I’m NOT an Apple salesperson: but these #iPads sure are for great!

How mobile technology can support collaborative independent study

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#abstract

We’re not apple salespeople, but when tutors and students collaborate on using this technology an iPad is really great for independent learning.

By supporting students and tutors to collaborate on how this specific technology can support independent study, we have worked to address three challenges:

- The pace of change of technology
- The perceived student use of technology
- The volume, access to and currency of academic literature

We took a thematic approach to data from a blog that six tutors and six students contributed to and from interviews with four pairs of tutors and students.

The speed and ease of use of the iPad was found to support independent study skills through access to video, the Internet and online reading along with note-taking apps that incorporate typing, writing, audio notes and photos. Tutors encouraged extended learning through the use of social media sites.

Two students with dyslexia reported their best ever educational experience and valued the collaboration with the tutor and access to the device and reported their best ever results on assignments and exams.

We recommend that tutors work with their students in using their mobile technologies as study tools through developing small collaborative practitioner research projects to explore these devices for other educational uses, such as classroom use, assessment task as well as independent learning.

#Introduction:

2010 was a big year. The iPad was launched & three technologies revolutionised how Cathy undertook her CPD: Twitter, Posterous Spaces and the iPad.

At the launch of the iPad, Apple CEO Steve Jobs (Jobs, 2011) proposed the iPad would be superior to a laptop or smartphone in seven key tasks (see figure 1):

Figure 1

It has just been three short years since the iPad was launched. Since then there have been four generations of iPad and other companies have launched their own Tablets. As well as the hardware aspect of these devices, the range of apps available is also a consideration. New apps are released daily and new functions become available for existing apps.

Jobs (2011) doesn't mention education in this launch, yet these devices are being seen as having the potential to revolutionise education. We hear of class sets[1] being bought and schools buying a device for each child. Increasingly students are bringing their own device into the classroom and there is an expectation that this generation, who are growing up in this digital age, are more and more savvy on how to use this technology.

To what extent is this investment in educational technology based on evidence? My college has a new build with over 100 classrooms. Each one has been kitted out with an Interactive Whiteboard (IWB). The IT Manager at my college has invested in all those IWBs partly in response to requests from teachers – "how can we use technology, we don't even have an IWB!". Yet, how many tutors have read any research on the impact of technology on teaching and learning?

These are the three key challenges that we'd like to explore here; firstly, the pace of change in technology, secondly, the perception that the younger generations have knowledge about technology that they can share and finally what educational theory says about technology for learning and the access FE tutors have to this.

[1] http://ipadschools.wikispaces.com/Managing+a+Classroom+Set+of+iPads

#Challenge1

Cathy has a history of experimenting with technology in the classroom. In 2004 she took part in the ICT Effective Practice Study (Harvey Mellar, 2007) as one of nine practitioner researchers. Each of the practitioners involved developed an approach to teaching literacy or language, in order to evaluate the technology, the software or the pedagogy. Cathy looked at using Webquests with Level 2 & Entry 1 ESOL learners (Clarkson, 2004) and one of the key things learnt from this was that ICT can be very motivational, but that there needs to be support in place for developing ICT skills in order for the technology to be most effectively used to improve [language] learning. (Harvey Mellar, 2007)

Since taking part in this project Cathy has continued to explore different technologies and reflect on how they can be used to support teaching and learning. She's used DFilm[2] with Entry 3 ESOL students to give advice about learning English[3]. She's experimented with Plogging[4] (photo blogging) with an L1 ESOL group to write picture stories. What these examples have in common is that the students needed some initial technical support but once their ICT skills and confidence had grown, the task set with the technology allowed for collaborative learning.

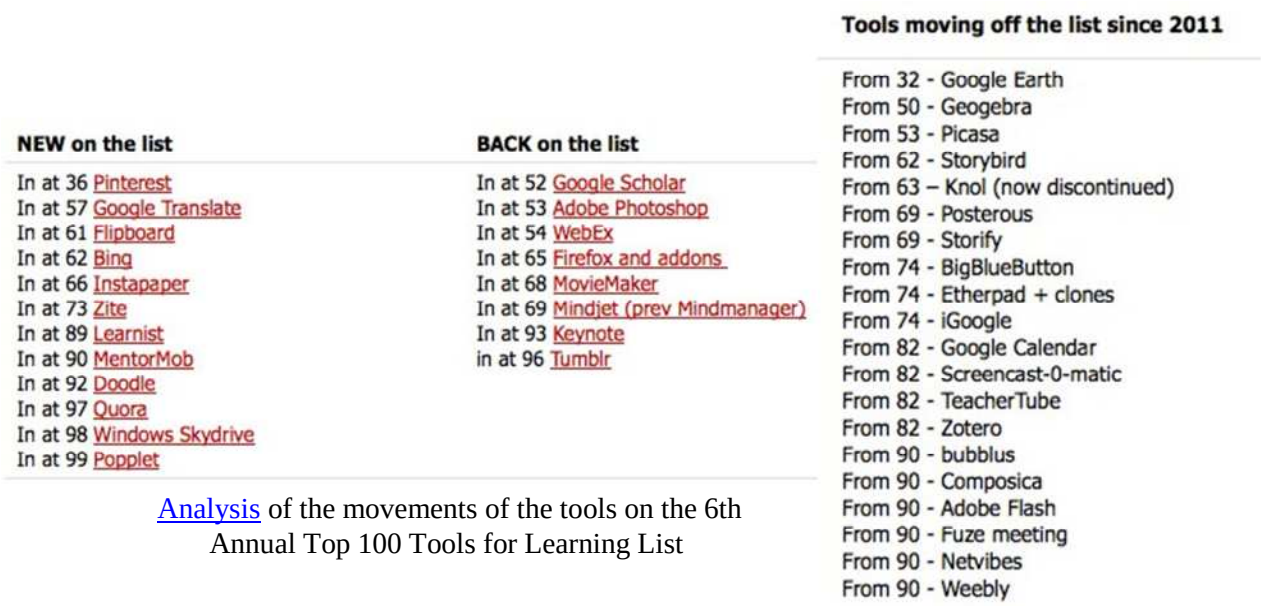
However, the speed of change in terms of technology is rapid. It seems that as any new technology arrives, others fall by the way side, for example the 'Ploggle' service no longer exists. The Webquest service that was used in the NRDC study no longer exists. Posterous Spaces will close down on April 30th 2013.

