How ICT can be used to enhance teaching and learning

Before we can consider the HOW we need to establish the WHAT and the WHY.

What is ICT?
We can consider ICT as two main forms; physical and virtual. Physical ICT is made up of hardware such as computers, printers, digital camera, etc. Virtual ICT is the software, both installed and web based, online resources including websites and social networking tools such as twitter and edmodo. As a collective term, both physical and virtual ICT are often referred to as digital technology.

Why does the use of technology in learning need to be addressed?
Research evidence from the Sutton Trust toolkit surrounding the impact of digital technology shows only moderate benefits for technology use linked to cost. This could be due to the fact that schools find it difficult to keep pace with the increasing rate of technological change and so much of their technology belongs to ‘yesterday’, also making it somewhat difficult to gauge what to buy for ‘tomorrow’. In addition, the use of digital technology in classrooms calls for different teaching approaches and the ability to select technologies for different purposes and outcomes.

Digital Technology in society—so much more than an IWB
The pervasion of ICT in popular culture and the development of societies which are heavily reliant on digital technology, means that in order for our young people to play a full and active part in those societies, they will need exposure to a rich and diverse range of digital tools and practices. Students need to develop digital literacy in order to:

• know when, and what, ICT can be used effectively to support learning
• become autonomous learners, important for the acquisition of all other skills and knowledge
• decipher meaning from a variety of sources, contexts and formats
• judge the validity and authenticity of the information they access
• create content either autonomously or collaboratively, for different purposes and audiences
• build a legacy of their learning, using effective digital communication methods to share content for others to access now and in the future
• overcome the challenges that technology can present
• be safety-aware at all times; know the importance of online reputation management.

You DO need digital technology skills and knowledge, but more important is the pedagogy that sits behind it and underpins effective learning. Otherwise technology becomes the destination and not the vehicle to reach there, a series of lower level ‘colouring in’ tips and tricks as opposed to creative, rich opportunities that were beyond comprehension 10 years ago.
How does this link to TEEP

Due to the ever changing nature of ICT and the rapid development of new tools, TEEP provides a dynamic reference document exemplifying the ideas, models and questions raised in this booklet. This document contains a number of practical strategies, web links and further reading to aid all teachers in enhancing teaching and learning through the effective use of ICT. http://bit.ly/18HGTfn

Are we making sure that students of today are leaving behind a legacy of learning for students of tomorrow? Are our students communicating and collaborating globally? TEEP provides a wonderful opportunity to explore the opportunities and possibilities. Within every classroom in every school, our young people are armed with a native technical ability. We should be capitalising on this ubiquitous pool of expertise to ensure that their skills overcome any barriers to technology use in the classroom. But further, we should be encouraging technologically competent students to take on digital leadership roles in schools to help embed technology into whole school practice.

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Dr Reuben Puenteedura has developed the SAMR model which offers a method of seeing how ICT impacts teaching and learning. The model exemplifies four main levels of ICT activity and student engagement as shown in the graphic.

It is only when we achieve Modification and Redefinition of activities that we truly transform the learning experience using ICT.

SAMR model developed by Dr. Ruben Puenteedura
www.hippasus.com