

DEBUT Project

| Digital Experience Building in University Teaching |

Pathfinder Journey Report (May 2008)

Key contacts

Susan Westerman Learning Technology Coordinator and DEBUT Project Manager

susan.westerman@canterbury.ac.uk

Lynne Graham-Matheson Principal Research Fellow and DEBUT Project Researcher

lynne.graham-matheson@canterbury.ac.uk

Canterbury Christ Church University, North Holmes Road, Canterbury, Kent CT1 1QU

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1. Background and context

Since 1995, when it established a unit to support staff in using learning technology, Canterbury Christ Church University (CCCU) has made substantial progress with e-learning. In 2002 this support moved into the newly created Learning and Teaching Enhancement Unit (LTEU). The philosophy of the LTEU has been to embed the use of learning technologies into the curriculum of the University. Its approach has very much been an enabling one, helping staff to be able to create learning resources themselves.

Within the LTEU support for learning technology is provided by the Learning Technology Team. The team has responsibility for advising on, and assisting in pedagogical, technical and organisational developments associated with the use of ICT to support learning and teaching. Each of the technologists primarily works with one academic faculty, but all have a remit to work on institutional developments and projects, thus sharing practice across the institution. The value of the support provided by the learning technologists was evidenced in an internal review of the LTEU in 2006. Above all, staff valued the close relations between a faculty and its technologist, and felt it was primarily this that had advanced the institution in its understanding and use of learning technologies.

2. The problem DEBUT set out to address

In 2007 CCCU welcomed the opportunity to be involved in the HEA e-Learning Benchmarking Exercise, seeing it as an opportunity to compare our engagement in e-learning with that in other HEIs. We also hoped it would enable us to better understand our current status, and involve significant numbers of staff in a debate around future directions. In particular, we were interested in gaining a better understanding of sustainable approaches to developing e-learning. The institution undertook an institution-wide review, and adopted a number of themes which focused on a variety of aspects of e-learning: quality, the student experience, the staff experience and strategic use of e-learning.

The Benchmarking exercise helped CCCU in a number of key areas. It helped to begin the development of a much closer relationship between the institutional Quality & Standards Unit and LTEU, and it raised the profile of learning technology on the senior management agenda. Yet above all, it highlighted that despite the institutional VLE being used within nearly all academic programmes, there were only limited examples of e-learning strategies that fully exploited a range of technologies. Most staff were not generally aware of other digital tools, nor how many "net gen" students were using them. Enabling our staff to confidently use a range of tools therefore required technical training from us (the centre) to them (the faculties); the locus of expertise very much centred on the Learning Technology Team, but this was not sustainable. The direction was clear: to further develop our use of learning technologies in a more sustainable way the institution needed to explore new staff development approaches that would address and increase the overall digital literacy of staff.

The DEBUT project accepted twenty-five expressions of interest from staff who together represented the academic and demographic profile of CCCU, and who had a variety of levels of digital literacy. At the same time a suite of digital tools was assembled. Some tools were standard learning technologies already available within the institution, some were external web2-type tools and others were technologies new to the institution. Each participant devised a personal development plan, choosing six digital tools which they would undertake within DEBUT. It was stressed to participants that their choice of tools could stem as much from a personal interest as a professional one, and it was emphasised that participants were not expected to immediately apply what they learnt to their practice. The aim of this approach

was to create a “safe environment” in which staff did not feel pressured, however, as Section 4 will detail, participants chose their tools primarily as a result of their professional needs and as a result of this most participants applied them almost immediately to their practice.

The DEBUT tools were supported by a variety of staff development approaches, and depending on the popularity of the tool amongst the participant group this development was offered at a number of different times during the project. In this way we aimed to enable our participants to experience a range of digital experiences which had meaning for them at a time which best suited them. A list of DEBUT tools, along with their staff development approaches can be found at Appendix A.