It is this speed of change that proves to be a real challenge for teachers. How can we make an informed choice about whether a specific technology can be beneficial for our learners when along comes another offering greater possibilities? (Laurillard 2006)

Of all the technologies mentioned in this paper so far, only the Webquest was designed with education specifically in mind. All other technologies are commercial products or services that have been utilised for teaching and learning. Laurillard (2006) defines e-learning as "any of the new technologies or applications in the service of learning or learner support." (p.2)

This pace of technological change is reflected in The Top 100 Tools for learning[5]. The Centre for Learning and Performance Technologies has conducted an annual survey of learning tools for the past 6 years. Figure 2 shows an analysis of the change on the list, how 20 tools have moved off the list to be replaced by 12 technologies new to the survey and 8 technologies that are back on the list after being removed on a previous survey.

[2] http://www.dvolver.com/moviemaker/make.html
[3] http://esolentry3.blogspot.co.uk/2007/10/your-movies.html
[4] http://esolbloggers.blogspot.co.uk/2005/01/finished-plogging.html#comments
[5] http://c4lpt.co.uk/top100tools/



NEW on the list

In at 36 Pinterest
In at 57 Google Translate
In at 61 Flipboard
In at 62 Bing
In at 66 Instapaper
In at 73 Zite
In at 89 Learnist
In at 90 MentorMob
In at 92 Doodle
In at 97 Quora
In at 98 Windows Skydrive
In at 99 Popplet

BACK on the list

In at 52 Google Scholar
In at 53 Adobe Photoshop
In at 54 WebEx
In at 65 Firefox and addons
In at 68 MovieMaker
In at 69 Mindjet (prev Mindmanager)
In at 93 Keynote
in at 96 Tumblr

Tools moving off the list since 2011

From 32 - Google Earth
From 50 - Geogebra
From 53 - Picasa
From 62 - Storybird
From 63 – Knol (now discontinued)
From 69 - Posterous
From 69 - Storify
From 74 - BigBlueButton
From 74 - Etherpad + clones
From 74 - iGoogle
From 82 - Google Calendar
From 82 - Screencast-0-matic
From 82 - TeacherTube
From 82 - Zotero
From 90 - bubblus
From 90 - Composica
From 90 - Adobe Flash
From 90 - Fuze meeting
From 90 - Netvibes
From 90 - Weebly

Analysis of the movements of the tools on the 6th Annual Top 100 Tools for Learning List

Figure 2

Technology is changing rapidly, driven through the developments of business rather than through the need for improvements in teaching and learning. "While we try to cope with what is possible now, another technological application is becoming available that will extend those possibilities even further." Laurillard (2006) p. 2

#Challenge2

A second challenge is how the students are perceived to be using this technology. There has been much discussion following Prensky's seminal paper on Digital Natives Digital Immigrants (Prensky, 2001), where he suggests there is a generation of people who have grown up using technology, the Digital Natives, in contrast to a generation who are having to learn this technology, the Digital Immigrants. Further analogies have also been suggested around digital visitors and digital residents. (Littlejohn, 2008). Cathy delivers a course called Technology for Learning Delivery, and many on the course stated their motivation is to catch up and try to get ahead of their students.

This theme of student use of new technologies emerged in a report where 24 FE students, who wrote learning logs, peppered their journals with reference to Facebook, You Tube, iPods, etc. (Coffield, All you ever wanted to know about teaching and learning, but were too cool to ask, 2009) Coffield highlights the importance of *the way* this technology is being used to create networks, interact with other learners and "break down barriers between students and teachers, social life and study" (Hoare, 2008). However, despite this access to and use of technology, Coffield questions whether these new technologies will "produce students who are also capable of independent, critical thought" (p.51)

Helsper and Eynon (2010) critique Pensky's notion of around *generation* being a deciding factor and suggest that both students and tutors are as likely to be a digital immigrant or a digital native.

