PHYSICS MENTORING PROJECT | PROSIECT MENTORA FFISEG

@PhysMentoring

Leading by example: creating an inclusive online space

Learning and Teaching Conference, 1 July 2021

Rosie Mellors
National Coordinator

Nkosi Yearwood
Physics Mentor, Cycles 2,3&4

Please share in the chat:

Name,

Pronouns (if you want),

What is your favorite topping on toast?

Cardiff University / Prifysgol Caerdydd | University of South Wales / Prifysgol De Cymru | Swansea University / Prifysgol Abertawe | 1872 Prifysgol Aberystwyth University | Prifysgol Bangor University

Universities

Schools

Student Mentors
UG/PG students with post-16 qualifications

Mentor training
mentoring theory,
science capital teaching approach,
inclusivity and session planning

Mentees
Year 9-11 pupils,
Selected with teachers' input,
Unsure if they want to take Physics at A level

Mentoring
Small groups
6 sessions per semester

Sessions promote transferrable skills and careers and self-awareness (with weekly reflection) through weekly themes

Key Aims & Ethos

Increase **uptake of post-16 physics** (particularly girls)

Increase **confidence** of mentees

Increase **Confidence** & **employability** of mentors

Physics is instrumental in providing equity in understanding the world; being the language of how we move through it. **Physics is relevant to all lives and experiences and should be available to all who wish to engage with it, regardless of background, protected characteristics or academic ability.**

Physics is also key to unlocking transferrable skills, such as problem-solving, critical reasoning and numeracy, which can increase a person's enjoyment, safety and belonging in society and increase economic benefit. **Physics skills can lead to an immeasurable number of careers and jobs, in a wide variety of fields.**

Moving Online

Mentor Training

Aims

- Creating buy-in and enthusiasm for the project ethos
- Creating community and building rapport
- Developing confidence, skills and knowledge

Microsoft Teams

Mentee Sessions

Aims

- Creating buy-in and enthusiasm for the project ethos
- Creating community and building rapport
- Developing confidence, skills and knowledge

Microsoft Teams/Google Classroom
But mentees not on camera/microphone
Co-mentoring

How do we do this?

Create a culture where all contributions and people are welcomed in the space

- Inviting participants to bring their authentic selves
- Creating a safe place for contributions
- Eliciting contributions by removing barriers
- Adjusting the training space in collaboration with the mentors

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The Online Dilemma

How do you build rapport, and generate engagement, with people you can't see or hear?

Rapport building

- Online communities rely on a level of trust.
- Host to a blank screen means you can't see people reacting to what you say.
  - The challenge for the host is creating a space where communication is relaxed, and people feel able to share their reactions
- Online chats are *purposeful* because they don't disappear, but you need to encourage spontaneity. Online training is also made fun, to keep people human

Examples

- The difference between an online and in-person version of the same thing (such as ground rules)
- Emojis in the chat!
- Co-mentoring – you can't lose track of the chat if two people are watching it! No-one gets ignored

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‘Online’ self v. ‘whole’ self

How do you bring your whole self when an online persona feels over-curated?

Being authentic in online delivery

- Start with something people can relate to.
  - Mistakes make us human in an otherwise robotic medium. Don't try to be perfect
  - Ask pronouns and nicknames! Make the space inclusive
- Be flexible with people, make recordings of sessions available, facilitate open conversations.
  - Ask yourself what people will remember about you as a host.
- Lead by example!
  - Value everything put into the chat and engage with it

Examples

- Reflections! Find the most effective way to get feedback
- Tone and positioning on camera help people to see you. Make eye contact with the camera!
- Review and reflect on your actions through session recordings

Recommendations

- Making effort to get to know about learners: 1
  - Using and remembering nicknames and pronouns
- Removing risk from contribution: 2 3
  - Anonymity tools (e.g. Mentimeter),
  - 3,2,1 send,
- Treating learners as humans: 1 2 4
  - Flexibility,
  - Open lines of communication,
  - Supportive culture,
  - Breaks,
  - Content warnings

1 Inviting participants to bring their authentic selves

2 Creating a safe place for contributions

3 Eliciting contributions by removing barriers

4 Adjusting the training space in collaboration with the mentors

Recommendations

- Creating space for fun: 1 2 3
  - Conversation/interactivity,
  - Gifs/emojis,
- Valuing contributions: 2
  - Thick valuing
- Collaborative design of ground rules 2 4
- Listening to feedback and implementing change 4

1 Inviting participants to bring their authentic selves
2 Creating a safe place for contributions
3 Eliciting contributions by removing barriers
4 Adjusting the training space in collaboration with the mentors

Want to know more?

- www.physicsmentoring.co.uk
- Email Rosie: physicsmentoring@cardiff.ac.uk

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