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Trawsnewid Addysg, Trawsnewid Bywydau

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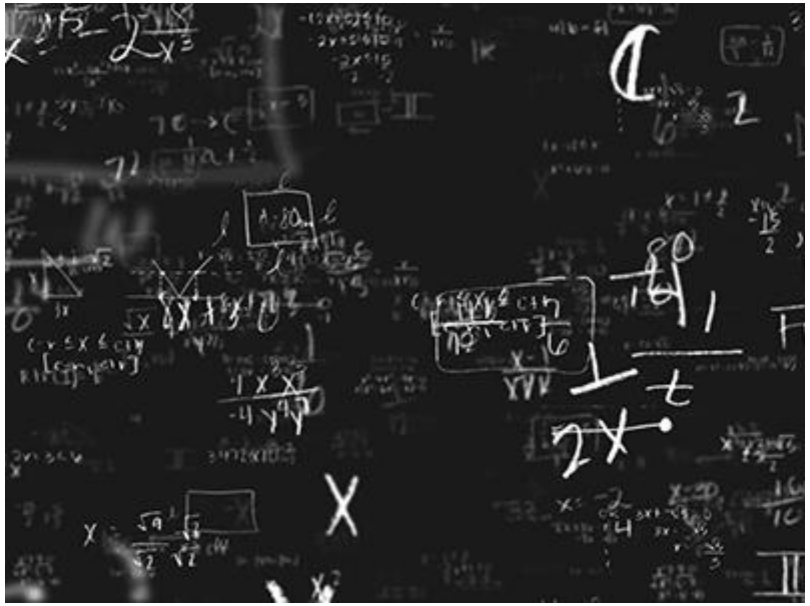

Sesiwn 3
Session 3

ECAD4017: 2025-2026
Beth ydw i'n ei addysgu?
Astudiaethau Proffesiynol ac Addysgeg: Arwain y Dysgu: beth, sut a pham ydw i'n addysgu?

ECAD4017: 2025-2026
What am I teaching?
Professional and Pedagogic Studies: Leading the Learning: what, how and why am I teaching?

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Yn ystod darlithoedd …
During lectures, please ….

