

From Tablet to Tablet, from Mesopotamia to Galway

KIERAN HARRINGTON, GALWAY & ROSCOMMON EDUCATION AND TRAINING BOARD

Abstract

iPhones and iPads are bringing significant changes to the way in which people communicate with their families, friends, colleagues and with the outside world, and how they access information, carry out work tasks and interpret and incorporate the non-alphabetic symbols and signs that represent daily realities. Additionally, many primary and secondary schools in Ireland have now replaced traditional textbooks with iPads loaded with the same textbook material, thus putting parents at a disadvantage if they are not familiar with the technology. This paper reports on the introduction of the iPad into an adult basic education classroom in which students were provided with a tablet which they used as a literacy tool for reading and writing, as well as a method of communicating digitally, of participating in digital social networks, and of keeping up with new social models through the use of various applications.

The Traditional Conference and Open Space Technology

At Galway Adult Basic Education Service (GABES), our primary rationale for incorporating iPads into the education setting was to respond to the duty of keeping adult students in touch with these new methods of communication. Limited access to learning opportunities leads to limited opportunities in life in general (Leu et al., 2004), and limited access to information, now predominantly accessible through digital literacy, defined by Glister (1997: 6) as ‘the ability to understand and use information in multiple formats from a wide variety of sources when it is presented via computers.’ This limited access not only disadvantages people as far as seizing life’s opportunities is concerned (Leu et al. 2004), but also impacts on matters of life and death (if we consider the area of health literacy, for example).

Focusing on the area of work and work skills in an era of ubiquitous digital communication, it is especially worrying that those without digital literacy may be left on the wrong side of the *digital divide* and are likely, 'to have their opportunities for getting work curtailed,' and their progress in their present work hindered (Bynner et al 2008). In a report published by the National Adult Literacy Agency in 2013 on distance learning, it was found (ibid: 6) that many of the students surveyed, who were either unemployed as a result of the recession or looking for work, 'felt vulnerable ... because of anxieties about their literacy, numeracy and ICT skills.' The report recommends (ibid: 64) that 'distance learning staff respond rapidly and innovatively to changing demands of policy and new literacies.' The recent OECD adult skills survey (Programme for the International Assessment of Adult Competencies (PIAAC) on literacy, numeracy and problem solving in technology-rich environments also refers (2013: 46) to 'limited knowledge and experience using the given tools of technology' as a further complication of the process of problem solving.

iPad project review

Feedback on the contribution of the iPad to group literacy classes was sought from the students by means of a questionnaire and a group discussion. The tutor and the course coordinator were interviewed, classes observed, the blogs posted by the students were analysed and attendance registers were monitored closely.

Participants

All six group participants were long-term unemployed. They attended two weekly sessions of three hours as part of a programme known as Intensive Tuition in Adult Basic Education (ITABE), which was introduced in 2005 by the then Department of Education and Science, with the aim of providing a longer and more intensive literacy programme to adults who are educationally disadvantaged. The participants, in groups of six to eight students, attend six hours of tuition per week over a 14-week period. ITABE is the only Irish literacy programme in which the students' progress is monitored and assessed, using a standardized framework.

In the case of this specific project, the two weekly sessions were delivered by two different tutors. One session was delivered in the traditional manner. In the other session, each student was provided with an iPad.

Participant feedback

The participants had different reasons for attending the course, but improving basic literacy and IT skills was relevant to all students. Some spoke of feeling excluded: “I always felt left out ... everyone was talking about computer things ... my children and friends.”

Others wanted to access further education and learn new skills in order to enter or re-enter the labour market. William, a thirty-year old unemployed male, for example, said, ‘I need to be able to go into a company and say I can do this.’ Those who were parents mentioned that they wanted to be able to supervise their children’s online activities. One of the latter commented that before the course, when her children spoke about iPhones, iPods, iPads and the Internet, it felt like they were speaking a foreign language.

On the more specific question of the use of new technologies in the classroom, some participants said that they were initially reluctant to engage when iPads were first introduced. Mary, a fifty year old female, admitted that she didn’t see a connection between the iPad and reading and writing, while William¹ said he ‘didn’t see any place outside the classroom for computers for me ... my mind was shut ... but now I see lots of opportunities.’

A blog (which was set up by the class via the iPad) posted by one of the participants reveals the progress, both at the level of the technology and core literacy:

We are using iPads now – it feels great to be part of something new. We are able to download our blog so it looks like an app. I never in a million years thought that I would be writing things like that and using words like that. It makes me feel good to get an iPad every class – cause I’m worth it. We help each other using spelling apps and we check who has looked at our blog – we take turn reading comments.

