



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

Yr Athrofa
Centre *for* Education
Addysg i Gymru | Education for Wales



Partneriaeth Dysgu Proffesiynol **Yr Athrofa**
Yr Athrofa Professional Learning Partnership

Trawsnewid Addysg Gyda'n Gilydd Transforming Teaching Together

Dyfnhau Arfer:
Mathemateg a Rhifedd

Deepening Practice:
Mathematics and
Numeracy



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Dyfnhau Ymarfer - Mathemateg a Rhifedd

Deepening Practice - Mathematics and Numeracy



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CYNNWYS DANGOSOL

- Archwiliad o'r sgiliau sydd eu hangen i gynllunio, cyflwyno a gwerthuso profiadau dysgu creadigol ac arloesol sy'n hwyluso cynnydd disgyblion drwy Fathemateg a Rhifedd
- Integreiddio agweddau allweddol ar fframwaith y CiG e.e. sgiliau cyfannol a sgiliau trawsgwricwlaidd, i Fathemateg a Rhifedd
- Ystyriaeth ddyfnach o wybodaeth addysgegol am y pwnc a'r pum hyfedredd
- Cyfleoedd i gysylltu a chydweithio ag ysgolion y Bartneriaeth ac asiantaethau eraill i ddyfnhau gwybodaeth ymarferol/gymhwysol a chreu a chyfiawnhau addysgegau arloesol o fewn maes arbenigol
- Y dulliau a ddefnyddir i ddatblygu cyfrifoldebau trawsgwricwlaidd sgiliau Rhifedd gyda dysgwyr

INDICATIVE CONTENT

- An examination of the skills needed to plan, deliver and evaluate creative and innovative learning experiences that facilitate pupils' progress through Mathematics and Numeracy
- Integrate key aspects of the Curriculum for Wales framework e.g. holistic skills and cross-curricular skills, into Mathematics and Numeracy
- A deeper consideration of pedagogical knowledge about the subject and the five competencies
- Opportunities to connect and collaborate with Partnership schools and other agencies to deepen practical/applied knowledge and create and justify innovative pedagogies within a specialist area
- The methods used to develop cross-curricular responsibilities of Numeracy skills with learners

Amcanion a Deilliannau

Amcanion

- Ennyn diddordeb darpar athrawon gydag ymagwedd feirniadol at sicrhau gwybodaeth effeithiol am y pwnc a chymhwyso addysgeg o ansawdd uchel, gan gynnwys yr egwyddorion addysgegol o wneud cysylltiadau, dysgu cyfunol a chreu cyfleoedd dysgu ystyrlon a dilys
- Sefydlu rôl yr athro proffesiynol mewn arfer darpar athrawon gan gynnwys bod yn hunangyfeiriol wrth rannu a gwerthuso profiadau mewn cymuned broffesiynol ehangach.

Deilliannau

Ar ôl cwblhau'r modiwl hwn yn llwyddiannus, dylai darpar athrawon allu:

- gwerthuso ac ymgorffori rôl a chyfrifoldebau ymarferydd sy'n seiliedig ar dystiolaeth yn feirniadol;
- cymhwyso'r wybodaeth a'r ddealltwriaeth ddyfnach hon i'w hymarfer eu hunain a myfyrio ar effaith y dulliau mewn cymuned broffesiynol;
- dadansoddi eu dewisiadau yn feirniadol mewn perthynas â'u harferion addysgegol ar y cyd

Objectives and Outcomes

Objectives

-
- Engage prospective teachers with a critical approach to ensuring effective knowledge of the subject and applying high quality pedagogy, including the pedagogical principles of making connections, blended learning and creating meaningful and authentic learning opportunities
-
- To establish the role of the professional teacher in prospective teacher practice including being self-referential in sharing and evaluating experiences in a wider professional community.

