ENhance Active Learning Case Study PCDE Physics (Teacher Education)

Dr Heather Earnshaw

Why active learning?

I try to remember that just because I'm standing up and teaching doesn't mean any learning is happening in the room.



It also makes the sessions more enjoyable for the students (and me).

I aim to plan activities so that by design students actively think about the material.

Main considerations

When I'm planning a session, I have two plans running through my mind:

- What am I doing.
- What are the students doing.

I aim for the principle that the students should be working harder than me.

I move between direct instruction (knowledge that I need to explain/teach), and student-led (active learning).

I try to be flexible: Adjusting approach when planned content seems obvious or too challenging.

"The interspersed activities - like show me boards-was really helpful and made the class more engaging." Student Feedback Quote

Isn't it chaos?

My sessions are highly structured. For me, this is about ensuring a really safe and inclusive space, where everyone has a voice, everyone feels able to contribute, and no voices are able to dominate.

My thinking is that by choosing where I maintain **high control**, I can offer the students the freedom to explore their thinking.

For discussion tasks, I assign the groups, and I mix them up week to week. Students seem to respond well to this. When moving back to whole class, I invite who I want to speak from each group, avoiding discussion being dominated by the same voices. I frame this as 'sharing some of the key points your group discussed'. It isn't about putting the individual on the spot, and they always have an out if they don't feel comfortable speaking in front of everyone.

"Use of practicals to develop knowledge and assess class relevance has been great active learning"

Student Feedback Quote