This notion is further supported by a report by the NUS into HE students' perspectives. The findings suggest that students are not confident in using technology to support their studies and would like more support with their ICT skills. The key findings show:

- students prefer a range of learning methods,
- flexibility is important,
- the ICT skills of tutors vary and that this can impact on the learning experience
- students would value more ICT skills support, especially around using and referencing online sources. (NUS, 2010)

Regardless of the ICT skills of students compared to tutors, a challenge for teachers is how they can support their students in either using the ICT skills they *already have* to support their studies, or how can they can support the *development* of ICT skills to support education.

#Challenge3

If the sheer volume of technology available is one barrier to classroom use, the final barrier for the busy FE teacher is the amount of, and access to, the academic literature on educational technology.

Cathy is currently a member of four professional organisations, each with their own peer-reviewed journal. She is also a member of a Special Interest Group (SIG) for one of these – the Technology SIG and here she gets access to all the back journals online. Over the 10 months she has been a member she has accessed these only once!

As well as academic journals reporting on educational technologies, there are also a significant number of case studies available on sites such as the Excellence Gateway, JISC and ESCalate. The IoE host a digital archive of reports relating to education, and you can see the volume of this in figure 3.

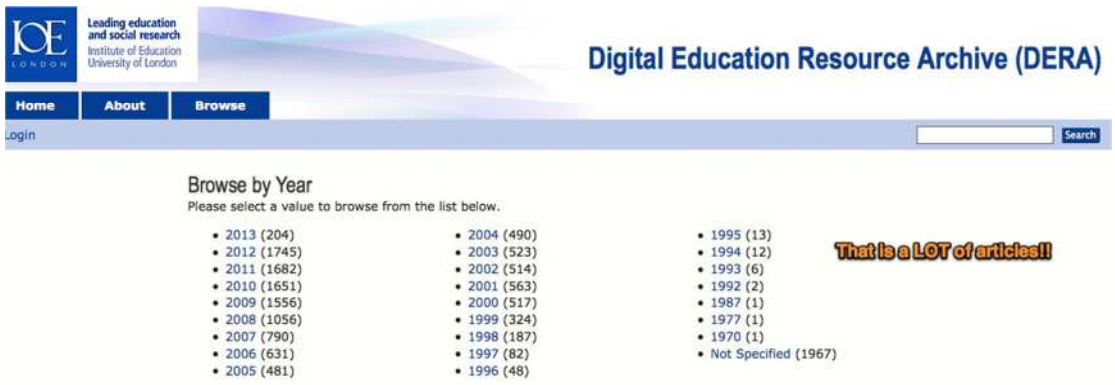


Figure 3

Not only is there a vast amount of literature available, there is an issue of value and currency. In one class, Luke had groups of students undertaking a 'fantasy shares' activity. One group chose shares based on the advice of the 'experts' in the field, while another group followed the advice of the 'layperson' on Twitter. It was surprising to the group to find that those following Twitter 'made' more money than those following the experts.

This provides us an analogy to practitioners and academics. There is a vast amount of research available, yet the practitioners in the classrooms are not accessing this. There is a growing call for practitioners to be undertaking research, and the recent Ben Goldacre article 'Building Evidence into Education'[6] highlights many of these themes. In what way can teachers be at the centre of their own research?

If we are really to see the use of e-learning embedded into our teaching and learning, tutors and students need to be given the opportunity and freedom to explore their benefits, and to work together to inform practice. (Laurillard 2008)

#background

In 2010, Cathy had had a Twitter account for about a year, but had never really used it or understood it, she was also familiar with blogging and had used the Google service Blogger for several years for class blogs. She went to a HudCETT[7] event where she was re-introduced to Twitter and introduced to the blogging service Posterous. Later that year, she got an iPhone and an iPad. These tools all had a huge influence on her use of technology for her own professional development.

We would like to share an example of how her use of twitter and blogging has impacted on her ESOL and ESOL teacher training classes. While following a link from twitter, she read a blog post titled 40 Things to do with a Text.[8] She used a couple of the ideas with her current Level 1 ESOL group and reflected[9] on her professional blog.[10] She also shared the link with the DTE(E)LLS[11] group on their group blog. In Figure 4 you can see a couple of the trainees replying to the post and talking about how they will try out some of the ideas in their ESOL classes.

[6] http://www.guardian.co.uk/education/2013/mar/18/teaching-research-michael-gove
[7] http://hudcett.hud.ac.uk/index.php
[8] http://teachertrainingunplugged.wordpress.com/other-writing/40-things-to-do-with-a-text/
[9] http://cathywint.co.uk/reflections-on-the-no-1-ladies-detective-agency-and-cpd-activity/
[10] Originally this was posted onto my posterous blog, but as the Posterous service was cancelled on April 30th 2013 my posts were transferred over to my new wordpress blog.
[11] DTE(E)LLS: Diploma to Teach English (ESOL) in the Lifelong Learning Sector