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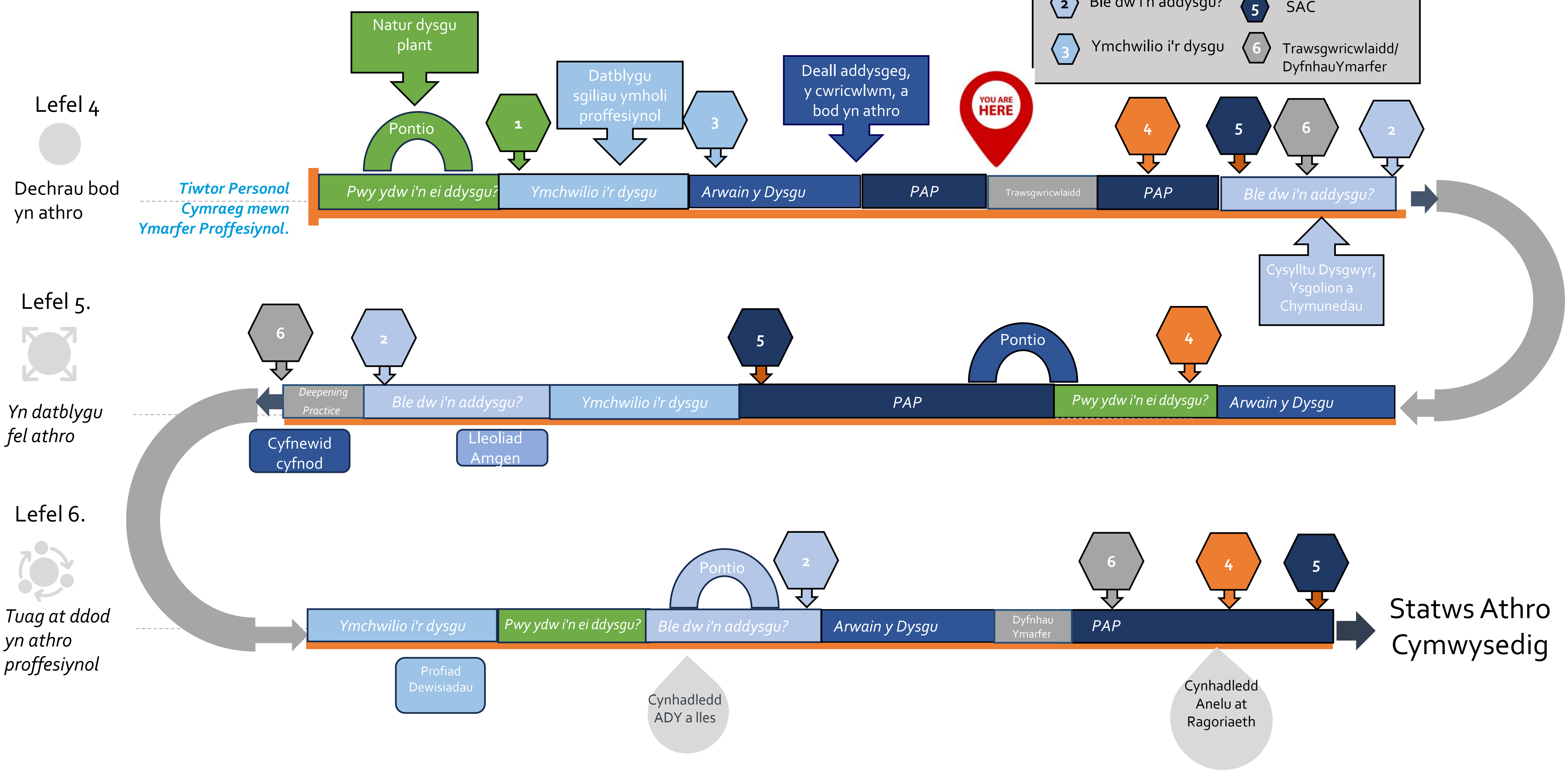
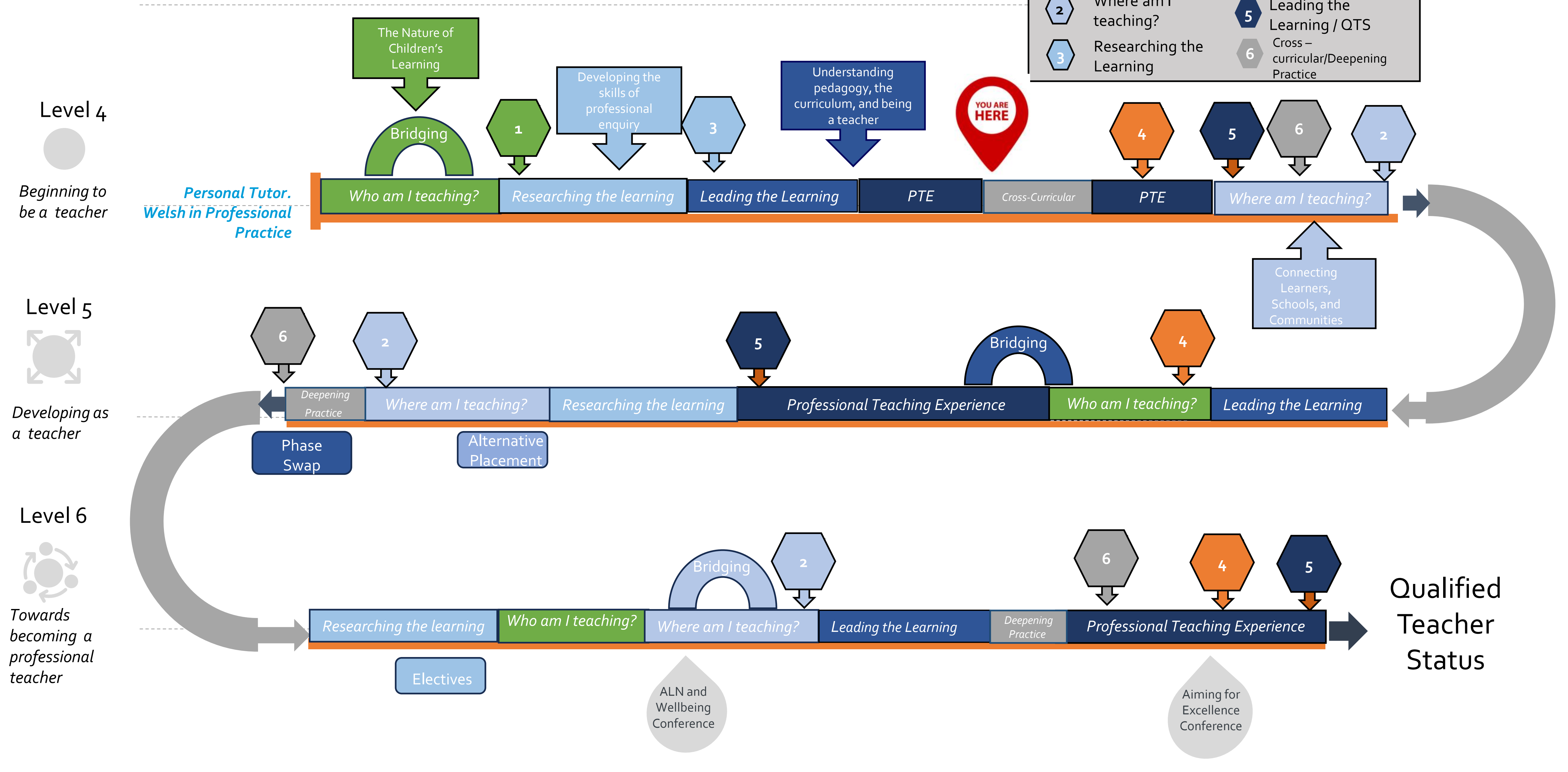
BA Addysg Gynradd (SAC) Llwybr Cwricwlwm Sbiral



