## Strengthening the student learning experience in the Post PC era





#### **Development** of Internet,

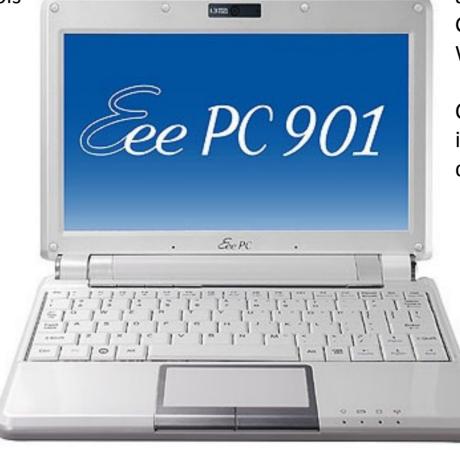
online information development, demand and consumption increases.



#### **Emerging and transformative**

learning technologies: Web 2, collaborative and interactive tools

- blogs, wikis, online word processing tools etc.



**Smartphones and tablets** drive new smaller/powerful applications: Apple App Store, Google Drive, Amazon Kindle, Windows Store.

Cloud-based and synchronised information and content across devices.



#### **Emerging Technology in Education**

Desktop computers – IBM, Commodore, Amiga, Apple, BBC – introduction of Windows PC becoming mainstream as computing tool. Desktops are 'fixed' to desks, tables, computing labs. Networking allows for 'movement' between computers using individual login details but students 'tethered' to workstations.

#### **Emerging Mobile Technology in Education**

Although bulky, heavy and large, early laptop computers offered limited freedom from constraints of tethering. Poor battery life and shortage of access/networking points hinder mobility.

#### **Netbooks – a new era in computing?**

Emergence of netbooks – cheap, light, long battery life, multiple USB ports, Wi-Fi, ultraportable...BUT...slow processors, lacking in memory – poor performance requiring cut-down version of Windows. Small screens and low resolution.

### Smartphones, tablets, eBooks – iPad, Android, Windows 8...

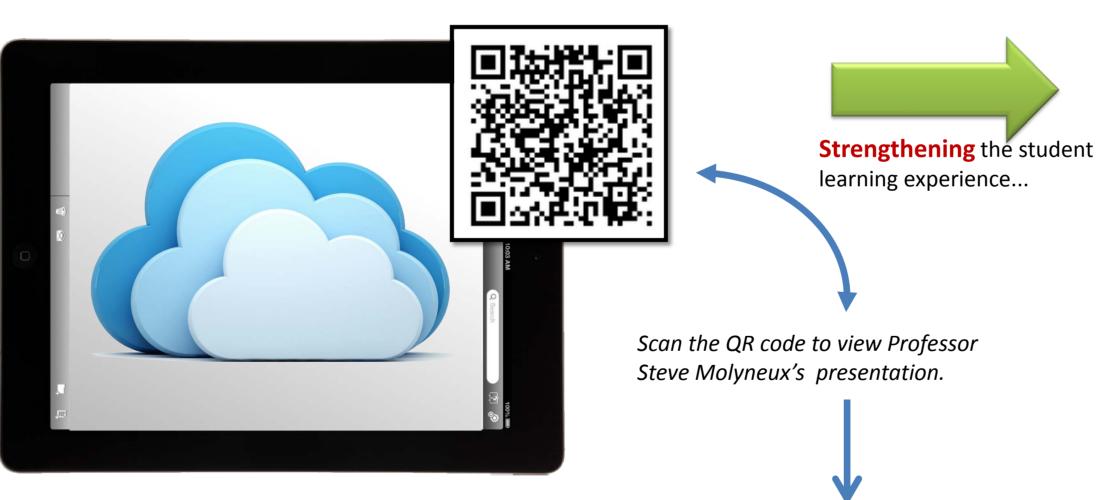
Tablets, particularly the iPad, revolutionise computing. Portable, powerful, high resolution combined with low cost and wide range of innovative and engaging apps.

# Personal Computer | Mobile Devices **Impact** on teaching and learning...new approaches required? Today

#### Post PC era

Mobile devices outselling traditional desktop computers. Students released from desktop tethering – enhancing individual freedom – an adapting student population – transformative learning through technology:

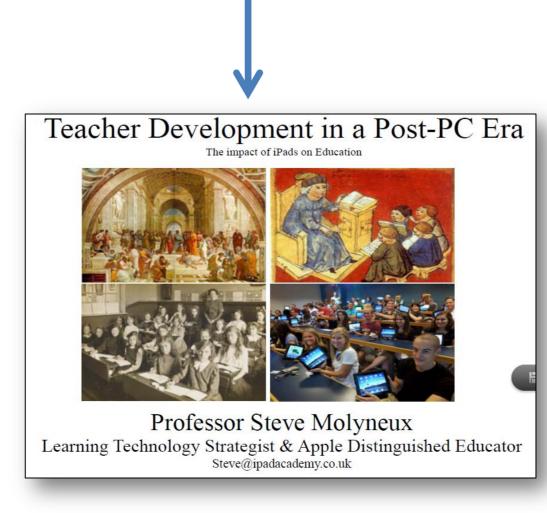
- improving apps significant task design,
- collaborative tools,
- eBook readers and authoring apps,
- improved productivity and research apps.



#### Paradigm shift in 'classroom' practice

Classrooms without walls but social learning spaces:

- 1. Lecturers create enriched multimedia presentations with interactive features using apps such as the Nearpod Content tool.
- 2. In the classroom lecturer shares content with students but controls the activity using 'Teacher' controls.
- 3. Students receive module content and submit responses via their mobile devices using Nearpod app.
- 4. Lecturer monitors student activity and measures student results on an individual and aggregate basis.



## Strengthening the student experience

Mobile devices and the range of apps has the potential to enrich learner engagement using a wider range of learning and teaching resources and methodologies. Mobile devices combined with collaborative tools, apps, community and other ICT recourses can potentially **enhance** learning.

The flexibility and mobility of smartphones, tablets and increasing range of apps allows learners to take greater control of their own learning thereby **empowering** students to research, create, share engage and collaborate with other learners.

Improved built-in tools and apps can transform learning experiences for students with additional support needs, such as dyslexia or students who are blind. Apps to support organisation, planning, memory, reading, writing and notetaking compliment and accommodate a range of learning styles, needs and lifestyles.



(Adapted from *Steve Molyneux 2013*)