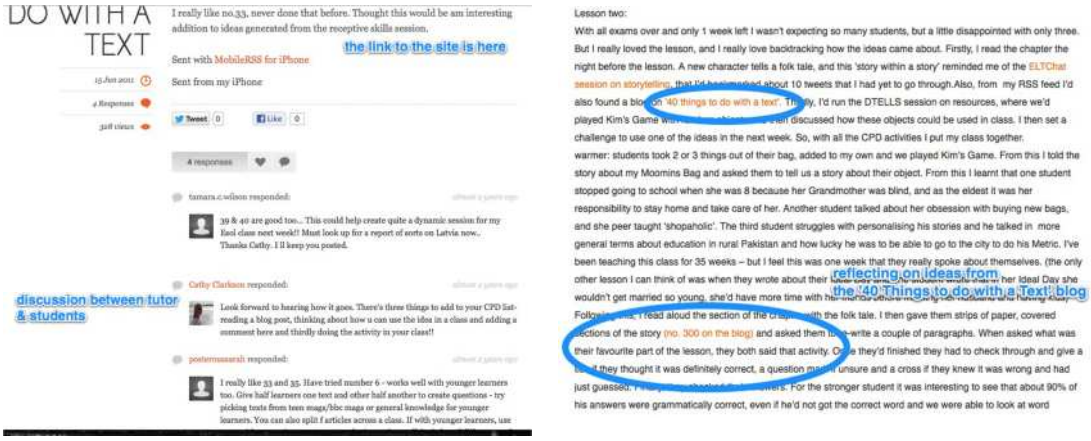


Figure 4 Screen shots from the DTELLS & Cathy's blog

Having such a positive experience with these new mobile technologies and social media sites she undertook a small practitioner research project to find out how other trainee teachers would use these technologies for their CPD. Six trainees on different stages of the DTE(E)LLS[12] course agreed to take part. They started by reflecting on their CPD activity undertaken in the previous six months. They were then each given an iPad or iPhone, asked to join Twitter, contribute to a group blog and to explore the devices for their own CPD.

Six months later they were asked again to reflect on the CPD activities of the previous six months. Three key areas of CPD activity emerged from this project. (figure 5)

Figure 5

During the forum the group talked about how the devices had made access to resources so much easier, they valued the portability, especially

[12] the trainees who took part in the project were: one on year one, three on year two and two who had finished the summer before

those who travelled by public transport, and the speed with which they could access this.

This small practitioner research project was one tutor working with six students, at varying stages of the same ESOL teacher training course. What would be interesting next was what other tutor and student partnerships, from different curriculum areas, could learn about these technologies and how they can support their teaching and learning. This is where the idea for this project originated from.

#ResearchQuestions

- What can HE in FE tutors and students learn together about how technology can effectively support independent study?

#Context

Wyke College is a large FE college, with a small HE provision. There are approximately 50 HE tutors, 10 of who teach solely on HE programs with the remaining teaching on both HE and FE courses. There are six different curriculum teams who deliver across four different sites in two different towns.

Volunteers from tutors teaching in HE were invited to take part in this project. Six tutors came forward, from five different curriculums. (figure 6)

These tutors in turn approached their students and asked for volunteers to take part.

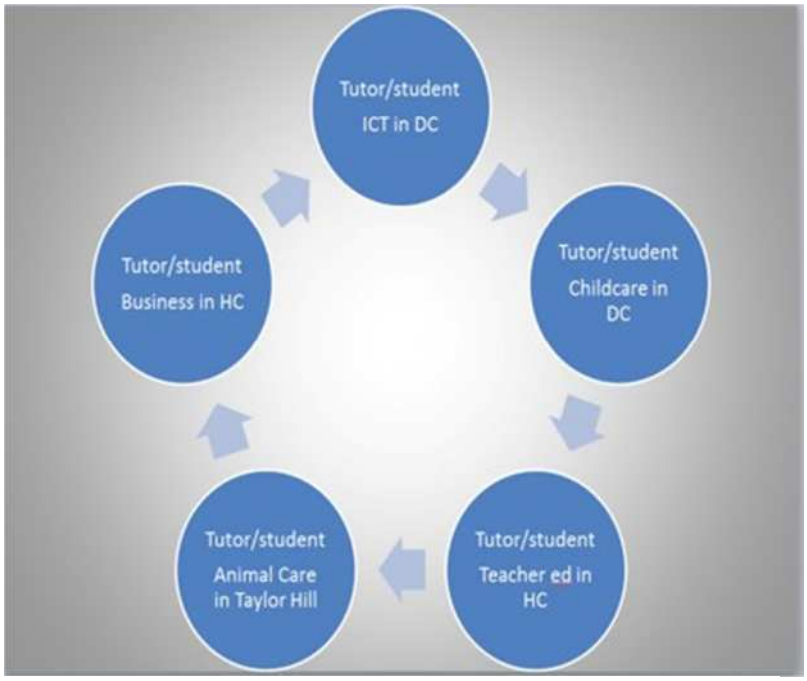


Figure 6

Tutors and students then each received an iPad, a keyboard and a stylus and were asked

- to explore how they could use these technologies to support their CPD/PDP activity
- to discuss and share activity with the group both face to face and virtually;
- to contribute to a group blog and/or an individual blog;
- to agree to take part in an interview or group forum.

#Expectations

Getting the tutors and students together was always going to be a challenge, but it was felt that getting people in a room together for face to face discussion and the opportunity to collaborate and share and learn from each other would be beneficial. Cathy already ran a BYOD[13] Group within the college and it was hoped that, having agreed to do this, that the tutors and students would make the effort to make themselves available.

One initial expectation was that the students had the potential to be able to teach the teachers something about technology and how it can be used effectively for study. In fact, further to this the researchers not only expected, but really wanted, to learn something from the others taking part in the project, whether this was the other tutors or the students. They wanted to be surprised and challenged by what the technology had to offer.

