Supporting Learners in a Digital Age (SLiDA)

Synthesis Report

January 2010

Introduction

The SLiDA project investigated how institutions are creating and enabling opportunities that promote the development of effective learning in a digital age. The ultimate aim was to promote strategies that support learners to develop the access, skills, strategies and attributes they need to learn effectively with technology. The main deliverables of the study were a set of nine institutional web-based Case Studies. They were produced in October 2010 and are available at the SLiDA Case Studies web site: https://wiki.brookes.ac.uk/display/slidacases/SLiDA+Home.

This synthesis report is not a summary of the case studies. It is, rather, an attempt to draw out key features of the policies and practices documented in the case studies and to make recommendations to institutional managers about supporting learners to effectively use technology.

The report has five main sections: first, we briefly summarise the SLiDA project methodology. A fuller companion report on the SLiDA methodology is available separately. Second, we briefly explain differences and overlap between the SLiDA project and what might be termed the digital literacies agenda. Third, we document important features of institutional policy for supporting and developing learners in a digital age. Fourth, we draw out implications for institutional change management approaches. The fifth and final section is recommendations from the SLiDA project.

Method

The project team selected and worked with nine institutions to co-create case studies which represented their strategic, policy and practical developments to support learners in a digital age. Data were collected over a six month period through multiple interactions with case study sites including an initial phone call to build a background picture, ongoing conversations with a consultant, document sharing, online workshops, and culminating in a site visit. The methodology is described and discussed in more detail in the SLiDA Methodology Report.

The key question proposed by the SLiDA project was, “How are institutions creating and enabling opportunities that promote the development of effective learning in a digital age?” Nine sub-questions were investigated:

1. What strategies, policies and practices can be used to support learners to develop digital literacies relevant for professional and lifelong working?
2. What frameworks are useful in specifying effective academic technology mediated practices?
3. How can the development of digital literacies and learning support be successfully embedded into the curriculum?
4. How can the development of effective learners be supported in individual, personalised ways?
5. In what ways can policies and practices be student driven?
6. How can social, personal and institutional technology be integrated to enable more effective learning?
7. How are learning spaces that have been adapted in response to learner needs, being used to promote effective learning?
8. How are institutions making use of effective learners to benefit other learners?

9. Which staff development approaches support the development of effective digital literacies for staff?

Supporting learners in a digital age and developing digital literacies: is there a difference?

Before discussing the SLiDA project findings about institutional policies and practice for supporting learners' uses of technology, we need to lay out the difference in focus between this project and one focusing on a digital literacies agenda. The SLiDA project aimed for a broad focus on institutional policies and practices that encompass supporting student learning in an age where digital technologies are an inevitable and important mediator of learning. Inevitably, given its growing popularity within the sector, SLiDA included institutions pursuing strategies for promoting and supporting digital literacies. However, we did not restrict ourselves to only these institutions or to digital literacies strategies.

The concept of digital literacies is bound up with that of *multiliteracies* (Cope and Kalantzis 2000). From a situated practice view of cognition, in which learning is intimately connected to the context in which it takes place (Lave and Wenger 1991), the concept of digital literacies is necessarily a *plural* one. Digital literacies encompass a range of socially situated practices involving making meaning through interaction with a range of digital media (Lankshear and Knobel 2008). Gillen and Barton (2010, p 9) define digital literacies as:

> *The constantly changing practices through which people make traceable meanings using digital technologies.*

This definition includes practices that are frequently included under the traditional category of information literacy, such as search, retrieval and evaluation of online information (possibly text, graphic, audio or video). It extends well beyond such skills-based meanings to questions of identity, access and power, judgement and criticality (Gillen and Barton 2010). It concerns the enormous range of practices involved in consuming and producing digital artefacts, individually and with others, online and offline.

Many of the practices within this definition of digital literacies do not concern formal learning, or even what we might normally understand as informal learning. It covers, for example, practices in people's everyday lives like shopping (e.g. amazon.com) and negotiating access to government services (e.g. direct.gov.uk). Moreover, there is clearly a range of learning literacies that a university student might be expected to develop that do not overtly or necessarily involve the use of digital technology, e.g. some study and time management practices, note-taking, meaning making with paper texts, etc. Nevertheless, increasingly in this digital age such practices may well involve the use of digital technologies.

