

Queen Mary
University of London

MTH6110

Evidence-based Decision-making in Education

Dr Shabnam Beheshti (s.beheshti@qmul.ac.uk)

Dr Matthew Lewis (matthew.lewis@qmul.ac.uk)

Plan for Today

1. Warmup
2. Writing/Editing a Personal Statement
3. A Few Reminders
4. Assignment 2 – Maths Presentation
5. What is evidence-based decision-making?

(Group) Warmup

Give feedback on the personal statement on the screen

A (small?) question:

Why do we focus on so much groupwork, discussion and peer-to-peer feedback?

Why use peer-to-peer feedback?

Giving and receiving feedback is a transferrable communication skill important in any professional environment

This is a safe zone for making mistakes

You see immediate improvements like this!

Writing and speaking gets better with practice, just like doing maths

Reflection and discussion will help you organise your thoughts

Harsh editing is the silent hero of good writing

First write how you speak, and it will come out more easily

Involves understanding/communicating maths in a different way

For now, trust the process: you will improve over time

You will get new ideas on approaching your own writing/presenting!

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Writing a Personal Statement

What are your 3 main messages?

- Does your structure support these messages?
- Check your **adjectives**: are they appropriate, nonexistent, over-the-top?
- Is there a “natural progression” in the essay?
- Spelling, punctuation, grammar, paragraphs, margins, ...

Editing a Personal Statement

We will show you how we approach editing

- Essentials: What is the brief? Is there a word count?
- Did they answer the question? Are there references to check?

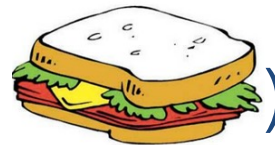
Pass 1: **Read down, not across**

- What bits stand out or need addressing?

Pass 2: **Fine-tooth comb**

- Read aloud, one paragraph at a time, repeat, connect

(students and colleagues get a

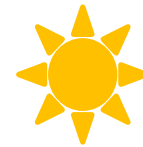


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A Few Reminders...

- Did we miss anything you've asked us for on QMPlus, by email, otherwise? Please let us know (and thank you)!
- CVs
Scores and general feedback now posted
- Upcoming Deadlines
Maths Presentation – Week 6
Research Article Summary – Week 9
- Feedback Quiz – please do complete when it opens



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Assignment 2 – Mathematics Presentation

Choose a topic of your choice from one of your (other) 3rd-year modules and prepare a 4-minute recorded video for a fellow Science & Engineering student (not just SMS)

- Questions to consider: Is your topic the right “size” for a 4-minute presentation? Who is your audience? Can you accomplish this while also meeting one (or more) of your PDP aims?
- Part of the challenge is for you to decide how to explain something in a way you think is “appropriate and doable,” given the audience
- You do not need special tech for this assignment
- Assessment Guide and Marking Criteria posted

Find it! Use it! Reference it!

Your work should include a Bibliography

- 2-3 references from a variety of sources, not just the lecture notes of the module you chose
- Excellent resource created *specifically for this module*, by James Soderman, S&E Library Rep
- Use consistent referencing style (e.g. Harvard style) and try it out using '[Cite Them Right Online](#)'

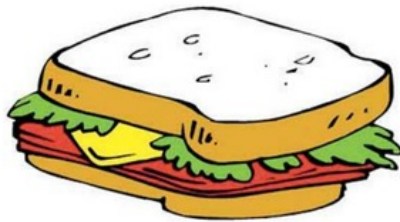
<https://qmplus.qmul.ac.uk/course/view.php?id=4440>

Go to Mathematical Sciences and select MTH6110

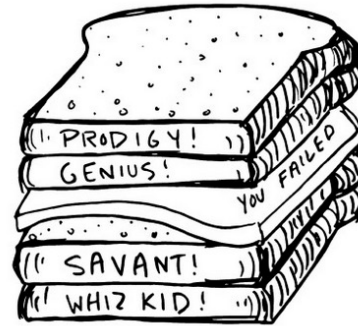
Your Mathematics Presentation

Exercise – 15 minute Think-Pair-Share, using the Assignment 2 Marking Criteria

- Outline what you'll cover in 4 minutes for your topic.
- Share this and your topic list with your partner
- Use Assessment Guide to give Peer-to-Peer feedback



I really like the way you...
I think you could have
improved it by...
Another thing I like is...



Credit: tes.com poster and illustration by Liza Leonard, found via Google images search

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Evidence-based decision-making

What is evidence-based decision-making?

“[...] a program, practice, or policy that is grounded in the best available research evidence and informed by experiential evidence from the field and relevant contextual evidence.” [CDC.gov]

Contributions come from researchers and practitioners, best available evidence and experiential evidence.

Informed by scientific literature, organisational data, expertise and judgement of practitioners, managers, consultants, business leaders, stakeholders (both internal and external).

Evidence-based decision-making

Who cares? Taking such an approach allows us to remove bias from our decision-making, rely less on personal or anecdotal experience, as well as cultivate trust in the organisation at which such decisions are being made.



https://vetoviolence.cdc.gov/apps/evidence/docs/ebdm_82412.pdf

Evidence-based decision-making

Case Study – first steps. As Director of Education of Maths at University of Oxenfurt, you are asked whether or not the entry tariff for your UG Programmes should be raised. What are your first steps, taking an evidence-based approach?

- What are your (three) key questions?
- Who do you consult?
- Where do you get your data?
- Can you quantify the unknowns?
- How much time do you need to make this decision?

Looking Ahead...

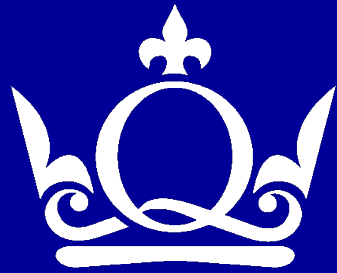
- **Guest speakers being planned for second half!**

You will need to bring in both your PDP and Observations
Participation in the module includes showing us your work

- **Assignments 3/4 – Research Article**

Assigned research articles in groups to read and understand
Week 9 Research Article Summary
Week 12 **In-class** Group Presentations

- **We meet in Week 7 but not Week 10**



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Questions?

Thank you for your participation!