

MTH6110

Mathematics Education Research Literature

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(Maths) Education Research Literature

Objectives for next few weeks

- basic structure of a research article
- how to approach content
- interpretation/application of conclusions
- how to find relevant resources
- citing resources in your own work





- 1. Housekeeping & Assignment 1
- 2. Discussion Reading Assignments 1 & 2
- 3. Reading research literature
- 4. Reflecting on our "Skills Checklist"





BUT FIRSTa Warmup Exercise (BIG QUESTION)!

In a few brief sentences, explain...

Why is school compulsory?





Warmup Exercises (continued)

In a few brief sentences, explain...

Why is school compulsory?

- History Was it always this way? What about for different groups (e.g., women/men, indigenous populations, etc.)?
- Geography Is it the same in every country?
- Politics What subjects should be compulsory (e.g., Maths, Religion, Science, History, ...)?



Warmup Exercises (at home)

This is a complex and modern topic

- Sierra Leone's president defends large education budget as 'necessary risk'
- Rishi Sunak wants all pupils to study maths to age 18
- How math became an object of the culture wars
- The sinister attempts to 'decolonise' mathematics

Note: The above articles were chosen simply to indicate the variety and level of discussion one encounters when searching in this general area. We may (and probably should) agree/disagree with parts in every one of them!



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- 3. Reading research literature
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Updates & Deadlines

- Update on Placements, Office Hours, ...
- Any questions on your Reflective Learning Log?
 empathy, listening, patience, confidence, ...
 communication, presentation, teamwork, organisation, ...
 school/college structure, pedagogy, explaining concepts, ...
- Curriculum Vitae Assignment 1 due Fri 09 Feb
- We are also working on a great lineup of guest speakers for this semester: topic suggestions welcome!



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Reading Assignment 1 – 6 components of great teaching, according to Coe et. al.

- Reading Demonstration –
- Individually Arrange the 6 components from most important to least and justify
- In Groups Compare/discuss/report back

Why?

- Why did we do this exercise?
- Why are we reading this article?
- How is this related to anything else in the module?





6 components of great teaching

Content Knowledge Instruction Quality

Classroom Climate

Classroom Management Teacher Beliefs Professional Behaviours





Reading Assignment 2 – What makes a great introduction? Try this at home

Individually - Write down as many tips and tricks (or things to avoid) as you can for writing a great introduction in 3 minutes.

With some colleagues - Compare and contrast your answers and see which one are/are not followed in the Coe et. al. introduction.





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(Maths) Education Research Literature

Today, we have taken first steps towards objectives

- basic structure of a research (review) article
- how to approach content
- interpretation/application of conclusions
- how to find relevant resources
- citing resources in your own work





Our (Weekly) Skills Checklist

- Reading
- Interacting
- Watching
- Reflecting
- Writing







Questions?

Thank you for your participation!