What we didn't expect was for nothing to happen. We didn't expect that the devices would sit in a drawer and not be used. We didn't expect that the tutor and student would not talk to each other about what they were doing.

#Methodology

The research will be of a qualitative nature, with the views from the blog and a series of interviews being analysed in detail. The blog, using Posterous Spaces[14], will involve all participants and tutors commenting on a variety of aspects of the project. To generate some interest in the blog and attempt to break down any fears people might have about blogging some prompts ideas will be used. Prompts sent out were:

1. Asked to post about why they volunteered to take part in the project

2. Share an app you are using, discuss how you are finding learning and sharing with your tutor/student and anything else you would like to share

3. Discuss top 5 apps and share on the blog

[13] Bring our Own Device

[14] as Posterous will close on 30th April 2013, the blog has been imported into Wordpress so this data isn't lost

There will be a series of interviews with each tutor and student partnership. The interviews will be a semi-structured with the following questions been discussed. Keeping the questions to a simple structure, will hopefully allow the interviews to flow and become interviewee led.

- What have you liked about using the iPad?
- What has been the biggest bugbear?
- How has it helped you to study?
- What advice would you give to a student/tutor thinking of buying a mobile device?

#EthicalStatement

Trust is central to the project. All participants are aware of the commitment involved in volunteering to take part in the project and reassured that all data collected will be anonymised and held in a secure location.

Participants

All participants volunteers and signed the agreement (see appendix) in align with the voluntary informed content section 10. (BERA, 2011) Each participant received the use of an iPad for the term of the project. The potential of providing an incentive of the use of an iPad was addressed through the voluntary nature of the participants.

Each participant has the right to withdraw at any time.

Blog

All participants were invited to contribute to the group blog and are aware that this is an open, social media site. The signed agreement outlines that "their participation and interactions are being monitored and analysed for research" (BERA, 2011, p. 11)

Tutor/researcher role

There may be a conflict in terms of the dual role of teacher and researcher. Cathy is the Advanced Teaching and Learning Coach for HE and has a staff development role with all tutors involved in the research, including Luke. Cathy is also the tutor on a Technology for Learning Delivery which Luke and Carrie are attending as students. Luke also has a dual role in the research project as he is a researcher and in a teacher/student partnership being researched.

All participants are aware of these dual roles and reassured that the required anonymity will be adhered to.

Privacy

Issues of confidentiality will be addressed by anonymising the organisation, location and all participants.

Data Collection

Interviews will be strictly confidential and all information will comply with the Data Protection Act 1998. All reports on the interviews will be given back to the participants to comment on whether this is a true record of their responses.

#Data analysis

We have taken a thematic approach to reviewing the data from the blog and the interviews.

The blog was predominantly used for sharing how people were learning the technical skills needed to use the iPads. Discussions on apps centred on the search for word processing and note taking apps, and this linked to people discussing where they would save documents and apps for accessing cloud storage. There were also posts sharing hints and tips for making the most of the iPad.

"the ease in which this machine has been to use, getting on the Internet quickly has been great"

The strongest theme to emerge around the technical aspects of the iPad was around accessibility and ease of use & how this supported independent study skills.

"is a lot quicker and easier to switch on the iPad which takes a matter of seconds rather than my laptop which takes ages"

Five of the seven areas that Jobs (2010) outlined an iPad would excel at were evident as useful educational tools, with additional elements of social networking and note taking. (figure 7)

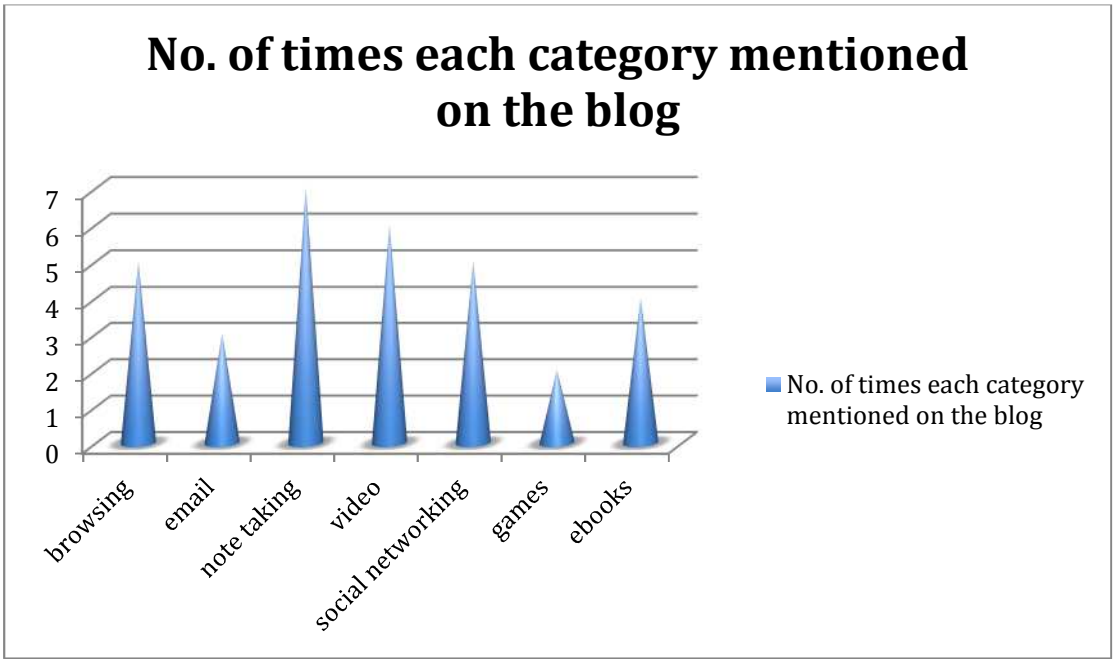


Figure 7

However, these broad areas meant different things for different people.

