

An Roinn Oideachais Department of Education





Resources

Padlet



https://padlet.com/postprimarymaths/tk4ghljrfnvwq076

Participants Guide



Ice Breaker Room

- When you arrive in your breakout room please turn your videos on if you can and unmute your microphones.
- If each person in the room could introduce yourself, say where you are teaching and how long you have been teaching.
- Can you identify who lives in the most central location in the country?





Key Messages

DEIS Planning



A school's DEIS plan should include targets relating to teaching, learning and assessment in the classroom

Teaching for Robust Understanding (TRU)



The TRU Framework provides guidance on designing powerful Mathematics lessons which, in turn, supports improvement in student attendance, motivation, ambition and self confidence.



Key Documents









Teaching, Learning & Assessment of Mathematics in a DEIS Setting

Exploring contributing factors



Factors that affect Mathematics Teaching, Learning & Assessment in a DEIS setting





Factors that affect Mathematics Teaching, Learning & Assessment in a DEIS setting





An Roinn Oideachais Department of Education

Modelling a Powerful Lesson

An application of the TRU Framework



Teaching for Robust Understanding Framework

Adapted from Schoenfeld, A. H., 2014





Teaching for Robust Understanding Framework

Adapted from Schoenfeld, A. H., 2014





Learning Intentions

By the end of the lesson students will be able to:

- Recognise the link between the graphical representation of a function and its algebraic representation.
- Interpret a real-life application of a function









Task

Using the matching cards link, match the graphs to their algebraic representation and the real-life application.







Pulling Together New Learning BR New Knowledge **Cubic Functions Exponential Functions**



Extension

Scenario:

On your way home from school you buy a latte from the local café. You take a sip and realise that it is too hot. Out of curiosity you measure the temperature of the latte and see that it is far too hot to drink. You measure the temperature of the coffee a number of times on the way home and see that every minute that goes by it's getting cooler by 10% (of the current value).

Task:

i) Sketch/Match a graph that you think best represents the cooling of the coffee.

ii) Explain why you chose this graph.

iil) By choosing suitable numbers, scale your axis.





Learning Intentions

By the end of the lesson students will be able to:

- Recognise the link between the graphical representation of a function and its algebraic representation.
- Interpret a real-life application of a function





Reflection on the Lesson

Using the Jamboard link, can you identify elements of the TRU framework in the lesson.

	Breakout Room 1	
Content	Cognitive Demand	Agency
Equitable Access		Formative Assessment



An Roinn Oideachais Department of Education

Putting a Lesson TRU Its Paces

Applying the elements of TRU to an activity



Key Message

The TRU Framework provides guidance on designing powerful Mathematics lessons which, in , turn supports improvement in student attendance, motivation, ambition and self confidence



Task

Design a lesson around the task you have been given, taking into consideration one element of the TRU framework.

https://docs.google.com/document/d/10AabE1p448-BvyDAOFSbplBLi-zUGvQ2Gsh1zteDJAQ/edit?usp=sharing

The Mathematics

Cognitive Demand

Equitable Access to Content

Agency, Ownership, and Identity

Formative Assessment



Sharing of the Learning



https://docs.google.com/document/d/10AabE1p448-BvyDAOFSbpIBLi-zUGvQ2Gsh1zteDJAQ/edit?usp=sharing







Reflection



Key Messages

- A DEIS plan should inform the approaches to teaching, learning and assessment in the classroom
- The TRU Framework provides guidance on designing powerful mathematics lessons which, in turn, support improvement in students' attendance, motivation, ambition and self confidence.



PDST Post Primary Maths Team

Team Leader Stephen Gammell <u>stephengammell@pdst.ie</u>

Administrator Gráinne Haughney grainnehaughneymdt@pdst.ie

General Enquiries:

postprimarymaths@pdst.ie

Advisors: <u>fullname@pdst.ie</u>

Angela Dwane Dympna McCoy Arlene Murphy Darren Murphy Enda Donnelly Warren McIntyre Michael Walsh







PDST Supports





School Support

Book a school visit

Contact us: postprimarymaths@pdst.ie

