Reflections on Encouraging the Use of Mobile Devices through Staff-Student Partnership

Matt Elphick and Stuart Sims, University of Winchester

Background

It has long been recognised that the mere presence of technology in a classroom does not promote student engagement or increased learning (Gebre *et al*, 2014). As is the case in many sectors, technology is a tool that can be used to enhance practices or overcome problems, but it is by no means a panacea. As with any tool, it is how it is used that gives the benefit and not the tool itself. In the case of Higher Education (HE) "*it is the pedagogy of the application of technology in the classroom which is important: the how rather than the what"* (Higgins *et al*, 2012:3).

Mobile devices such as iPads have become an important piece of educational technology in HE, enabling students to access resources and collaborate with their peers in new ways (Al-Emran *et al*, 2015). That said, only a limited number of studies have taken place to evaluate their use within HE and those that have taken place do not show consistent results (Maurizio and Perocz, 2011). In their 2012 study, Rossing *et al* found that the students believed that the devices helped to support collaborative learning environments, where the focus was on discussion and the shared building of knowledge, but also found that the ease with which information and applications could be accessed did lead to the students' being more easily distracted.

Unsurprisingly, staff perceptions of technology and teaching have a direct impact on the effectiveness of mobile device use in HE. Lecturers who regard effective teaching as "developing students' learning independence/self-reliance" (Gebre *et al*, 2014:93) and who use technology to support this view are more likely to have classes that are more engaged than those teachers who believe the focus is on the transmission of knowledge. To bridge the gap between student and staff expectations about the role of technology, this project situated staff-student working at its core. Technology can also be used as a way of increasing accessibility in the classroom, which is particularly relevant for the inclusion of hard to reach' students but also for facilitating partnership to create a greater sense of belonging.

In recent years, the potential for staff-student partnership to be a transformative model of practice has increased in popularity and traction (Wenstone, 2011; Healey *et al*, 2014). Partnership work can contribute to a shifting perception of power relationships in universities and a greater empowering of both staff and students to be active members of a learning community. In conceptualising the role of students as 'agents of change', Dunne and Zandstra (2011) drew a distinction between emphasis on student voice and emphasis on student action, as well as between the university as the driver and the student as such. Involving students as full partners with staff in the iPilot was seen as a way of transcending these dichotomies and having ground-up, co-designed curriculum (Bovill and Bulley, 2011) facilitated by technology. Genuine examples of curriculum co-design are often rare or highly localised (Bovill *et al*, 2011); as a multi-disciplinary pilot, with the potential to be rolled out cross-institutionally, this initiative has the capacity to normalise both the relevant, contextual use of technology and staff-student partnership working on an institutional scale.

Context

The iPilot has its roots in student-led enhancements through technology. Initially, it began as a project designed to pair staff and students to use technology to resolve issues relating to

assessment (FASTECH - Jessop *et al*, 2013). This grew into the Mobile Device Scheme, which recruited students with high levels of digital literacy to offer training and support to staff members. This included researching, profiling and demonstrating new apps, hands-on workshops and developing resources. This was housed within the wider SFS, an initiative which provides students with training and a £600 bursary to facilitate their collaborative working with staff members on year-long enhancement projects (El Hakim *et al*, 2015).

The iPilot project was co-developed in partnership between the University's Learning and Teaching Development Team and Winchester Student Union. This over-arching partnership ensured that there was a clear focus on both educational enhancement and improving the student experience. To reflect this partnership and to encourage co-developed technology-driven enhancement, every successful iPilot project team was allocated funding to recruit a Student Fellow. This decision was driven out of a desire to scale up the small pockets of good practice that these prior initiatives had successfully developed, by rolling out devices and support on a large scale.

The iPilot project was launched in academic year 2015/16 across seven undergraduate programmes. First-year students on these courses, and the staff teaching them, were each given an iPad mini 2, the staff having been tasked with embedding the technology into the way that they delivered their curriculum. All undergraduate programmes were eligible to apply to be a part of the project. Those who applied were asked to present their proposals for embedding the technology in front of a panel comprising members of Learning and Teaching Development, the Student Union and Senior Management.

