdrechu'n barhaus i gwrdd â disgwyliadau sy'n uchel ond o fewn eu cyrraedd
3. Mae addysgu a dysgu da yn galw am ddefnyddio cymysgedd o ddulliau sy'n cynnwys addysgu uniongyrchol
4. Mae addysgu a dysgu da yn golygu defnyddio cymysgedd o ddulliau gan gynnwys y rheini sy'n hybu sgiliau datrys problemau, sgiliau creadigol a'r gallu i feddwl mewn modd beirniadol
5. Mae addysgu a dysgu da yn golygu gosod tasgau a dewis adnoddau sy'n adeiladu ar wybodaeth a phrofiad blaenorol ac yn ennyn diddordeb
11. Mae addysgu a dysgu da yn hybu datblygiad cymdeithasol ac emosiynol a pherthnasoedd cadarnhaol

Formative Assessment and Questioning

Dylan Wiliam discusses Five Formative Assessment Strategies

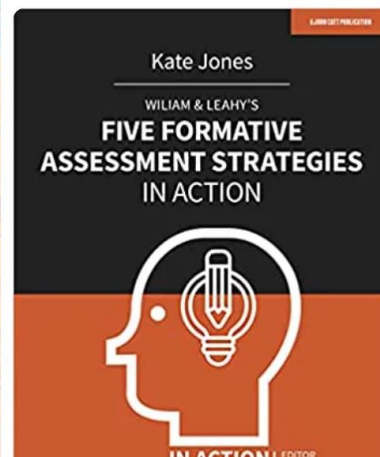
Questioning

Hinge Questioning

Research on Questioning

Feedback

Suggested reading book by Kate Jones, discussing the works of Wiliam & Leahy on Formative Assessment



ask in class really reveal about student learning?

Podcast with Dylan Wiliam on Effective Questioning In The Classroom (strategies and techniques)



Didau Blog



How effective learning hinges on good questioning

How effective learning hinges on good questioning – David Didau
(learningspy.co.uk)

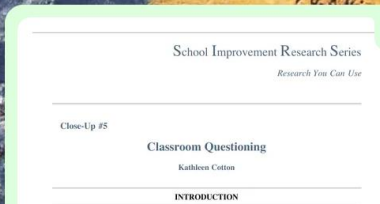
Hinge questioning - a method of eliciting evidence of learning



What does research evidence tell us about effective questioning?



What does research evidence tell us about effective questioning?



Towards effective feedback: an analysis of teachers' oral feedback practice

[Formative Assessment and Questioning \(padlet.com\)](https://padlet.com)





Exit Ticket

Tocyn gadael

CYFEIRIADAU/REFERENCES

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