3. Intended outcomes of DEBUT

In DEBUT we sought to pilot and evaluate a digital literacy staff development programme that aimed to raise the overall confidence of participants in using and exploiting digital tools. Our interest in the concept of digital literacy arose from the work of Allan Martin and colleagues¹. Digital literacy is the ability to understand and apply information conveyed from a wide variety of sources via an increasing array of electronic or digital tools. As Martin explains, “Digital literacy is a cultural rather than a technological phenomenon, and moves beyond ICT literacy in asserting its embeddedness in socially located action”. In “*Towards e-literacy*” Martin lists five elements of digital literacy:

- awareness of the ICT and information environment;
- confidence in using generic ICT and information tools;
- evaluation of information-handling operations and products;
- reflection on one’s own e-literacy development;
- adaptability and willingness to meet e-literacy challenges.

The key intended outcomes of DEBUT were:

- i. To explore how the LTEU, and educational developers in the sector, can best deliver and support a digital literacy development programme which enables staff within HE to feel more confident about exploiting digital tools in learning and teaching.
- ii. To inform the institution and sector of the benefits and challenges involved in delivering contextualised or situated staff development.
- iii. To help the LTEU, and other educational developers, gain a better understanding of approaches and methodologies that best aid the development of digital literacy levels in HE staff.

Martin concludes that digital usages can ultimately be transformative. As digital usages become well anchored within the practices of the community, some users may then gain an insight which can produce innovative or creative action; action which significantly changes accepted practice within the community. It was thus hoped that DEBUT would begin the process of building a community of digital envoys, better able to exploit digital tools, and support their colleagues.

To measure the success of DEBUT, the following evaluation questions were used:

- i. Which approaches and methodologies best supported our participants in becoming digitally literate?
- ii. To what extent can staff development be delivered in a way that is more situated and personalised?
- iii. Has the DEBUT experience changed participants’ attitudes to the development of their digital skills?
- iv. Has the DEBUT experience changed the attitude of participants towards the digital culture?
- v. What are the challenges that the digital environment poses for HE staff?

A range of evaluation methodologies was used to answer these questions. At the beginning of DEBUT, participants were asked to rate themselves on a digital literacy scale (see figure 1. overleaf) based on Martin’s elements of digital literacy. The aim of using this tool was to provide a benchmark against which participants could position themselves in terms of a digital literacy scale at the outset and end of the project. In devising the grid to enable participants to rate themselves against Martin’s elements, the ‘complete beginner’ and ‘expert’ were used to show the progression and guide participants in their thinking.

In addition to an individual interview at the outset of the project, participants were interviewed again at the mid-point of the project to gain a progress report, and at the end of the project to evaluate their views of the project and their overall digital journey through DEBUT. For each digital experience participants were also asked to complete a questionnaire to reflect on each experience, and on their overall progress.

¹ Martin, A, (2003) “Towards e-literacy”, in A Martin and R Rader (eds.) *Information and IT Literacy: Enabling Learning in the 21st century*, London, Facet p3-23

	<i>Complete beginner 1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>Expert 5</i>
<i>a) awareness</i>					
<i>b) confidence</i>					
<i>c) evaluation</i>					
<i>d) reflection</i>					
<i>e) adaptability</i>					

Figure 1.

4. Achievements and situation to date

i. Increased digital literacy amongst participant group

The key indicator of whether DEBUT was successful was evidence of a marked increased in the digital literacy levels of the participants. It is clear from the evaluation data that all but the most experienced participants had made progress on their digital journey, very significant progress in a number of cases, with participants commenting on their increase in ability not only on the tools they had experienced as part of DEBUT, but with digital tools generally. Figure 2. illustrates this story, showing participants digital literacy score at the outset and end of the programme.

