Innovative teaching not technology alone has 'greatest impact' in the classroom, report finds

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Digital technologies in the classroom must go hand in hand with innovative teaching to have a true impact on educational achievements, research involving academics at The University of Nottingham has shown.

The academics from Nottingham's Learning Sciences Research Institute, in collaboration with theLondon Knowledge Lab , say that—just like traditional school resources — the key to success is the way in which digital technologies like interactive whiteboards, laptops and tablets are used.

This new research suggests we need to ask more meaningful questions about technology and learning. The traditional approach asks whether a

type of technology helps learning and always finds the answer is "it depends". So instead we need to ask what are the most effective activities for learners and then find ways that technology can support them.

Director of the Learning Sciences Research Institute in the University's School of Education, Professor Charles Crook, said : "The good news is that this question can be answered with clear and compelling answers. Educational research has shown that children can be engaged with computer programming when they are given a tool that allows them to write code that generates simple animations".

In their research, commissioned by Nesta, an independent charity that promotes innovation in the UK, the academics looked at over a 1,000 examples. They then focused in depth on 124 research and 86 teacher-led examples of innovation that showed the potential for digital technology to support one or more of eight learning themes which are proven to be effective—learning from experts; learning with others; learning through making; learning through exploring; learning through inquiry; learning through practising; learning from assessment; and learning in and across settings.

In the report, "Decoding Learning," they identified opportunities grounded in effective practice, including recommended approaches to learning that will use technology to its full potential to engage pupilsand raise academic standards.

Professor Rose Luckin from the London Knowledge Lab said: "The report contains many examples of how learning can be supported with technology. For example, learners working with experts to identifying solar storms, using context rich lifelogs to help them to assess their learning, or teachers creating location-based games to meet the needs of their learners."

Dr Shaaron Ainsworth in the University's School of Education, an author of the report, added: "Research has identified when technology can enhance learning, now we focus on what needs to change in schools, industry and academia to realise the full potential of digital technology, find the gaps in innovation that are missed opportunities for improving children's learning and evidence these findings well."

More information: www.nesta.org.uk/library/docum … arningReport_v12.pdf

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