Research

For tutors and students it has been around the flexibility to be able to research something at any time, and this quote shows how that is having an impact on the student's job as well as their studies.

"This is also useful for me as if I need to research assignments around work matters, I can do this as ideas come to me. The iPad's also been a useful tool to practice at work as I've used it to research activity ideas for Chinese New Year etc. The ease and quickness of getting onto the Internet is the best feature in all these areas as you don't have to wait while the iPad loads up, unlike a laptop or computer."

"Research wise its great to quickly look up a paper on Birds for example whilst waiting for a bus etc!!"

The video has also been a valuable tool for research, with You Tube, TED

"The ease and quickness of getting onto the Internet is the best feature in all these areas as you don't have to wait while the iPad loads up, unlike a laptop or computer. This will also be good for me as next week ill be starting my next semester so ill be doing a lot of research again."

& iTunesU all praised.

"the screen is a good size to watch a video on regarding assignments for college"

A childcare tutor talked about using the video camera on the iPad to film aspects of her students practice and then used these clips in the class to support the theory sessions.

Organisational skills

Using the iPad to help with organisational skills has also been a theme for both students and tutors.

"the calandra app on the iPad, i actually like this app and it now runs my life, it keeps all my uni assignments in check, also when and what certain lectures and classes will be about"

"The iPad has allowed me to organise my time well and a utilise a better never ending to-do list."

A student theme: note taking

"Over the last few months I have been using my ipad more and more for my college work, I find it so easy for making notes on which I can store both to the ipad and the sky drive so accessible from everywhere."

A strong theme to emerge from students was how the exploration of note-taking and word processing apps had translated into independent study

skills around note-taking, organising and reviewing these notes and using these to inform assessment activities.

There were a variety of note-taking apps used by the group, including Pages, Notability Bamboo Paper, and Notes. Russel did try using the stylus but he preferred to type & all other students typed their notes. Most students brought the iPad into class and took notes directly onto the device, but one student took notes on paper in class and then used the iPad at home to type up and review her notes.

In terms of reviewing these notes, students talked about the value of having notes in one place. In addition, using the camera function and audio recorder function, in conjunction with Pages and Notability specifically, allowed photos to be taken and embedded during a lesson or oral notes to be recorded.

Jane talked about taking photos of her (childcare) setting using the iPad and embedding this into Pages for her assignments. She talked about how easy this made explaining the nursery setting in her assignments.

The visual aspects of the photos were particularly valued by Russel who said that this was an invaluable revision tool. Jane talked about the value of the recorder, and how she liked being able to listen back to the lecture in her own time, while reviewing her written notes.

A tutor theme: social media

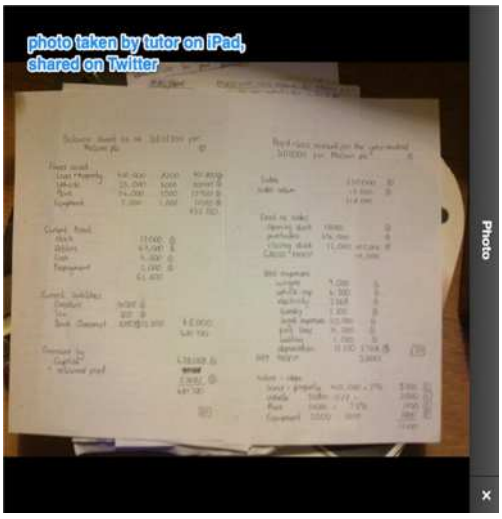


Figure 8

Social networking was discussed more by the tutors than the students, and tutors talked about using Facebook or Twitter to encourage students to collaborate out of class and as a tool to access up to date subject specific content. A Facebook page was set up by one tutor to encourage a buddy system and their student talked about how the iPad had helped her access this support network.

Twitter was used in another class where the student with the iPad became the unofficial 'photographer' for the group when work was completed on the WB. The tutor reported students concentrating more on the task, rather than worrying about taking notes, as they knew a photos would be taken and shared via Twitter. (figure 8)

In the teacher education group students were also encouraged to use twitter as a means to keep up to date with the latest developments in FE, through following things such as @FEnews, @IFLmembers and @FEguild. In business the tutor encouraged a buddy system on Twitter:

"all the learners have to tweet before they email me any issues. Ironically others learners have being able to solved and help them. (the philosophy of 'See Three Before Me' comes in here where a learner has a question they have to see three students before me to see if they can get the answer). I have only received three emails from my foundation degree students all year, this peer learning/ problem solving on a open forum is great to see. "

Communication Tool

Various communication tools were used between the students and teachers. Email was a common tool and the speed, access and mobility of the devices improved communication. For one pair, email was compared to a phone, where they stated that as it was 'always on' – unlike a laptop that needed to switched on, booted up, etc

One pair used Facetime and scheduled tutorial times to happen virtually to fit with the student who worked full time and attended a part time HE course. The benefits of this were reported to be around the speed of being able to give/receive feedback and the oral nature of the feedback. The student valued not having large chunks of text to have to unpick and found the face to face (virtually) feedback beneficial. The tutor in turn talked about the value of investing time in this initial virtual feedback meant that further support later was not needed for this student.