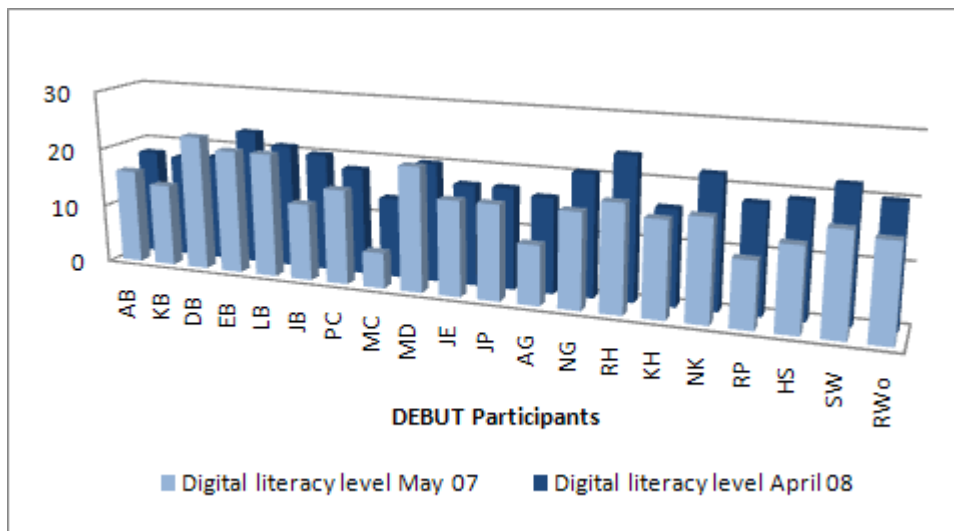


Figure 2.

The data stemming from the interviews with our participants and from that provided in their digital experience evaluations reinforces this picture of increased digital literacy with evidence of increased awareness, understanding and confidence. However, the best illustration of this increased digital literacy level amongst participants is the many ways in which they have applied and linked tools to their practice. Comments from participants' best tell the story:

Awareness:

"It makes you aware of all those other things available".

"It has widened my understanding broadly of the possibilities that could be used for personal, professional or educational development".

Confidence:

"The net effect has been a real growth in my confidence about my ability to deal with technology overall because I have learnt that actually it is quite intuitive. Most things nowadays are quite logical or at least maybe logical and intuitive don't go hand in hand but there is something that works in a fluent way about the way you operate things."

"I feel much more confident ... if I just fiddle around then something will come up and at the end I can just get rid of it and unfiddle it. Before I was so petrified about ... I don't know ... it not working out."

Evaluation:

"It has made it very clear in my mind what I can see myself using or what I can see the value of".

"I already use discussion boards for a personal interest. I am keen to use discussion boards at work for information exchange and, in the future, for summative assessment. This course has given me information and confidence to envisage this."

Reflection:

"This [digital video] is proving to be a valuable experience in lots of ways, both in terms of reflecting on my own learning and my students' and also because my confidence has improved so much."

"I used it [Qwizdom] for a revision quiz, which is a way of reminding students of the things we did during the term and this tool adds a bit of excitement."

Adaptability:

"It has been interesting to integrate the different digital tools. I have used pictures from Flickr and updated the reference lists used at the end of the [PowerPoint] presentations using Refworks."

"You wouldn't believe how much my IT skills have developed. Now I can use sound, podcast and e.g. I learned the other day (and I know this is nothing to do with Debut) in my iTunes I downloaded an audio book. Now I wouldn't have had the confidence to do something like that before but now I feel I can press buttons on my computer and it won't break. It's only through Debut that that kind of thinking has come. I am a lot more confident and that is great".

ii. Increased understanding of how to deliver more contextualised or situated staff development

Evidence from DEBUT highlights the benefits of contextualised staff development. For participants, the opportunity to choose which tools they learnt based on their own situation and needs was a key success factor. The most popular tool choices were PowerPoint, digital video, Flickr, Netvibes, and Refworks. The reasons given for choosing these tools were that they were immediately useful to participants' professional practice and built on what they already knew. As one participant commented, *"When it is relevant and you need it, you do it"*, and as a result of this perhaps not surprisingly an overwhelming number of DEBUT participants felt able to apply what they had learnt to their practice.

DEBUT participants were aided in making their tool choices through a tools event, where each tool and its potential applications were demonstrated. Participants rated these introductory sessions very highly, explaining that they provided an awareness of the tools available and allowed them to link them to their own needs and situation. Planning is underway to run this type of session at the start of each DEBUT cohort, but on the recommendation of a number of participants, also as awareness-raising sessions within their departments.

What marked out the DEBUT participant group was a desire to learn new ways of supporting learning and supporting learning with technology. However, where a participant could integrate their DEBUT activities with work that they were already engaged in, this appeared to give a greater impetus and more time in which to explore a tool. *"Just-in-time"* learning appears to make learning a new digital tool within this type of programme more manageable and successful.

iii. Increased understanding of the approaches and methodologies that best support the development of digital literacy levels in HE staff

DEBUT has given us some clear indicators regarding the factors which best support the development of digital literacy in HE staff. Preferences do vary between individuals and tools, but factors which enable progress and factors which hinder progress have emerged.