BA Primary Education (QTS) Spiral Curriculum Pathway

Assessments

1. Who am I teaching?
2. Where am I teaching?
3. Researching the Learning
4. Welsh in Professional Practice
5. Leading the Learning / QTS
6. Cross – curricular/Deepening Practice



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Amcanion ar gyfer heddiw
Aims for today

- Datblygu dealltwriaeth o'r cyd-destun cenedlaethol ar gyfer addysgu mathemateg a rhifedd
- Archwilio arferion effeithiol y Cyfnod Sylfaen mewn addysgu mathemateg a rhifedd
- Archwilio rôl yr athro a’i heffaith ar ddatblygiad mathemategol dysgwyr.

- Develop an understanding of the national context for teaching mathematics and numeracy
- Explore effective Foundation Phase practices in teaching mathematics and numeracy
- Examine the teacher’s role and its impact on learners’ mathematical development.

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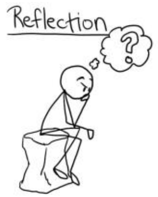
Adfyfyrio ar y lleoliad
Reflecting on placement



Meddyliwch am un achlysur o'ch lleoliad pan oeddech chi wedi gweld plant yn dysgu drwy chwarae neu'n dysgu drwy brofiad.

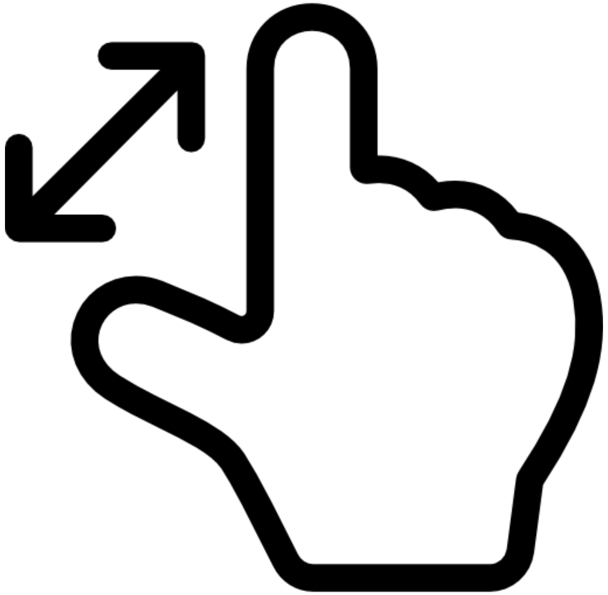
Beth oedd wedi eich synnu fwyaf am oedd plant wedi'i ddysgu yn 'ystafell ddosbarth' y Cyfnod Sylfaen?