A surprise theme

Two of the students have dyslexia and both spoke passionately about how they have valued the iPad and the impact it has had on their studies. Both these students spoke passionately about how the multimedia aspects of the devices supported their studies and that this year they had their best results

"the best ever done on an exam"

"the iPad is amazing if you've got dyslexia …… can't live without it …..definitely recommend it to someone with learning difficulties"

#Discussion

These iPads were given to tutors and students in order for them to explore independently and collaborate together on how these can be beneficial for their studies.

Everyone took the use of the iPad for educational purposes seriously. Everyone has taken a slightly different angle in exploring the possibilities that these devices offer but a common theme of supporting independent study has emerged.

The three challenges outlined earlier have been addressed in the following ways.

#challenge 1

One way that we have overcome the barrage of change with technology is to choose a device that has staying power within the industry. Apple are seen as market leaders in mobile devices and a leader for app developers[15].

Of the seven areas (Jobs, 2011) suggested the iPad would excel at five of these can be utilised to support independent study. These, with the addition of the note-taking facilities and social media, have proved to be powerful tools. (figure 9)

Figure 3

#challenge 2

These findings support those of (Helsper & Eynon, 2010) who suggest the perceived gap between tutors and students does not exist. Here the students and tutors have worked together to define how these technologies can best be utilised.

These findings link back to those of Coffield (2009) who suggests the analogy of a tandem bike, where tutor and student need to be peddling in unison in order to reach a common goal. Although each tutor and student pairing have taken a different angle on specific uses of the iPad, through the use of different apps, the notion of supporting independent learning has been a strong theme for each pair. This is where the skills and expertise of the tutors needs to be utilised to further exploit these technologies to support and encourage students who may be 'digital immigrants' in becoming independent learners.

#challenge 3

None of the tutors or students made any reference to academic literature around the use of educational technology. This suggests a need to enable practitioners to undertake their own action research, in collaboration with the students, into what works best for their specific setting.

#limitations

This was a very small study. There were six tutor/student partnerships across four different curriculums and three different centres within the college. Despite signing a contract to commit to meeting at least three times over the duration of the project, dates suggested via the blog were only taken up once by two tutors and one student. In addition, due to extended illness and other issues, only four of the six partnerships were interviewed.

[15] http://www.guardian.co.uk/technology/2013/may/15/apple-50-billion-app-store-downloads

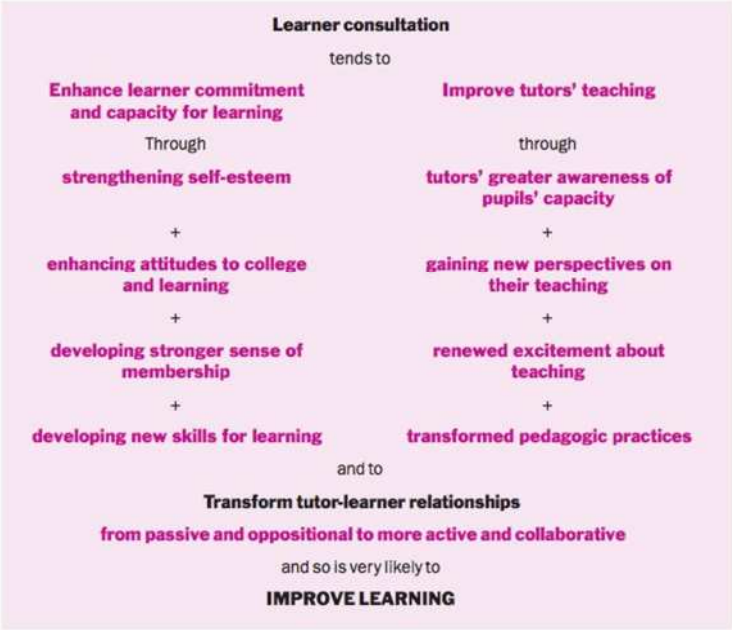
It is unclear what value the blog had in providing a virtual support service. Everyone contributed to the blog at least once, and it provided a valuable research tool but there is only limited evidence to suggest participants were reading others posts.

#Conclusions & Recommnedations

The iPads allowed students, and teachers-as-student, to direct their own learning through the use of multiple tools in order to reflect on what works best in their subject specialism.

The ease of access and portability of the devices made research easier, whether this was reading an ebook, browsing the Internet or watching a video. It also made communication easier, through access to email and social media, and the tutors' encouragement in using social media provided a means of communication and collaboration outside of the classroom. The students valued the ability to take photos and have voice memos which added value to written notes, making the iPad a valuable independent study tool. Therefore, this small study suggests that combined on one device, the seven areas that the iPad excels at for independent study are browsing, email, photos, video, social networking, note taking and eBooks.