As the project hoped, exploring a range of different digital tools was a key factor for most participants in enabling them to raise their digital literacy level. As one participant concluded, *"being taught to use different tools and thinking about how you use them and embed them...just makes you more digitally aware and literate overall"*. Some participants also believed that experiencing the range of tools within a short time frame contributed to this increase. However, other participants would have preferred to have more consolidation time between tool experiences.

The support provided within DEBUT was also highly appreciated. Participants valued people contact, whether this was in the form of support from a staff developer or another participant. Staff development that involved group activities was therefore preferred over self-directed activities. It was also evident that DEBUT participants preferred telephone or face-to-face support over online communication.

A further key factor to success was where staff development involved sharing of practice and peer support. The comment from one participant is illustrative of the views of many: *"People from different disciplines approached it in a totally different way. It was quite amazing and very interesting to see what they were doing."* However, as with support from developers, participants preferred to share practice face-to-face and not online.

The most highly praised method of staff development supporting a DEBUT tool was a group workshop or demo where a small activity or "homework" was given, and this was followed up by either a one-to-one, or a small group coaching session. The latter was probably the most successful approach, as the opportunity to share and learn from each other's approaches was highly valued. Participants commented that the "homework" element acted as a motivator, whilst this and the follow-up session reinforced learning: *"The thing that has been most useful in terms of the training I have had has been a fairly immediate follow up session where I have been forced into doing something and forced to put it into practice."* The follow up session also allowed participants to "play" with a tool, see its benefits for them, and then allow highly personalised support. This approach appeared to give participants a "quick win" – a good experience

with technology which rapidly built their confidence. The benefits of this are summed up by a digitally advanced participant: *"IT must work the first time and every time, particularly with new users"*.

DEBUT has also highlighted areas that can hinder the development of digital literacy amongst staff. As perhaps would be expected, time, or lack of time is a key block to staff being able to develop their digital literacy skills. Many of our participants felt they could have learnt more in DEBUT or consolidated their learning if they had had more time set aside for their development. However, when further analysing participant comments, many did not want to be released from their current teaching, but felt that a mandate was needed or an acknowledgement made of the need to spend time on their staff development.

Lack of access, or lack of easy or appropriate access to technologies can also easily deter staff in using digital tools. DEBUT illustrated that with increased mobile working, staff want technology which they can use not only "on campus" but from home, on the road and from partner organisations. Lack of access to their email from mobile devices was an access factor that many of our participants commented on.

As a corollary of preferring contact with other people, it was perhaps not surprising that staff development methodologies that involved manuals (on or offline) and/or working on ones own were not as favoured by DEBUT participants. However, there was one exception to this. When a group was of mixed digital ability, this was sometimes an issue for participants at both ends of the ability range. The more advanced wanting to move ahead, the less confident feeling *"inferior and insecure"*.

These findings thus present a challenge: the DEBUT experience suggests that in developing digital literacy skills staff very much value a contextualised/personalised approach, and value follow-up sessions and support in the form of people contact. The question for institutions is how this can be delivered in a manageable and sustainable way.

5. Sustainability – taking DEBUT forward

As indicated, the positive outcomes from DEBUT have led CCCU to commit to a second year of the programme starting in June 2008. The aims for year two of DEBUT are to further evaluate and enhance the approach with a new group of participants, and enable a longitudinal study of the impact made on the student experience as a result of the use of digital tools by the first DEBUT participants.

The LTEU now see DEBUT as a key element in the drive to build e-capacity within the institution in a more sustainable way. It has been indicated earlier in this report that the locus of support for e-learning has very much been seen to be within the LTEU. However, as the institution grows this is not sustainable. Martin, (2003) explains that *"Digital literacy is the development by the individual or organisation, of digital usages, practices which become part of a culture."*² The longer term aim of DEBUT was to foster a community of digitally confident staff within the institution, whose understanding can enable them to exploit e-technologies themselves, and alongside the LTEU, enable them to support colleagues. Participants from the initial year of the programme have welcomed this continuing role. As this community grows with each cohort of DEBUT then staff will hopefully not only be able to call on support from "the centre" but be able to turn to colleagues, who as digital envoys, can guide them in their digital development and use of digital tools.