Thomas, a forty year-old unemployed male stated that he, an avid movie goer, once introduced to iPads and social media, began to tweet, blog and access movie reviews which enhanced his literacy skills. Prior to this he would ‘take a chance’ on a movie; now he not only does research on-line and reads reviews in advance, but he also writes his own reviews and engages in blogging and tweeting about movies.

1 Pseudonyms are used for reasons of confidentiality

On a broader interactional scale, the ITABE students reported a sense of relief and success at being able not only to engage in activities that seemed beyond their reach, but also to engage in them collaboratively. The group bonded more easily through their collaborative work with the iPad and through the close contact of sitting around a table together. This is a significant development in light of our usual experience with IT classes, in which strong learning communities are difficult to establish using PCs in the normal computer room layout.

Tutor feedback

The tutor identified the iPad as a tool to support new opportunities for teaching and learning and acknowledged the need to develop not only an educational project but also one that would be creative and personally relevant to the students' lives. In a preliminary session, the learners and the tutor discussed how new digital literacies might influence their present lives and futures socially, educationally, personally and economically. The tutor thus gauged the learners' knowledge and experience of, and feelings towards, new literacy, bearing in mind that making a connection between people's everyday practices and classroom topics and themes allows for a closer fit, making the learning both relevant and useful.

The tutor commented on how the use of the iPad changed the three interactional patterns of the classroom: between teacher and students, students and students, and between students, materials, and resources. Working together with the teacher in a context of increased classroom interaction gave more scope to the students to express their life experiences and utilise them as material in the classroom. As far as the interface with materials is concerned, on the educational level, the user-friendly mobile iPad embodied new digital multimodal skills and integrated them with traditional reading and writing. At the level of practicality, one piece of hardware functioned in a multipurpose capacity.

Significantly, the device and apps, apart from promoting multimodal semioticity at the educational level, also used the same software and hardware symbols as other ubiquitous digital devices. As one student said: 'that one there the box yoke with the arrow. It's the same on all the camera ones!'

While there was a greater sense of ownership and personal control of the iPad, the level of collaborative learning amongst the students also increased. The social networking sites and the blogs were negotiated collaboratively and students reflected on the concept of permanence in public writing and how that

increases the needed for careful editing and critically reflective reading. The new techniques, new apps, new ways of doing things were shared more readily than they would have been in the context of the traditional cold and cluttered IT room.

The students embarked together on tasks such as creating their own blog, and were eventually contacted by students of a similar school in the United States (The Thornhill Education Centre, Kentucky). Both sets of students were able to take a virtual stroll around both centres using the camera facility on the iPad, and by the final weeks of the ITABE programme, they communicated with one another regularly. The students used the iPad to write and send local histories of the Galway region to the American students. This greatly improved the cognitive aspects of the students' reading and writing skills.

Coordinator feedback

The course coordinator reflected on the affective, cognitive, enactive and socio-economic aspects of the project. The students' confidence and self-belief increased as a result of being trusted with the iPads – literacy students frequently have had negative experiences in formal schooling and bring this negative schema with them when they join adult literacy services, which are often delivered in old decrepit buildings. The coordinator compared the positive effects of the service moving to a new building with state of the art of facilities, to the introduction of the iPad: the students felt – to paraphrase one of them – that they were worth it. The coordinator also made the important point that to get the full benefit of the iPad in the classroom, it not only had to be used as a literacy tool in developing and improving basic literacy, but the full range of its possibilities needed to be engaged in order to develop the semioticity of digital literacy.

The coordinator pointed out that many of the digital activities introduced developed the students' core reading, writing and numeracy skills. They wrote and received messages on the iPad and used apps to help them with maths operations. Additionally, they had to develop skills of critical reflection when they filtered for publication the messages that they received on the blog.

Two of the students have made particular progress socio-economically: one finding work as a buyer, using touch-screen technology, another finding placement work in data entry. Two other students reported enactive progress: one volunteering with a local homework club, and another joining the university

access programme and reporting that he was the most advanced student as far as new technologies were concerned. The students also began to use their new skills outside the centre. For example, when the group was on its way out to meet a local writer, one of the students suggested taking the iPad, and then proceeded to take notes and record some of the meeting with the device.

Reflection

In GABES, equal priority is given to building confidence and building basic cognitive skills, and each gain feeds off the other. Success, for example in the everyday basic skill of writing one's name, leads to a gain in confidence and the concomitant enthusiasm to tackle other tasks, which in turn leads to greater self-esteem and general confidence. Such gains were significant and developed in line with the achievement of managing the mechanics of the iPad, using it as a literacy tool, using apps and gradually availing of the full range of capabilities that the iPad offers. Of course, the experience of participating in social networking activities such as blogging, maintaining a Facebook page, and above all, using one of these ubiquitous hand-held smart devices, brought a sense of belonging to the fast changing world.