What is one moment from your placement where you saw children learning through play or experience?

What surprised you most about how children learned in the Foundation Phase "classroom"?

"Ehangu ein gorwelion" – golwg ar dirwedd ehangach addysgu mathemateg yn y Cyfnod Sylfaen

"Zooming out" – a look at the wider landscape of teaching maths in Foundation Phase



Why is mathematics and numeracy so important?

Andreas Schleicher, OECD noted that "Good numeracy is the best protection against unemployment, low wages and poor health”. However, National Numeracy notes ‘it is culturally acceptable in the UK to be negative about maths. We don’t talk about other life skills in this way, but we hear ‘I can’t do maths’ so often it doesn’t seem a strange thing to say (Kowsun, 2008)’.

It is also accepted that young people entering adulthood with poor standards of numeracy or weak skills in mathematics have a significant effect on the economy. According to research from Pro Bono Economics, it is estimated that 58% of adults in Wales have low numeracy skills (Franklin, 2021).

Pam fod mathemateg a rhifedd mor bwysig?

Nododd Andreas Schleicher, OECD mai "Rhifedd da yw’r amddiffyniad gorau yn erbyn diweithdra, cyflogau isel ac afiechyd”. Fodd bynnag, mae National Numeracy yn nodi ‘mae’n dderbyniol yn ddiwylliannol yn y Deyrnas Unedig i fod yn negyddol am fathemateg. Dydyn ni ddim yn siarad am fedrau bywyd eraill yn y modd hwn, ond yn clywed ‘Dydw i ddim yn gallu gwneud mathemateg’ mor aml fel nad yw’n ymddangos yn beth od i’w ddweud (Kowsun, 2008)’.

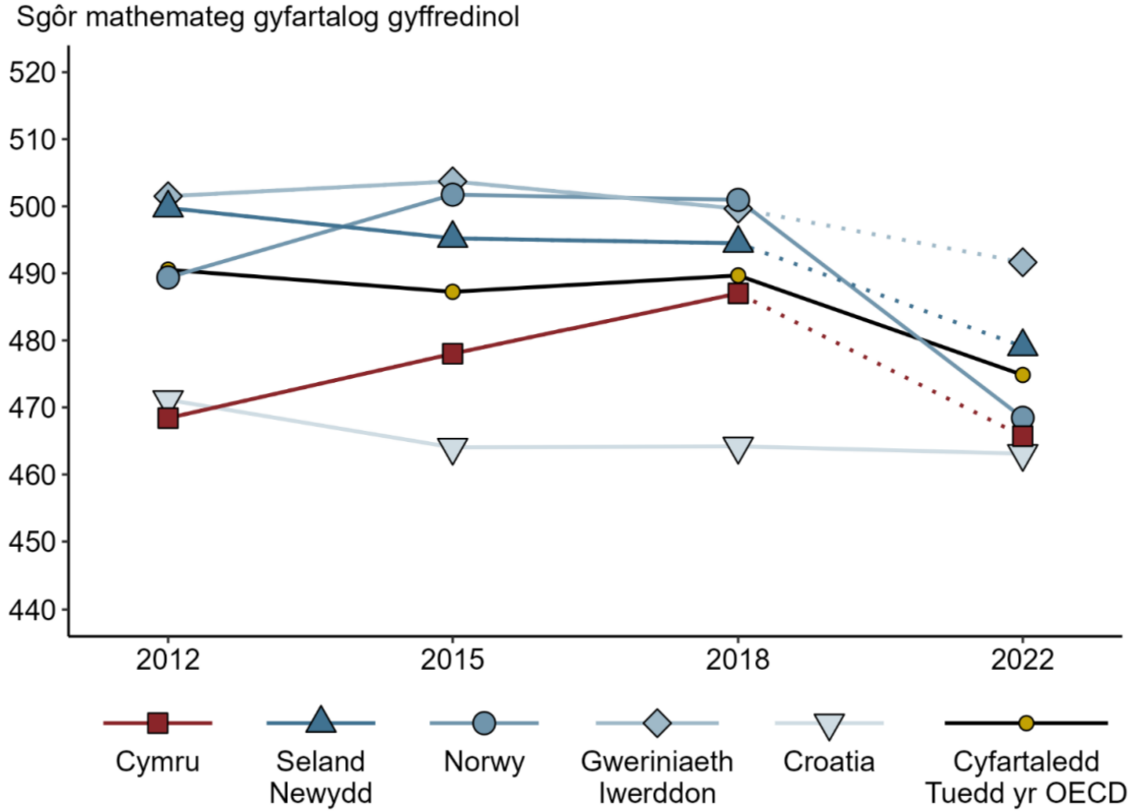
Derbynnir hefyd fod pobl ifanc sy’n tyfu i fod yn oedolion gyda safonau rhifedd gwael neu fedrau gwan mewn mathemateg yn cael effaith sylweddol ar yr economi. Yn ôl ymchwil gan Pro Bono Economics, amcangyfrifir bod gan 58% o oedolion yng Nghymru fedrau rhifedd isel (Franklin, 2021).