Analysis of the different forms of staff development explored in DEBUT suggests that the most favoured methodology is a group session with an activity and follow-up session where approaches and practices can be shared. This type of approach not only represented a more desirable way to develop digital literacy skills amongst participants, it represented a more manageable way to for developers to provide this type of programme.

DEBUT has brought other benefits to the institution. Through collaborating on the Pathfinder programme, closer relations have been fostered between the different staff development teams within the institution. This will continue and grow as DEBUT moves forward. The programme has also enabled the institution to introduce new staff development approaches and deploy them immediately, for example, a "Creative PowerPoint" workshop. Finally, DEBUT has also enabled the institution to pilot and evaluate technologies not previously available to staff. As a result of this the institution has a far better understanding of the potential of a greater range of technologies to support institutional aims and objectives.

6. The wider context – key messages

HE staff

Staff came onto the DEBUT programme for many reasons but overwhelmingly they felt that the digital world was burgeoning, and that they needed to be more aware, more confident, more adaptable in using digital tools to enhance

² Martin, A, (2003) "Towards e-literacy", in A Martin and R Rader (eds.) *Information and IT Literacy: Enabling Learning in the 21st century*, London, Facet p3-23

the many elements of their roles. Experience from DEBUT suggests that having an increased level of digital literacy gives staff greater confidence to exploit digital technologies. In doing so this allows them to better juggle the many demands upon them and better align their practice to their philosophies of learning and teaching.

Educational developers

Evidence from DEBUT aligns with literature in the professional development field by illustrating that where learning is situated in the context of the individual learner it allows them to develop their abilities and embed their learning in their practice. This was shown most clearly by the value DEBUT participants placed on being able to choose their digital experiences. It was also evident from the many examples participants reported to us of the rapid application to their practice of what they had learnt.

Evidence from DEBUT confirmed the challenges staff face in terms of accommodating professional development, especially when outside of their academic discipline. However, the contextualised approach in DEBUT illustrated what Ferman, (2002) suggests in her study of what lecturers found valuable in academic professional development practice, that it is best approached “*not as something extra but in a directly work, practice-embedded way*”.³ Evaluation of the different staff development methodologies rehearsed within DEBUT also illustrates the case for applying theories of adult learning to staff development. Previous experience, relevance, practice, application and control were all key success factors listed by DEBUT participants.

The DEBUT programme exposed participants to a range of digital experiences. This enabled an overwhelming number of our participants to gain in digital confidence generally, with many commenting that their confidence had not only increased on the tools they had experienced within DEBUT, but on other tools they had previously approached with trepidation. DEBUT also allowed many participants to see potential linkages between tools they had not seen before and therefore develop new usages.

Finally, DEBUT reinforces evidence from many staff development programmes in HE, that academic staff have a strong preference for collaborative learning. This not only aids their learning, but makes the delivery of situated professional development less resource intensive for educational developers who often find themselves working on a one-to-one basis with staff.

Institutional decision makers

Many students are coming into Higher Education with sophisticated digital skills and experience of their use, a reflection of their life experience where the Internet is ubiquitous and is neither new nor different. Conversely, many students from all age ranges are coming to HE with a lack of digital experience and poor digital skills. Institutions need to enable their staff to develop and maintain their digital literacy so that they in turn can engage those students who are digitally confident and develop and support those who are not.

As institutions move forward in their use of digital tools it is highly unlikely that the demand for support can be met by relatively small teams of education developers. DEBUT illustrates the benefit of focusing on raising digital literacy rather than repeated skills training on different systems. It provides value for money, in that a higher level of digital literacy appears to raise the digital confidence generally of staff, and enables them to take greater responsibility for their own digital development. It can also auger a more sustainable way of fostering digital development within an institution, whereby participants can then assist educational developers in supporting and guiding colleagues.

Sector policy makers

The HEFCE Strategy for e-learning points to the need to “*Review the human capacity in the HE sector to deliver future e-learning growth*” and “*Address skills, knowledge and competencies for e-learning in training and continuing professional development for learning and teaching staff*”.⁴ DEBUT would suggest that a focus on digital literacy amongst HE staff, rather than on skills training for individual systems could prove a more successful approach to developing digital capacity in the sector.