Through collaborating on the exploration of how the technology can support learning, these partnerships have recognised the "interplay of … formal and informal learning, of students' lives inside and outside the classroom" Coffield (2008) p. 29. Further research in this area could look more directly at the value of student consultation and the points Coffield summaries from the Ruddock and McIntyre (2007) study. (figure 10)



SUMMARY OF BENEFITS TO STUDENT CONSULTATION

FIGURE 10

Recommendations for future research

- Consider the geographical location of tutors to support face to face collaboration opportunities
- Consider how to support developing ICT skills of tutors who may view themselves as digital immigrants

If we were to repeat this project we would look to form groups of tutors who were geographically closer and possibly from the same curriculum team. Tutors on the project said they would have valued face to face meetings, so we would need to consider ways to ensure this happened.

We are also conscious that those volunteering to take part in this project may be digital natives, and so are confident about exploring and experimenting with new technologies. Any repeat of this project would need to take into consideration the ICT skills and experience of the participants and consider what technical support may be needed beyond sharing via a blog.

Recommendations for tutors

- Undertake CPD activities that explore how technology can be used to support learning in collaboration with your students

The CPD needs of tutors needs to be considered, both in terms of IT competencies in using the devices and in supporting ideas for how these can be used to support learning. Groups of tutors and students could explore specific areas of educational use, such as classroom use, collaborative learning, assessment activities, subject specific apps, etc.

Recommendations for organisations

- Ensure there is a freely available and stable wifi connection
- Regularly review and update a mobile technology policy, taking into consideration views of managers, tutors and students.
- Consider providing tutor access to mobile technologies for work purposes

In terms of the technical aspects, as students increasingly bring their own devices into college, organisations need to ensure there is a stable wifi available and consider having a mobile technology policy, based on the needs of all stakeholders. Organisations also need to consider the appropriacy and expectation of staff using their personal devices for work purposes & consider the possibility of providing mobile technology for staff.

#Impact and Next Steps

Cathy has already run a workshop at the RSC_YH HE E-learning conference in March 2013, has led a session at staff conference on Mobile Technologies and has given a presentation to the college's Senior Leadership Team on Innovations in Technology. The BYOD meetings will continue to be held as requested, and there are discussions happening with the Teaching and Learning Manager about running specific BYOD groups, ie BYOD for social media; BYOD for note taking, BYOD for research.

There are currently three ideas under discussion about what to do with this set of iPads:

1. Repeat the project with the same tutors and students (where possible)
2. Repeat the project with fewer tutors but more students within fewer curriculum teams. Eg: two curriculum teams would have two tutors taking part each with four students.
3. Repeat the project but invite tutors who are undertaking college funded studies (ie Masters) to take part.

#case study

Foundation Degree in Business Studies: Luke Stockdale & Russel Blackburn

My main aim of taking part in the project was to get involved in trying to make it so that all learners were able to interact together so they could foster the spirit of an independent learner.

One activity that was of vital importance is attempting learners to become more independent was by giving them a selected research task using social media. Out of the class that were present for the activity (6 out of 8) didn't have a twitter account, so they had to create one. The learners then had to seek advice of business journalists from Twitter to help them create a pretend share portfolio. This firstly engaged all learners in Twitter and started them on their journey on this social media platform. Another positive aspect in using social media was that the students kept the conversation going after the lesson (especially when hen the share price kept rising or falling).

One aspect that proved positive was the help of Russel gave to other learners in the class. The subject of Accountancy involves a high percentage of white board work where teachers and student contribute their workings. In the past this work was left on the board when the learners left the classroom or some learners didn't engage in the activities but solely copied all of the work down with understanding of the meaning. I found myself saying 'Pay attention to what I am saying... you don't need to take notes' someone will take photos of the work.

With the use of Twitter and mobile technology I fostered the spirit of 'see three before me' as you can see from the twitter feeds below, all learners fully engaged in this. The majority of issues where solved before contact me they made contact with me. An increased in interaction amongst all of the learners outside of the classroom gave an increased responsibility to the learners for their own learners.

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Appendix

HE students, HE tutors & Mobile Technologies: a community of practice

I would like to develop a small community of practice HE tutors and students, who will commit to investigating the use of mobile technologies to support their studies. The group will be given the use of a mobile device, some basic training, as needed, along with suggestions of useful places to get started in building a PLN (personal learning network).

This is the outline of a scholarly activity project that I am running this year. I'm looking for a group of HE tutors to join a network of tutors and HE students to investigate how mobile technologies can support CPD/PDP activities.

Below is a contract outlining the commitment needed.

Contract:

- Agree to take part in research
- Use the mobile device as part of your own CPD/PDP activity
- Investigate and join social networking sites
- Reflect on how these activities impact on your CPD/PDP and teaching and learning
- Contribute a blog post at least once a month
- Comment on others blog posts at least once a month
- Share use of devices and ideas with own and other students
- Attend *at least* 3 meetings before July 2013
- Complete a questionnaire and take part in an interview at the end of the project

I agree to take part in the above project and be part of this Research and Scholarly Activity.

Signed _____

Date _____