Rhaglen Ryngwladol Asesu Myfyrwyr (PISA) adroddiad cenedlaethol: 2022
Program for International Student Assessment (PISA) national report: 2022

Fe wnaeth 81 o systemau addysg gymryd rhan yn PISA 2022, gan gynnwys Cymru. Yng Nghymru, cwblhaodd 2,568 o ddysgwyr 15 oed o 89 ysgol asesiad 2 awr ar gyfrifiadur a holiadur i ddysgwyr.

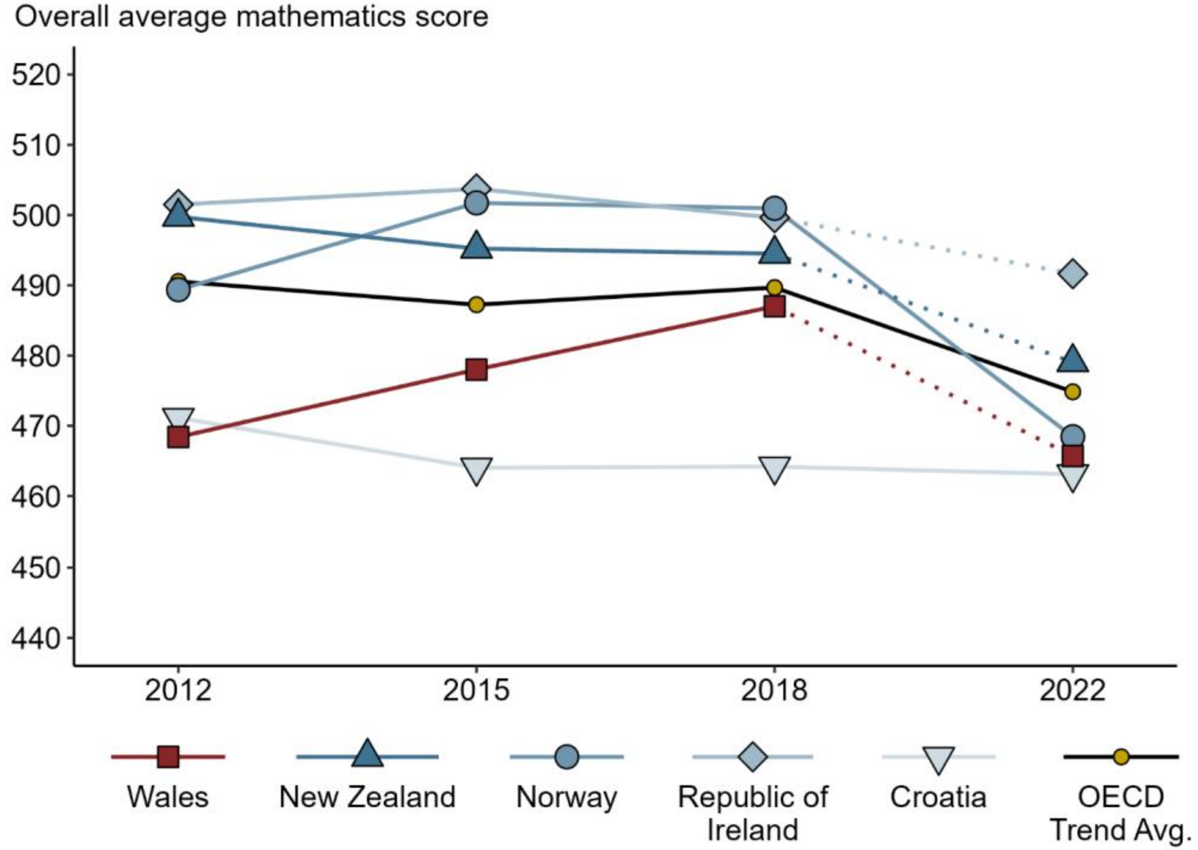
PISA 2022 involved 81 education systems, including Wales. In Wales, 2,568 15-year-old learners from 89 schools completed a 2-hour computer-based assessment and learner questionnaire.