The students' attendance also greatly improved and a new sense of enthusiasm was noticed after the introduction of the iPads. Such an improvement is quite normal in the centre after the introduction of innovation. However, unlike normal attendance patterns, which, as we have noticed, usually re-establish themselves when the novelty wears off, good attendance was maintained.

The centre is careful not to equate any educational gain with socio-economic gain, and certainly does not promote the idea of *literacy equals jobs*. However, the examples noted in the coordinator's reflection above demonstrate that such socio-economic progress is possible.

Even though we stress the importance of new workplace multimodal digital literacy and semiotic systems in our education reports to higher authorities, questions always come back with regard to the "real" progress in "real" literacy, referring to the development of core reading and writing skills. Such questions are asked on the one hand by governmental organizations understandably concerned about value for money and the conversion of literacy education into job acquisition, and on the other hand, by more conservative managers and practitioners who worry that core basic skills will be neglected. Some tutors in the centre put forward the valid point that such a basic exercise as handwrit-

ing could be forgotten. However, the iPad, just like the book or the newspaper, is a reading tool, and, just like the pen, it is a writing tool, and while it will take time for it to be accepted as such and for educational philosophies to converge, industry and commerce forges ahead without inhibition. Adult students must be prepared.

There are, of course, as pointed out above, benefits for cognitive development. Writing postcards using an app not only practices digital skills, but also hones discourse and genre awareness. Other specific examples that demonstrate core skills practice and progression include blogs on homophones, analysis of twitter language, and statistical analysis of blogs and tweets – all aided by the personal iPad. The students, the tutor and the coordinator reported on improvements in core reading, writing and numeracy skills and these were recorded in the ITABE assessment. For example, in the ITABE assessment section on the conversion of common fractions into percentages, it was reported that an app was utilized successfully to help the students with this operation.

Limitations

The economic issue is an obvious concern. Not every adult literacy service can afford to buy a suite of iPads for group use and even if the money was available, other considerations apply. For example, a suite of 10 iPads would cost €5,000, which equates to approximately 111 classes (3 one-hour classes a week over a 34-week adult education calendar).

Although increased attendance has been cited as a benefit here, the downside was that attendance at the other ITABE class (where a more formal approach was followed), fell off. This has implications for the teachers involved, as students will perhaps look on the formal classes as being boring by comparison. Such an issue could be resolved by classroom contracts and group management.

As with any innovation, the acceptance of change can be a barrier. Evans-Andris (1995) concluded after an eight-year research period, that the main reaction by teachers to computers in education was that of avoidance. Winnans and Brown (1992), Dupagne and Krendl (1992), Hadley and Sheingold (1993), Rosen and Weil (1995), Robertson et al. (1996) and Mumtaz (2006) all investigated the reasons why teachers avoid embracing new technology and found that it all came down to a difficulty in accepting change. Total integration of the use of iPads in the classroom beyond this pilot stage will thus depend on the management of change.

Conclusion

Every human being is born with the facility of acquiring the complex system of communication known as language through social interaction in early childhood. However, ways of graphically representing oral language have been invented – they did not evolve through a process of natural selection. Writing systems are generally thought to have begun in Mesopotamia (Ancient Sumer) in 3200 BC, in China in 1650 BC and in Mesoamerica (Zapotec in Mexico) in 650 BC. Even before then humans were making basic graphic signs (knot records, pictographs, notches, hatch marks, pebbles, etc) to represent language, in order to satisfy the human need to store information. Ironically, new digital communication turns graphic developmental evolution on its head as we are now again in a phase where non-alphabetic semioticity is ubiquitous, as the reference by one of our students to “the box yoke with the arrow” evinces. Similarly, there has been a development from pen, paper, and book to PC and laptop and from there to iPads and iPhones. The latter actually marks a return to pen and paper type mobility, unobtrusiveness, and greater sense of ownership, evidence of which we see on a daily basis.

We have seen clear benefits as far as cognitive, affective, enactive, socio-economic development are concerned, and importantly in the development of critical reflection. The iPads have helped the students learn to read and read to learn. However, there are also economic, logistical and human resource issues, and limitations which need to be weighed up by adult education managers. Notwithstanding the benefits and the difficulties associated with introducing the iPad into adult education, the one irrefutable determining factor for adult education managers and tutors is that iPads and iPhones are not going away: they are here to stay.

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