As with SLiDA's sister project, LLiDA (http://www.jisc.ac.uk/whatwedo/projects/elearningllida.aspx), we wanted to sidestep the epistemological debates in literacy studies between cognitive and situated theories of learning (Beetham, McGill et al. 2009) and remain as open as possible about which technology-assisted learning practices most need institutional support. Consequently, this is a report about institutional policies and practices that support and develop students' uses of technology for learning, rather than a report about developing digital literacies per se.

What policies and practices are institutions using to support students in a digital age?

We chose the nine SLiDA cases to illustrate a diversity of institutional approaches and focuses to supporting student learning with technology. Yet although we uncovered many distinct policies and practices, they can be classified into five key aspects that most institutions shared, to greater or lesser degrees.

1 Preparing students for their experience of learning with technology. Virtually all the institutions in this project were concerned to adequately prepare their students to use an identifiable set of core technologies. The clearest expression of this is focusing on induction,

ensuring all beginning students are aware of the digital learning tools they will need and that they know how to use them.

The case of Abingdon & Witney College is the purest example of this, where the College has invested considerable time and resources in a universal e-learning induction programme. This focus has implications for staff as well, since universal induction in digital learning technologies implies a minimum level of staff engagement and skills. At Abingdon & Witney College this has led to a parallel staff development programme and the appointment of six e-learning champions.

Universal induction requires multi-modal delivery to work best, e.g. in-class activities plus multimedia anytime anywhere access to learning activities. Such flexible access resources allow students to be 'inducted' even if they enter the university or college outside of the usual enrolment periods.

It is notable that in the Abingdon & Witney College case study the enactment of this policy was a product of a consultation exercise with students, including learner voice conferences and impromptu focus groups with students by the College Principal. Allied with this desire to listen to learner voices in the College has been a series of decisions about reconfiguring College workspaces, such as the library, to enable staff-student collaboration and social learning, and upgrading the College's infrastructure to improve wireless network access on site and improve off-site access to learning activities and resources.

Other institutions induct their students into the uses of technology differently. For example, at the University of Edinburgh technology use is largely developed within the curriculum. New, social learning spaces there require students to learn how to use both old and new technologies to enhance their learning experiences. At the University of Surrey, CoLab students are required to respond to an external need, as a consequence learning to use and even design innovative technology solutions of their own.

2 Enabling learners to use their own devices and services. It is clear that very high proportions of university and college students own their own laptops and routinely carry with them a range of digital devices including, in rapidly increasing proportions, Web-capable mobile phones. As well as having personal attachments to them, learners require less support with using their own devices than they do with unfamiliar institutional ones. Each of the SLiDA case study institutions was accepting and supportive of students using their own devices on campus and providing easy, secure network access. With resources and space at a premium, Birkenhead Sixth Form College has taken the idea a step further, making the use of personal devices, such as personal laptops, smart phones, camcorders and audio devices, across the curriculum the central tenet of their approach to supporting learners' use of technology. The College maintains a small pool of these devices for those students who do not own one.

The College has extended its computing infrastructure to offer ubiquitous wireless access across the campus, enabling students to connect to the network using their own devices. BFSC also has a virtual desktop system, based on thin client technology, which enables students to access the network remotely.

Student demand has driven this initiative. As with Abingdon and Witney College, a programme of staff development and the use of staff e-learning champions is necessary to support it.

3 Reconfiguring campus spaces for social learning. It is increasingly clear that the traditional configuration of classrooms and learning spaces does not adequately support effective use of modern digital technologies for learning. Traditional classroom spaces are organised to support the didactic teaching module. Preparing learners for the digital age requires spaces and pedagogical approaches that enhance learner engagement and involvement in the learning process. As is typical across the sector, the SLiDA case study

institutions were, wherever possible, reconfiguring campus spaces to enhance network connectivity and support more social learning activities.

The SLiDA case in point is the University of Edinburgh, which has extensively redesigned learning spaces in response to learners' needs. The Science and Engineering campus has a new learning and teaching cluster which offers a variety of learning and teaching settings designed to promote collaborative work, together with a large informal study and social area. The main library has undergone major redevelopment to support a range of learning and research activities. A key driver of these changes has been the need to support new pedagogical practices, including group learning.

What is important about these campus space developments is that they permit a range of technologies to be used, from high spec wireless laptops to humble whiteboards, pencils and paper. A range of learning preferences and pedagogies is supported, from individual to collaborative and formal to informal. The new social, student-centred spaces have changed the usage and the ethos of the buildings; there is more mingling between academics and students during and outside class times. Student feedback has been used throughout the campus redevelopments to inform subsequent designs.