Ffigur 2.1: Tueddiadau mewn mathemateg yng Nghymru, y gwledydd cymharol ac ar gyfartaledd ar draws gwledydd tuedd yr OECD



Gwlad	2012	2015	2018	2022
Cymru	468	* 478	* 487	466
Seland Newydd	* 500	* 495	* 494	479
Norwy	* 489	* 502	* 501	468
Gweriniaeth Iwerddon	* 501	* 504	* 500	492
Croatia	471	464	464	463
Cyfartaledd Tuedd yr OECD	* 491	* 487	* 490	475

Figure 2.1: Trends in mathematics in Wales, comparator countries and on average across OECD trend countries



Country	2012	2015	2018	2022
Wales	468	* 478	* 487	466
New Zealand	* 500	* 495	* 494	479
Norway	* 489	* 502	* 501	468
Republic of Ireland	* 501	* 504	* 500	492
Croatia	471	464	464	463
OECD Trend Average	* 491	* 487	* 490	475

Achosion gorbryder ynghylch mathemateg

Dylanwad	Priodoleddau
Amgylchedd Addysgol	Trefniadau setio, diffyg realaeth, profion ac arholiadau
Rôl pobl eraill	Athrawon, cyfoedion, aelodau o'r teulu
Canfyddiadau personol	Hunan-ganfyddiad, meddylfryd
Natur mathemateg	Mathau o ddealltwriaeth, natur gymhleth

Causes of mathematics anxiety

Influence	Attributes
Educational Environment	Setting arrangements, lack of realism, tests and exams
The role of others	Teachers, peers, family members
Personal perceptions	Self-perception, mindset
The nature of mathematics	Types of understanding, complex nature

Tasg / Task

Mathemateg a Rhifedd

Mathematics and Numeracy

Wrth edrych ar y dudalen gyflwyniad, nodwch 6 ymadrodd allweddol sydd, yn eich barn yn crisialu pwrpas mathemateg a rhifedd yn y Cwricwlwm i Gymru.

Mewn parau, cytunwch ar 3 neges allweddol, yr hoffech i bob athro eu cofio.

Looking at the introduction page, highlight no more than 5 key phrases that you think captures purpose of maths and numeracy in CfW

In pairs, agree 3 key messages you would like *every* teacher to remember.