Outcomes

On successful completion of this module, prospective teachers should be able to:

- critically evaluate and incorporate the role and responsibilities of an evidence-based practitioner;
- apply this deeper knowledge and understanding to their own practice and reflect on the impact of the methods in a professional community;
- critically analyse their choices in relation to their pedagogical practices in collaboration

Amlinelliad o'r diwrnodau nesaf

Outline for the next few days

Dyddiadau/Dates

16.1.2026 – Sesiwn 2/Session 2	Adroddiadau a Pholisiau/Reports and Policies	9.00-10.40	
16.1.2026 – Sesiwn 3/Session 3	Manyleb Asesu/Assessment Specification	11.00 – 12.40	
19.1.2026 – Sesiwn 4/Session 4	Adnoddau/Resources	9.00 – 10.40	
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20.1.2026 – Sesiwn 7/Session 7	Ymateb i senarios/ Respond to Scenarios	9.00 – 10.40	
20.1.2026 – Sesiwn 8/Session 8	Cwestiynau i Gydlynnydd Mathemateg/Questions for a Maths Co-ordinator	11.00 – 12.40	
20.1.2026 – Sesiwn 9/Session 9	Cysylltiadau i'r aseiniad (Rhan 1)/Link to Assignment (Part 1) Pwysigrwydd fod yn Rhifog/Importance of being numerate	1.30 – 3.10	
23.1.2026 – Sesiwn 10/Session 10	Enghreifftiau fideo/asesiniad /Examples of Assignments and Videos	9.00 – 10.40	
23.1.2026 – Sesiwn 11/Session 11	Ymweliadau Ysgolion neu dechrau gwaith ymchwil/	11.00 – 12.40	
23.1.2026 – Sesiwn 12/Session 12	School Visits or Begin Research Ymweliadau Ysgolion/School Visits	1.30 – 3.10	
5.2.2026	Drop in session		



MAES DYSGU A PHROFIAD

Mathemateg a Rhifedd

Canllawiau i helpu ysgolion a lleoliadau i ddatblygu eu cwricwlwm eu hunain, gan alluogi dysgwyr i ddatblygu o ran y pedwar diben.



Cynnwys

1. Cyflwyniad
2. Datganiadau o'r hyn sy'n bwysig
3. Egwyddorion cynnydd
4. Disgrifiadau dysgu
5. Cynllunio eich cwricwlwm

AREA OF LEARNING AND EXPERIENCE

Mathematics and Numeracy

Guidance to help schools and settings develop their own curriculum, enabling learners to develop towards the four purposes.



Contents

1. Introduction
2. Statements of what matters
3. Principles of progression
4. Descriptions of learning
5. Designing your curriculum



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Beth yw rôl y cydlynnydd Mathemateg a Rhifedd?

What is the role of the maths co-ordinator ?

Trafodwch mewn grwpiau bach.

Discuss in small groups.



GED – Ról y Cydlynnydd Mathemateg

KWL – Role of the Maths Co-ordinator

Gwybod	Eisiau Gwyb od	Wedi Dysgu

KNOW	WANT TO FIND OUT	LEARNT



Ymweliadau posib i Ysgolion ar gyfer arsylwi rôl y
Cydlynnydd Mathemateg – Dydd Gwener Ionawr
23ain – myfyrwyr i drefnu

Possible school visits for observation
Friday 23rd January – student teachers to
organize



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Profiad Personal Personal Experiences

- Arsylwi gwersi
- Monitro cynnydd (craffu llyfrau)
- Sgyrsiau cynnydd
- Gweithredu polisiau a chynlluniau
- Cefnogi athrawon drwy hyfforddiant ac arfer da
- Observing lessons
- Monitoring progress (book scrutiny)
- Progress talks
- Implementing policies and plans
- Supporting teachers through training and good practice

Cwestiynau posib i gydlynnydd Mathemateg a Rhifedd

Possible questions for Mathematics and Numeracy co-ordinators

- Sut mae'r cwricwlwm mathemateg yn cael ei gynllunio a'i ddatblygu ar draws yr ysgol?
- Sut rydych chi'n sicrhau bod disgyblion o bob gallu yn cael eu cefnogi a'u herio mewn mathemateg?
- Pa strategaethau neu adnoddau ydych chi'n eu defnyddio i wella dealltwriaeth fathemategol disgyblion?
- Sut mae cynnydd disgyblion mewn mathemateg yn cael ei fonitro a'i asesu?
- Pa hyfforddiant neu gefnogaeth broffesiynol sydd ar gael i athrawon mathemateg?
- Sut mae mathemateg yn cael ei chysylltu â phynciau eraill neu sefyllfaoedd bywyd go iawn?

Cwestiynau posib i gydlynnydd Mathemateg a Rhifedd

Possible questions for Mathematics and Numeracy co-ordinators

- How is the mathematics curriculum planned and developed across the school?
- How do you ensure that learners of all abilities are supported and challenged in mathematics?
- What strategies or resources do you use to improve learners' understanding of mathematics?
- How is learners' progress in mathematics monitored and assessed?
- What professional development or support is available for teachers of mathematics?
- How is mathematics linked to other subjects or real-life contexts?