4 Listening to learner voices. In each of the nine SLiDA cases we could hear the same message expressed in various ways: institutions wanting to better support students to use digital technologies are feeling their way in new terrain. All sought active input from their students in policy-making and implementation. Four cases – University of Glamorgan, University of Surrey, Oxford Brookes University, University of Wolverhampton – illustrate different approaches to this.

The University of Glamorgan has a distinctive student body with 80% of students drawn from the local region, which includes some of the most deprived areas in Europe. The new PVC has driven an agenda to **create a culture of engaging with students** in order to better understand and manage their expectations, including their expectations of the use of technology at university. At Glamorgan two initiatives have been influential in engaging staff in understanding and responding to student expectations: the student expectations research project and its subsequent implementation task groups, and the creation of a new role of Student Voice Representative (SVR).

The student expectations research project involved three staff/student task groups which conducted student focus groups to investigate their areas. Amongst other things this led immediately to recommendations to achieve more consistency in staff use of the Virtual Learning Environment (VLE), student training for using the VLE, and online access to Skype and social networks immediately on arrival. In the second initiative, six SVRs have been appointed to each faculty. Students have various channels of communication with their SVRs. The SVRs have direct input into Faculty Boards and their input has led to things like upgrading software in labs, development of an online assessment submission system and Wifi across campus.

The University of Surrey is using a **student enterprise** to prepare learners for a digital age. CoLab is a student-led enterprise that provides a range of services for students, staff, the University, the local community and external institutions. It includes a dedicated team of students who, as part of their placement year, listen to students in order to develop strategies to respond to student technology needs. They also engage in staff development through workshops and designing technology-enhanced tools, provide technology services for hosting in-house and external conferences, and respond to emerging technology demands in the University.

Surrey's educational model encourages development of professional capability alongside academic capability. A range of research approaches, including online surveys, interview studies and story-based competitions at the university, has highlighted the significance of work placements and other life experiences outside the classroom in student perceptions of

their own development. CoLab recruits students part-time (paid for 5 hours per week) as networkers and technologists. Networkers are trained in interviewing and focus group techniques. They went out and found out things from the student body by interviewing students and conducting focus groups.

Technologists provided a range of services focused on supporting student learning for and in the digital age. Two full-time placement students act as leaders and managers for the part-time students (networkers and technologists).

There are several interrelated impacts on the development of students' digital literacies from this student enterprise. 1. CoLab students develop their own digital literacies through team working on projects that aimed to enhance other students' experiences of using Web 2.0 technologies and new media. 2. Student networkers and technologists respond to students' needs through ongoing dialogue with the student body. 3. The CoLab technologists hold discovery workshops introducing participants to technologies and one-to-one drop-in sessions for students and staff to help develop digital literacies that can be used in everyday life and in teaching and learning.

A different approach that seeks to hear the student voice in the institution is **student experience research**. Oxford Brookes University has shown that engagement in student experience research can drive digital literacies to the top of the policy agenda. Over five years of learner experiences of e-learning research, including a large-scale evaluation of technology use by Oxford Brookes students (Ramanau, Sharpe et al. 2008; Benfield, Ramanau et al. 2009), a systematic evaluation of best practice in blended e-learning in higher education (Sharpe, Benfield et al. 2006), the JISC Learner Experience with e-Learning programme (http://www.jisc.ac.uk/learnerexperience) and the Higher Education Academy's Pathfinder programme (http://elearning.heacademy.ac.uk/weblogs/pathfinder/), have led to the University identifying digital and information literacy as one of five graduate attributes that each programme must support and develop.

The University of Wolverhampton has also focused on digital literacy, in their case as one of three graduate attributes. This focus emerged from **consultations with current students and recent graduates**, about their experiences with learning through technology at the University, their needs from the world of work, and their information literacy needs. The other SLiDA case study institutions used variations of this approach to hear their students' voices. A Wolverhampton project recruited student 'e-champions' to use technology to help support other students' learning and to act as a link between students and staff. In one case this resulted in students creating course content in partnership with academics, for example by blogging on their understanding of lectures, and writing formative assessment tasks which were then shared with and commented on by students and tutors.

5 A strategic emphasis on course design for blended learning. Several SLiDA case study institutions – London Metropolitan University, Oxford Brookes University, University of Salford, University of Wolverhampton – have a strategic learning and teaching focus around embedding digital literacies development in the curriculum through blended learning course design.

