

INSPIRING THE NEXT GENERATION OF TEACHERS WITH DIGITAL RESOURCES

Sharing favourite resources

Graham McManus is a teacher of teachers. After a long career as a physics teacher, Graham now supports early career teachers and is involved in initial teacher education. He also supports teachers wanting to improve their physics delivery or those switching specialisms.

One of the key messages he passes to his trainees is to use existing resources as much as they can.

"So many early career teachers want to reinvent the wheel and I nudge them in the direction of resources like those at STEM Learning to say "use this as a starting point". You simply don't have time in the early years to create every lesson from scratch. You have to rely on what is there already. That's why these resources are so helpful."

"I do have a few favourite resources which I point people in the direction of and sometimes still use myself. I will always have a look around and see which new materials have been added or developed, too."



Cross-curricular links

Graham sees a lot of the resources making the most of cross-curricular links.

"When you can spot opportunities to talk about careers or the way that science links nicely into maths then it makes more interesting lessons.

There are a lot of materials on there that link something like environmental science with geology, geography or maths. I also like the way that it connects back to careers as much as possible too.

This much broader curriculum is really interesting for students."

Sparking ideas

Graham enjoys seeing his trainees get creative with resources they find at STEM Learning.

"There's a student I'm currently mentoring, and one of the digital resources sparked an idea for him. He has now arranged to take one of his year eight classes to a local hospital.

We were looking at the materials for scanning techniques and different imaging techniques in medical physics. The resource provided the subject knowledge base to work from and then that naturally led to him wanting to make it more relevant for the students. He decided to look at more broader aspects of what they're learning and now they're going on a trip to the local hospital to see the scanning equipment."

Graham is aware that the more real-life examples you can pull in to lessons, the more it helps students engage.

"For something like physics, students often say "What's the point of this? What are we doing this for? Why are we learning this?"

It is always nice to have something to fire back really quickly and get them thinking more about how they could use the concepts in real life.

Another resource that was useful to one of my trainees recently was based on mechanical engineering and produced by the Army. There is a barracks near to their school so they could link the resource to that context really easily."



Adapting resources

Graham encourages teachers to take the resources and tailor them to their needs.

"Once you point people in the direction of the best resources, they'll then be able to adjust it to their needs and to their classroom. Then they can come back to it year on year."