Pwysigrwydd bod yn rhifog.
The importance of being numerate.



Sesiwn 2

Session 2

Sesiwn 2 – Adroddiadau, Polisiâu a Damcaniaethau

Session2 – Reports, Policies and Theories



[Adroddiad-thematig-Datgloi-potensial.-Mewnwelediadau-i-wella-addysgu-ac-arweinyddiaeth-mathemateg.pdf](#)

[Thematic-report-Unlocking-potential.-Insights-into-improving-teaching-and-leadership-in-mathematics-education.pdf](#)

Beth i'w drafod... What to discuss...



1. Beth yw'r elfennau addysgu a dysgu mathemateg llwyddiannus?
What are the elements of successful mathematics teaching and learning?
2. Trafodwch safonau mathemateg yng Nghymru
Discuss the Standards in mathematics in Wales
3. Yn ôl ESTYN, beth yw'r argymhellion i bawb?
According to ESTYN, what are the recommendations for everyone?
4. Beth yw'r cwestiynau i werthuso effeithiolrwydd dysgu proffesiynol
What are the questions to evaluate the effectiveness of professional learning?

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What are the questions to evaluate the effectiveness of professional learning?



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<https://www.estyn.llyw.cymru/adnoddau-gwella/datgloi-potensial-mewnwelediadau-i-wella-addysgu-ac-arweinyddiaeth-mewn-addysg-fathemateg/>

<https://estyn.gov.wales/improvement-resources/unlocking-potential-insights-into-improving-teaching-and-leadership-in-mathematics-education/>

Anghysondebau mewn Addysgu Mathemateg Inconsistencies in Mathematics Teaching

[Anghysondebau mewn Addysgu Mathemateg yn Rhwystro Cynnydd Disgyblion Ledled Cymru - Estyn](#)

[Inconsistencies in Mathematics Teaching Hamper Pupil Progress Across Wales - Estyn](#)

Trafodwch/Discuss

Anghysondebau - Inconsistencies



[Nicola Morgan – Mathematics and Numeracy Area of Learning and Experience - YouTube](#)
[Sgwrs - Episode 6 - Thoughts on the teaching of Mathematics in Wales](#)

Sesiwn 3

Session 3

Manyleb Asesu – Lefel 6

Assessment Specification – Level 6

Rhan 1 - Aessiad Ysgrifenedig - 1,375 o eiriau

Part 1 - Written Assessment - 1,375 words

Rhan 2 - Cyflwyniad Fideo 10 munud
Part 2 - Video presentation - 10minutes



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Aseiniad (Rhan 1)

ASESIAD YSGRIFENEDIG

1,375 O EIRIAU

LEVEL 6

TEITL - Beth yw eich dealltwriaeth o rôl y Cydlynnydd Mathemateg a Rhifedd?

Trosolwg- Beth yw eu cyfrfoldebau (tystiolaeth o lenyddiaeth)

Myfyrdodau

Sefyllfa Strategol o fewn ysgolion

Cyfyngiadau a Rhwystrau

Assignment (Part 1)

JOURNAL

1,375 Words

LEVEL 6

Title - What is your understanding of the role of the Mathematics and Numeracy co-Ordinator?

Overview - what is their responsibility backed up with literature

Reflections

Strategic position within school

Limitations and barriers



Aseiniad (Rhan 2) – Assignment (Part 2)

Cyflwyniad Fideo 10 munud LEFEL 6

Meddyliau Ar- Ymateb i gyfweiliad swydd ar gyfer rôl
Cydlunydd Mathemateg a Rhifedd sy'n dangos yn feirniadol:

Sut i gefnogi staff

Proses adnabod

Proses monitor a gwerthuso

Amlinellu cryfderau personol sy'n gysylltiedig â'r rôl

PRESENTATION 10 Minutes LEVEL 6

THOUGHTS - A response to a job interview for the role of a
Mathematics and Numeracy Co-Ordinator critically
demonstrating:

How to support staff

Process of identification

Process of Monitoring and Evaluating

Outlining personal strengths linked to role

Enghraifft o aseiniad/fideo da **An example of a good assignment/video**

Gwener 23ain Ionawr
Friday 23rd January



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