The University of Salford is developing curricula that encompass the development of digital literacies within the context of their distinctive curricula in media, creative arts and business. As with each of the institutions represented in SLiDA, the University's approach is to embed digital literacies into the curriculum across the University.

The University has initiated a project to develop and implement an institution-wide Information Literacy Strategy. Salford is using SCONUL's Seven Pillars of Information Literacy as a framework for development. However many courses broaden this view of information literacy to encompass personal, organisation and societal skills in using technology, contextualised within their disciplines. It is a challenge to integrate developments so that they build on each other. Therefore, along with a baseline audit,

processes are being put in place to audit programme documentation to see whether information literacy is included in the learning outcomes.

London Metropolitan University too has made blended learning its key learning and teaching strategy focus. To support curriculum renewal for blended learning it has placed Blended Learning Coordinators and Consultants into each faculty. Their role is to support innovation and blended course design and renewal.

Oxford Brookes and Wolverhampton have taken the approach of developing digital literacies as one of a set of core graduate attributes. Brookes' new Strategy for Enhancing the Student Experience requires all undergraduate programmes to develop five graduate attributes, one of which is digital and information literacy. To underpin this, a conceptual model, based on SCONUL's Seven Pillars of Information Literacy, is being used to help codify digital literacies at the programme level.

A set of Oxford Brookes digital literacies has been identified; namely, that graduates should be self-regulating citizens in a globally connected society who are:

- able to handle multiple, diverse information sources and media,
- proficiently mediating their interactions with social and professional groups using an ever-changing and expanding range of technologies and
- able confidently to use digital technologies to reflect on, record and manage their lifelong learning.

Departments have been asked to build on and extend this framework to articulate discipline-specific digital literacies at the programme level. Initially, programme teams are auditing their current practice and identifying gaps and aspirations. The next step is to undertake a redesign and development of the curricula in order to map these attributes onto each programme. It is envisaged that over the coming years of course renewal every programme in the University's academic portfolio will be able to explicitly describe when, where and how students' digital and other learning literacies are being developed.

The University of Wolverhampton has identified digital literacy as one of its three key graduate attributes. These provide an overarching vision about what the University offers alongside professional and subject expertise. Digital literacy sees graduates as confident users of advanced technologies who will lead others, challenging convention by exploiting the rich sources of connectivity that digital working allows. The undergraduate curriculum was redesigned recently with graduate attributes being a core element. Development of digital literacy in courses is through: (i) a student-activity focused blended learning curriculum, (ii) a focus on information literacy capability, and (iii) uses of cutting edge, work related technologies.

In the redesign of the undergraduate curriculum, new courses must articulate how they develop digitally literate graduates. Course teams also have to show how their programmes meet the University's six blended learning entitlements. These are: 1. have access to a digital copy of all lecturer-produced course documents; 2. have formative assessment/s opportunities online with meaningful electronic assessment feedback; 3. collaborate on line with others in their learning cohort; 4. participate in ePDP; 5. submit all (appropriate) assessments online; and 6. engage in interactive learning during all face to face sessions (University of Wolverhampton 2009).

As in each of these cases, an important feature is that the notion of digital literacies (together with the other key graduate attributes) will be contextualised within each academic discipline, the aim being to embed them within the programme curriculum rather than deliver separate 'bolt-on' elements.

Implications for institutional change management

Staff at the nine SLiDA case study sites spoke repeatedly of strategies and tactics for implementing change at their institutions. A variety of approaches had been used in each

institution with some more obviously fruitful than others. In all cases institutions tended to be in the midst of implementing change. Robust evaluation data was usually not readily available and some practices may have needed more time make an impact. We can group important change management tactics into three broad areas: tactics for student engagement, or as we have termed it, 'listening to learners'; tactics for engaging staff, or 'staff development'; and general features, which we have called 'taking a long-term view'.

Listening to learners.

We have already noted above that institutions seeking to make an impact on how they more effectively support learners to use technology have actively sought to learn what their students need and want. While this is clearly important from a policy shaping perspective, several of the SLiDA cases show with remarkable clarity the impact that student engagement in policy formulation can have on policy implementation. The Glamorgan case, for example, illustrates a series of institutional policies enacted as a direct result of student input.