Seven progra	ammes were	selected:
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Project Numbers 15/16				
Programme	Students	Staff		
American Studies	34	9		
Digital Media	22	9		
Law	110	13		
Media and Communication	41	6		
Primary Education	221	52		
Social Work	28	11		
Sport and Exercise Science	24	11		
	480	111		

Table 1. Students and staff numbers by programme

Development through partnership

As part of the project, each selected programme team was given the opportunity to work with a Student Fellow. Locating elements of the iPilot project within the SFS has the potential to go beyond notions of collaboration and development of self-efficacy towards a genuinely partnership-driven technology agenda. As the iPilot was a new initiative that would make dramatic changes to the way curriculum is designed and delivered, the organisers of the scheme felt this was a prime opportunity to remove any potential barriers to a satisfying staff and student experience. Involving students in the process of designing and delivering the content also had potential to engage harder-to-reach groups, as the initiative would not be founded on a traditional power dynamic between staff and students.

While this served the purpose of fitting with the University's focus on student partnership, it was also seen as a practical solution to up-skill staff and ensure that the iPilot was a

meaningful enhancement to the student learning experience. The Student Fellow role was both to support the roll-out of iPads and to evaluate the success of this. The support was specifically extended to students, with their highly-contextual experiences, in order to identify and promulgate discipline-specific uses of the mobile devices. This involved Student Fellows collaborating with staff and students to explore innovative ways to integrate iPads into and beyond the course. Whilst the broader iPilot project is being evaluated cross-institutionally, these Student Fellows, in partnership with staff, could also provide a more 'on-the-ground' evaluation that gave a unique student experience and was tailored to the specific way the devices were being used on their programmes.

Accessibility

As these projects were directly linked to the educational use of iPads, the iPilot Student Fellows received an iPad mini 2 and case, in addition to their £600 bursary. These various incentives and the supporting structure of the scheme was intended to constitute an effective way of addressing two potential barriers in terms of 'hard-to-reach' students. Firstly, providing Student Fellows with a bursary and an iPad removed potential financial barriers - which could have associated time barriers - to performing their role well. Secondly, it was hoped that the iPilot would increase the overall digital literacy at Winchester, the underdevelopment of which can be a barrier to accessing a range of activities. The whole project had the rationale of including students who could be 'hard to reach' because their inability to afford technology might be a barrier to an effective learning experience.

Structure

While the staff and students involved monitored the day-to-day progress of the iPilot SFS projects, they also collaborated closely with the iPilot co-ordinator. Additionally, iPilot Fellows were required to engage in various progress-review stages as part of SFS, including presenting their findings at a university-wide conference. To ensure that the iPilot project met its intended goals, a task and finish group was created, with each iPilot Fellow a member. Through attendance at these meetings, the Fellows not only provided updates on their respective projects, but also acted as representatives for the students on their courses, passing on feedback and sharing any concerns or examples of best practice that the cohorts wished to share. While it was important that the iPilot Fellows were fully integrated into the wider SFS and had access to the opportunities that the scheme provides, the nature of their projects meant that it was important for the iPilot co-ordinator to be closely involved. As such, the iPilot co-ordinator worked in a chimaeric position, taking on aspects of the roles of both the Student Fellows co-ordinator and the staff partner. So positioned, the iPilot coordinator provided guidance to students about the use of mobile devices in education and, where requested, worked with students and staff partners in order make individual projects more focused.

Student reflections

As part of the reviewing of SFS progress, students produced, five months into their projects, digital artefacts and reflections. The reflections were to be 500 words long and explicitly asked students to outline the nature of their partnership working with staff members and the ways in which this might have helped or hindered progress. The following section outlines how these students presented their experience of working with staff members (for a full list of the projects and their methodologies, please see Appendix A).