Mathemateg a Rhifedd

Tasg / Task

Mathematics and Numeracy

"hyder a mwynhad"

"dilyniant a chydlyniant"

"bywyd go iawn“

“confidence and enjoyment”

“progression and coherence”

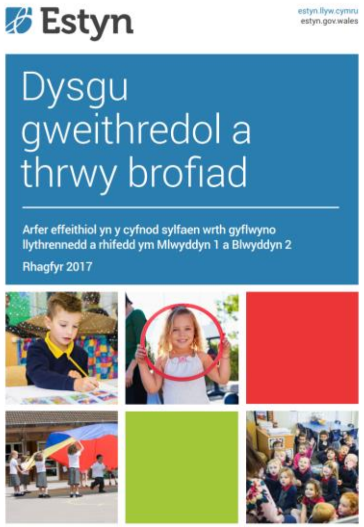
“real-life”

Pe bai hyn yn digwydd mewn ystafell ddosbarth, beth fydden ni'n ei weld? Beth fyddai'r athro yn ei wneud?

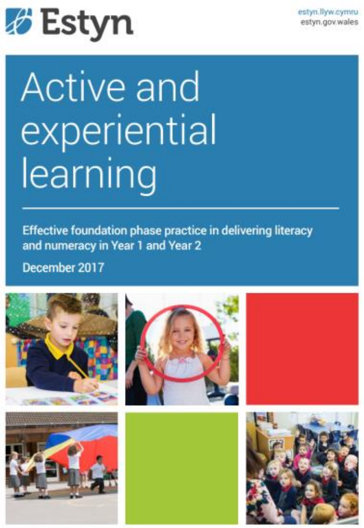
If this was genuinely happening in a classroom, what would we see?

What would the teacher be doing?

Estyn



Tasg / Task



Agorwch y ddogfen hon a darllenwch dudalennau 6 – 9 (“cefndir”).

Atebwch y cwestiynau hyn mewn parau:

1. Beth mae’r ddogfen ei dweud wrthym am sut mae plant yn dysgu orau yn y Cyfnod Sylfaen?
2. Sut fyddai dysgu gweithredol a dysgu drwy brofiad yn edrych yn ymarferol?

Open this document and read pages 6 – 9 (“background”).

Anwer these questions in pairs:

1. What does it tell us about how children learn best in Foundation Phase?
2. What would effective active and experiential learning look like in practice?

Beth nesaf?
What next?

Nodyn...
Un syniad o bolisi / PISA / Cwricwlwm Cymru a heriodd y ffordd rwyf yn ei feddwl.

Un goblygiad ar gyfer sut rwy'n addysgu neu'n cefnogi’r dysgu yn fy ystafell ddosbarth

Un newid penodol y byddaf yn ei wneud yn fy ymarfer yn y dyfodol

Note...
One idea from policy / PISA / Curriculum for Wales that challenged my thinking

One implication for how I teach or support learning in my classroom

One specific change I will make in my practice in the future

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Cysylltiadau heddiw â'r safonau SAC
Today's links to the QTS standards

Yn y ddarlith hon rydych chi wedi dechrau datblygu eich gwybodaeth a'ch dealltwriaeth o'r safonau SAC hyn

In this lecture you have begun to develop your knowledge and understanding of these QTS standards

Addysgeg – Hrwyddo dysgu…

Mae'r athro'n arddangos gwybodaeth am addysgeg a disgyblaethau perthnasol o fewn, ac ar draws, cynnwys pynciau, meysydd dysgu, a themâu trawsgwricwlaidd; mae hefyd yn arddangos dealltwriaeth o hyn ac yn cynllunio'n briodol yn ôl hynny

Pedagogy - Advancing learning

The teacher demonstrates a knowledge and **understanding of relevant pedagogies and disciplines within and across subject content, areas of learning and cross-curricular themes**, and plans appropriately.

Addysgeg – Hyrwyddo dysgu…

Mae'r athro'n arddangos gwybodaeth am ddefnyddio cyd-destunau bywyd go iawn dilys, a hynny fel rhan naturiol o'r profiad dysgu. Mae hyn yn ehangu profiad diwylliannol, ieithyddol, crefyddol ac economaidd-gymdeithasol y dysgwr, ac yn rhoi enghreifftiau ymarferol o gysyniadau a haniaethau.

Pedagogy - Advancing learning

The teacher demonstrates an understanding of the use of **real life, authentic contexts** for learning being provided as a natural part of the learning experience. This extends the learner's cultural, linguistic, religious and socio-economic experience and illustrates applications of concepts and abstracts in practice.