The tactics exemplified in the SLiDA cases include:

- starting a dialogue involving a range of stakeholders, including academic staff, students, librarians, technologists, eLearning champions, senior management, etc, in working groups and decision making (Abingdon and Witney College, University of Wolverhampton)
- student enterprises to support and develop digital literacies with students **and** staff (e.g. CoLab at University of Surrey, student e-champions at University of Wolverhampton)
- facilitating peer learning and support (e.g. student e-champions at the University of Woverhampton)
- investigating learner practices and needs through learner experience research (e.g. Oxford Brookes University), including wherever possible, methods involving students as researchers (University of Glamorgan)
- empowering students to participate in policy-making (e.g. Student Voice Representatives at the University of Glamorgan)
- actively supporting students' preferred personal technologies (Birkenhead)
- developing trusting, respectful relationships with students (University of Surrey) that are ongoing, continuing to provide feedback on what is happening (Glamorgan) and testing and refining prototypes (University of Edinburgh)

Staff development

Effective staff development is a *sine qua non* for change management in the area of educational technology. In the rapidly changing terrain of digital technology this cannot be taken as a routine task. Whether it is the introduction of a universal induction programme (Abingdon and Witney College) or embedding digital literacies development throughout programmes institution-wide (e.g., University of Wolverhampton, Oxford Brookes University), engaging teaching and support staff both in professional development concerning the use of learning technologies, critically appraising appropriate uses for them and exploring relevant pedagogies for a digital age, is equally as important, if not more so, as engaging with students on these questions.

The tactics exemplified in the SLiDA cases include:

- placing E-learning champions within departments and giving them time and resources to work with other staff on developing appropriate uses of technology within the curriculum (e.g., Abingdon and Witney College, Birkenhead Sixth Form College, London Metropolitan University)
- providing resources and incentives for staff training in the use of technologies (Abingdon and the College)

- articulating a small, realisable set of blended learning 'entitlements' that students can expect from their courses (University of Wolverhampton)
- using stories (e.g. from alumni), examples, and frameworks (e.g. the SCONUL Seven Pillars model) to help staff understand learners' needs in relation to the use of technologies (Oxford Brookes)
- contextualising digital literacies within the discipline (Salford), empowering staff to implement changes at a pace and level of sophistication they are confident with
- wherever possible, work at the programme level (e.g. Oxford Brookes and Wolverhampton) to ensure coherence and consistency in the student experience and make use of existing institutional course renewal systems and practices
- setting up processes where skilled students organise and run staff development sessions on demand (Surrey)

Taking a long term view

Educational technology has an impact on and is impacted by the policies and practices of an enormous range of people. Real impact on effectively supporting learners in a digital age will come about not through one policy or initiative, but a web of interconnecting ones that are continually affected by shifting priorities and practices. The pace of change in educational technology is rapid, yet universities are notoriously slow to adopt new practices. This paradox can be suitably managed by strategies that enhance institutional responsiveness and adaptability. For the most part, as is clear from the two categories above, such practices concern stimulating and maintaining ongoing dialogue between as many stakeholders within the institution as possible. Tactics exemplified in the SLiDA cases include:

- Using audit tools to find out where you are and to help agree where change is needed (A&W)
- Factoring in time to consult about the nature of digital literacies (Wolverhampton).
- Enacting multiple projects (Abingdon and Witney College), allowing for incremental progression (Birkenhead, Edinburgh), and time for people to come on board (Oxford Brookes)

Recommendations

The following observations may be useful to institutions considering how best to support their learners to study and learn successfully in a digital age. A number of these are recognisable as applying to a wide range of institutional change processes.

- Students need preparation for their experience of learning with technology. Induction is an important stage and students need flexible access to induction resources and activities.
- Programmes of staff development and the co-ordinated use of staff e-learning champions within departments, are necessary to support new initiatives
- Campus spaces should be reconfigured to enhance network connectivity and support a range of social learning activities
- Digital literacies should be explicitly specified in learning and teaching strategies (although not necessarily using that terminology), contextualised for the discipline, embedded into the curriculum and mapped across all programmes. Those institutions that have made the most progress with this have included digital literacies in their core graduate attributes.
- Students can make valuable contributions to the design and decision making process. In order to do this, institutions need to create a culture of engaging with students e.g. through student experience research projects, reviewing student representation systems, providing student work placements, or appointing student champions.
- Favour practices which improve institutional responsiveness and share good practice e.g. audit tools, multiple projects, stimulating dialogue between multiple stakeholders.

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