In spite of suggestions that the students should reflect on the nature of partnership, many students reported very functional aspects of their collaboration with staff; for example:

"I have been able to meet with my lecturer every week to keep him updated in my progress and receive guidance in how to proceed... Myself and my supervisor read journals into research techniques to write the most effective survey, whilst having considered common issues"

(Law iPilot Fellow)

This quotation, representative of a few reflections, very much situates the project as something where the staff member is the lead, with associated authority; particularly striking is the reference to the staff partner as a supervisor, situating the Student Fellow as research assistant rather than an equal partner in the process. Nevertheless, in spite of lacking a sense of clear partnership in most of these reflections, there is a sense of collaboration.

With regard to how the iPilot Fellows engaged with other students, there was a clear sense of separation;

"[The Lecturer] and I decided that it would be a wise idea to first of all spend some time using and researching some of the best ways in which the IPad could be used to aid students both in and out of lecture."

(Sport and Exercise Science iPilot Fellow)

"On top of meetings with my lecturer and the Student Fellows staff, I have had meetings with the first year cohort to understand what works and what does not."

(Digital Media iPilot Fellow)

It is unclear from these quotations or any of the reflections whether this is because of the fellow being from a separate cohort, the distinctiveness of the role or the responsibility of representation associated with it. This was further evidenced by the way that some students discussed the role in terms reflective of a distinct responsibility;

"Professional conversations with tutors and administrators."

(Primary Education iPilot Fellow 1)

The use of the term 'professional' implies that the Student Fellow took a particular approach and disposition in conducting the project, setting herself apart from that of other students.

A notable exception to the separation from the wider student body and the lack of partnership was a second project from Primary Education, the student situated their partnership working within the broader community of practice;

"Together with the module leader we collaborated in a community of practice (Wenger 1998) approach to evaluate the module in action to inform potential improvements."

(Primary Education iPilot Fellow 2)

This community of practice approach is one consciously developed by Primary Education teaching staff in partnership with students already and thus was already present in their department but was extended to include the iPilot.

You can't force partnership

Contrary to how the SFS traditionally operates, where a staff member or student formulates a project organically and then is paired with an appropriate partner, programmes that were selected to take part in the iPilot scheme were required to have a Student Fellow by the scheme's organisers. Given the success of the SFS in producing effective partnership-driven change, this was seen as an appropriate way of supporting programmes through the process of embedding the devices in the delivery of their teaching, and a means of involving the student voice in the co-design of curriculum. However, it wasn't without its problems.

The stipulation that programmes must have a Student Fellow, and that they must find an appropriate student to fulfil this role themselves, meant that staff and students who would not normally have been involved with the scheme were exposed to it. This provided an opportunity to raise awareness of the SFS in pockets of the University that have not historically participated (only two of the seven staff partners had previously worked with a Student Fellow). However, this enforced participation in the SFS and narrowed project scope restricted the organic development of partnership, with many staff and students fulfilling their roles because they had to, rather than owing to a deep interest in either mobile technology or staff-student partnerships. The effects of this can be seen in the length of time it took both for some programmes to recruit a Fellow and then for the partnerships to define and begin working on their project. Ultimately, this enforcement of partnership working led to the overall quality and depth of the projects being inferior to what would normally be expected of a traditional Student Fellow Scheme project. However, the scale of the iPilot and the central institutional drive behind it did result in students' - both the Fellows and the wider cohort having a direct role in shaping and informing the curriculum, even if true co-development was elusive.

You can have too many cooks

Whilst the theory behind having three members of staff involved with each project (SFS coordinator, iPllot co-ordinator and Staff Partner) was sound - it provided training and management from the SFS, technology advice and guidance with regard to mobile devices and programmatic oversight - in reality it became a case of 'too many cooks'. Having so many staff involved in the project led to some students' being unclear about whom to contact for specific information and guidance; furthermore, from a staff perspective, it was often unclear when or where one role finished and another began. Consequent confusion as to which role should be adopted with certain activities resulted in some being missed. It is clear from the experiences of both staff and students that greater clarity was required in the definition of these roles and also that a more nuanced approach to facilitation of the staff-student partnerships could be taken, that task being perhaps too burdensome or bureaucratic as it was.

