3 Ways To Deepen Students' Learning With Technology

29 March 2024



Technology has become an increasingly important aspect of education, and there are many ways for school leaders to deepen students' learning with it.

Having witnessed the digital revolution for the last three decades, expert Jon Mason believes the three biggest impacts are all around the emergence of big data, and how much of it is driving everything that we're doing.

Back then, the big thing that was happening on the web was the "first wave of services and the world of mashups; being able to combine different bits from everywhere and the modularisation of applications with the world of apps," said the Associate Professor of Education (e-Learning) at Charles Darwin University.

And of course, the emergence of artificial intelligence and how "it's currently working is doing a lot of really interesting things," he added, describing how AI has been around for 50 years as a discipline of computer science.

But this doesn't necessarily mean that things that we've been doing in the past are outdated.

Using asynchronous discussions in online learning

When it comes to learning online, Dr Mason is still a big fan of asynchronous discussions.

“I use that as one of the elements of my teaching, and I think it’s still a really powerful aspect of teaching and learning online,” said the educator, who’s also the Adjunct Professor (e-learning) at Korea National Open University and East China Normal University.

Asynchronous discussion is a form of online discussion that allows students to read and respond “out of time.” Examples include research projects, student presentations and online class discussions via course discussion boards.

Jon, who teaches digital technology in education believes having a threaded discussion helps students “think reflectively and write reflectively.”

“Learning how to conduct conversation over time, in a text-based form, or as a voice thread is still a powerful tool, and it’s been around for nearly three decades.”

Teach reflective thinking

One of the downsides of the digital revolution around search is “we’ve all become very good at using search, using keywords and key phrases.”

“But we’ve abbreviated our questioning skills by doing that and there are many kinds of questions that we don’t get to use – because search doesn’t accommodate for example, why questions very well,” the professor asserted.

“The ‘why’ questions are something that we use when we engage with each other; when we want to have a dialogue when we want to go deeper into a topic. But search takes us to another space altogether.”

He highlights the need for educators to teach students to be more reflective.

Describing how “we’re in this world where we’ve got lots of cute infographics or beautiful visualisations of data that are very persuasive.” While the data may be new or look great, students “need to learn the skills to interrogate that as well.”

Scaffold questioning skills

That’s why despite all the digital innovations in the classroom, Jon is still very much interested in the human dimension of it, having done extensive research on questioning skills.

“I think that student thinking skills, reasoning skills and questioning skills are still really important skills to be developing alongside any kind of skill development about how to use a particular technology or platform,” he explained.

One of the problems he found in the education system was that the teachers are still “the centre of gravity with asking questions.”

“We need to flip that around and empower students with their own thinking skills, their own questioning skills and their own critical thinking skills. We do this in school and university, but I think if more attention is put on it, we would develop much stronger and much better skills.”

Part of his research is on how to scaffold student questioning skills better, and how educators can do that in ways using the question formulation technique.

To learn more about this questioning technique, he recommends the Right Question Institute and the book, Make just one change: Teach your students how to ask their own questions.

[Source: 3plearning.com] Photo by CDC