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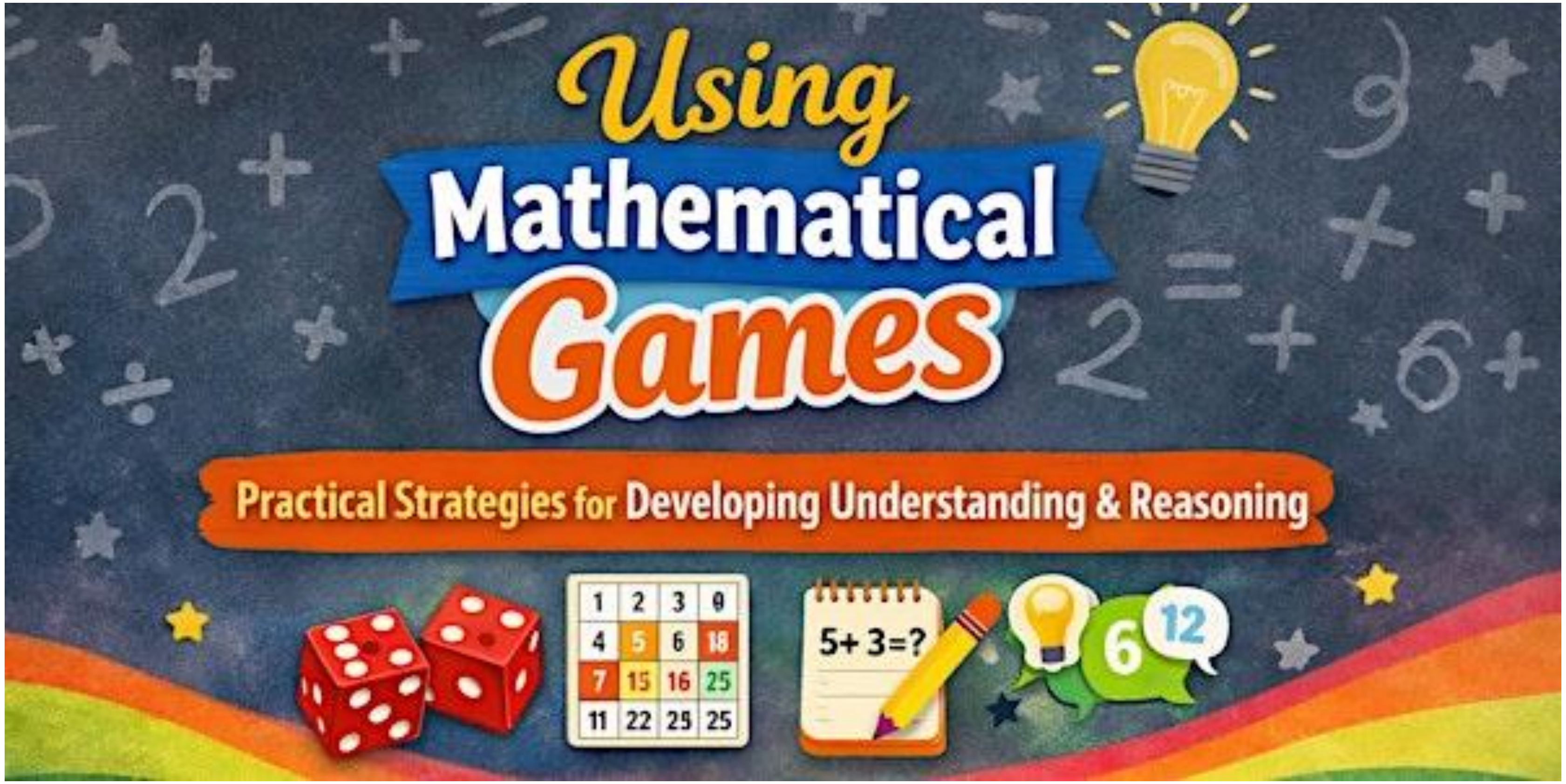

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