Reflections on power relationships

It is often claimed that the majority of the undergraduate students who attend university now are 'digital natives' or 'native speakers' of the digital language of computers, video games and the internet, having been born into the digital age (Prensky, 2001). The majority of tutors, then, are 'Digital Immigrants', being born before 1980 and adopting technology later in life. An expectation of the iPilot was that the 'digitally native' students would form a natural partnership with their 'immigrant' staff counterparts, who could provide discipline, specific knowledge and greater understanding of good pedagogic practice. The diverse levels of skill and experience amongst the staff and student body were one of the key challenges of this project. In recent years, the concept of 'digital natives' has been widely challenged, Wang and Myers (2013) argue in favour of a more flexible continuum of 'digital fluency' which is not necessarily restricted by generational boundaries. Where a native/immigrant dichotomy did seem to manifest itself, the inherent power relationships

between staff member and students were usually more significant. In spite of the fact that the iPilot was situated within an established partnership scheme (SFS), these principles were not replicated as effectively as the coordinators would have liked. A key recommendation for a similar project would be a coherent audit of the digital literacy of key stakeholders. It was intended that the broader support, guidance and training for Student Fellows for working in partnership would fill this gap, but, on reflection, the unique nature of the iPilot partnerships required more targeted support.

Conclusion

Staff and student partnership is an effective way of facilitating a large-scale change programme, from the ground up. The outcomes of the projects with intended partnership at their core speak to the effectiveness of the model, yet, whilst many of the 'partnerships' were collaborative in nature, they often maintained traditional divisions between lecturer and student. Consequently, when any institution embarks on similar initiatives, the facilitation and authenticity of partnership must be carefully considered. Particular areas of focus should be on people for which partnership working is new and care should be taken in managing the tension between local and central requirements in relation to discrete project-based partnerships. The whole point of integrating the SFS into the iPilot was to try to overcome this tension, ensuring not only that there was central oversight of the this resource, but also that the local discipline specific staff-student partnerships could give each project its own flavour. That the results here were inconsistent perhaps indicates too much bureaucracy, with demands upon the students and staff involved coming from three separate sources (iPilot, Student Fellows and partner - whether staff or student). This was the first example of Student Fellows projects being a requirement for both the staff member and the student involved, rather than one partner developing the initial idea. As such, while the teams were encouraged to develop their own projects, the initial desire to be part of the SFS was not necessarily present. While equal co-design in partnership probably eluded us in this enterprise there were various degrees of collaboration between staff and students and all of the projects produced something, leading to broadly successful projects.

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Appendix A

Project title	Initial aims of SFS project	Changes Described
Digital media app development	To develop an app to improve workflow for Digital Media Design students	"The most requested app from the first years themselves was one in which to teach them to draw." Collated feedback on the direction of the app, did not develop product
The extent to which LawTrove and other Applications are adding to the use of the iPad scheme in the Law department, with relation to the attitude of students towards this software	To evaluate and enhance the usage of LawTrove	"Students were given a training session and were aware of the tools available, however most students only used LawTrove for reading" "Clearer answers were found in interviews; most students use LawTrove when directed to as part of tutorial work but do not use it unless specifically told"
How iPads can be used in the Scientific Enquiry module for Year 1 BEd students	To enhance curiosity through the use of mobile technology	"Feedback from evaluative focus groups indicated a strong desire among participants to take forward good practice identified through discussions and support"
How may iPads enhance professionalism and employability in teacher development?	To find out how the iPad can be used as a professional tool for learning within the teaching profession	Collected data.
Using Nearpod as an alternative presentation tool	To investigate the use of Nearpod as an alternative presentation tool that makes use of student iPads	Collected data. Scope of project increased to look more broadly at how content can be shared in class.
Learning with iPads	To investigate whether iPads have increased student learning	"The qualitative and quantitative data suggest that students believe the introduction of iPads has enhanced their learning."
iPads for Sport Education – iPilot Evaluation	To gather student opinion of the iPilot in Sport, evaluate its impacts on learning and discover further practical uses for the iPads both inside and outside lectures	Undertook a qualitative study. A list of recommended apps for sport students was created.