Continuing professional development is a key form of lifelong learning and when viewed in this way the conclusions from DEBUT mirror comments recently made by Helen Beetham at the JISC 2008 national conference talking on what makes effective e-learners. Beetham commented, “*If you think about learners experience across the curriculum through the life path, as something learners have to understand and make sense of themselves and of empowering learners to be effective, then we start to think about digital literacies. This really is the area that JISC and institutions and anyone interested in learning needs to be thinking about*”. (Beetham, H, 2008)⁵

³ Ferman, T. (2002) “Academic professional development practice: What lecturers find valuable”. *International Journal for Academic Development* 7:2, 146-158 <http://dx.doi.org/10.1080/1360144032000071305> Accessed May 2008

⁴ HEFCE, 2005 “Strategy for e-learning”. http://www.hefce.ac.uk/pubs/hefce/2005/05_12/ Accessed May 2008

⁵ Beetham, H. “Becoming e-literate: practices and requirements of effective e-learners.” *Changing Student Experience and Expectations of ICT Workshop JISC Conference 2008: Enabling innovation* http://www.jisc.ac.uk/events/2008/04/jiscconference08/student_expectations.aspx

Appendix A

Canterbury Christ Church University DEBUT Project digital experiences

Tool	Form of staff development	Chosen by # participants
Creative PowerPoint	Group training session followed by small group coaching session with attendees being asked to bring presentations in progress and questions & ideas with them to share with the group.	14
Refworks	Group workshop, followed by peer support via Blackboard discussion board. The participants were also given manuals.	14
Digital camera and Flickr	Group demonstration after which participants were asked to learn the tools on a self-directed basis but with paper based tutorials to get them started.	13
Netvibes	Self-directed development with paper based introductory manual to give participants some ideas of how the tool could be used	13
Podcasting	Group presentation about podcasting and demonstration of the Audacity software. Participants were then asked to produce an audio presentation. The final element of the support was a one-to-one session with the developer to evaluate work and provide further training.	13
Captivate	One-to-one session plus paper-based manuals.	11
Digital video production	One-to-one initial training session on basic knowledge/skills after which participants were set a task to practice/play and begin to think of a small project. The second element of the developed was at least one follow-up session to re-reinforce knowledge/skills, share project idea and advise on additional skills/knowledge for the project.	9
Blackboard wiki tool	4 week online activity using the Bb wiki tool itself, consisting of two 2-week sessions supported by group activities.	9
Outlook with PDA	One-to-one session at participant's PC, followed by peer support.	7
Institutional e-library	Video simulation tutorials using Captivate.	6
Qwizdom voting system	Small group coaching session followed by one-to-one run through and support at first "live" use.	6
JORUM/institutional graduate skills repository	Group workshop	6
Interactive Whiteboard	On-line tutorial, supported by a printed handbook, to learn basic knowledge/skills. A task was then given to participants to work through at their own pace. This was followed by a small group coaching session at which participants are asked to share their project ideas plus any knowledge/skills they want more help with.	6
Ning social networking tool	One-to-one session followed by peer support via a closed community on Eduspaces and offline, face-to-face.	5
Blackboard blog tool	Peer support plus documentation that introduced some of the educational uses of blogs.	4
Delicious	Self-directed, but with directions given on where to find help on using Delicious.	3
Blackboard discussion tool	Four week on-line course consisting of a series of group activities using the Bb DB tool itself. The duration of each activity was a few days, during which participants could engage at their own pace but will be guided to spend around 1-1.5 hrs per week.	3
Desk-based video conferencing	Initial training session on basic knowledge/skills, either 1:1 or in groups, via a videoconferencing session itself, followed by one or more 1:1 follow up sessions either via a videoconference, phone, e-mail or face to face.	3
Wikipedia	Peer support.	2
Google reader	Paper-based guide.	2
Information alerts	Paper based guide	2
MSN Messenger	One-to-one initial session via MSN Messenger. Followed up by subsequent "conversations" via the tool.	2
Clipmarks	Self-directed.	1

