'E-help!' - learner support in higher education

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Introduction

The drive towards widening participation in higher education is reflected by the variety of students that represent the student body in 21st century education. The diversity of students' educational, vocational and experiential backgrounds and the requirement by institutions and educators to recognise these differences is paramount. It is beholden of institutions to provide help and assistance to these learners during their course of study, providing access to individual guidance and support if and when they need it. This provision, whilst benefitting students, will also impact positively on university retention and progression figures, of vital importance in the current economic/educational climate. 'The appropriate use of technology is leading to significant improvements in learning and teaching across the sector and...this is translating into improved satisfaction, retention and achievement' (Higher Education Funding Council for England (HEFCE), 2009: 6).

The Centre for Learner Development (CLD) in the University of Wolverhampton provides specialist support to art and design students and in turn aids and impacts positively on the university's retention and progression targets. The centre also operates as a starting point for many technological, e-learning initiatives in the School of Art and Design and was seen as the ideal department to pioneer the introduction of a specialist e-support website to assist students in their course of study in the school. This paper will document the inception, design/build and future publication of the e-support website, and will consider the success of the project, the direct outcomes relating to the school's future provision of support and the potential benefits to students.

Project overview

The CLD is based in the School of Art and Design at the University of Wolverhampton and has three staff members that offer a wide range of support to students from the many disciplines based in the school. All three have art and design backgrounds to accompany their knowledge of specialist areas of support required for their role in the department/ school. Two of the staff members operate as study support tutors (one of these acting as a special educational needs advisor) and the third staff member offers e-learning and software advice/support to staff and students. Key areas of support include assistance with the contextual strand in the school (research, essay writing, proof reading, etc.) and also e-learning/software assistance. Support is available to students during a one hour tutorial session arranged with the appropriate member of staff. This can be organised by pre-booking over the telephone, or by email or by physically visiting the centre. Simpler 'generic'

queries are often resolved on an ad hoc basis as students 'drop in' to the office. The aim of the learner support website is to resolve these simple queries and also proffer information regarding staff support and the booking of tutorial sessions (for those students who have complex queries). These would be done without the need physically to journey to the office/school and alleviate issues surrounding travel and access for those students with physical disabilities.

Figures obtained from the school show a pass/progression rate of 94 per cent for those individuals that attended at least one session in the CLD. This represents a considerable increase on the figure for those students that have not received support, which is currently 68 per cent. It is the success and importance of the centre's work and the possibilities to expand the provision offered (reaching more students and providing greater access) that led to the proposal to create a learner support website, offering the opportunity to provide students with a means of academic support that is not currently available.

The US Department of Education recently published an evaluation into the evidence-based practices in online learning (Means et al., 2009). Over 1000 empirical studies in online learning were screened and measured using meta-analysis to produce the outcome. The findings support the practice of offering a blended approach within education as opposed to purely face-to-face or online instruction. 'Instruction combining online and face-to-face elements had a larger advantage relative to purely face-to-face instruction than did purely online instruction. The mean effect size in studies comparing blended with face-to-face instruction was $+0.35$, $p<.001$. This effect size is larger than that for studies comparing purely online and purely face-to-face conditions, which had an average effect size of $+0.14$, $p<.05$' (Means et al., 2009: 17).

The improved student performance resulting from engagement in blended instruction has a direct impact on the individual learner's educational experience and success during the course of their study at the University of Wolverhampton. Accessing the student support website would afford a wide range of students further opportunity to improve their learning experience and assist them in all aspects of their learning. The information that will be made available on the site is aligned to the university's strategic aim towards assisting and enabling a 'widening participation' student body that has a proven record of benefitting students. The applicability of the content that is currently being disseminated by staff working in the physical centre is reflected in the pass/progression rates of those individuals who have been supported. This further reinforces the importance of the site, ensuring that numerous students with differing needs have the best level of instruction and support possible - available from their home via broadband or a mobile 3G connection. The ability to access the content online without having to visit the office is a particularly pertinent issue for mature students and students with physical disabilities who have difficulty accessing the building, and also students that work part-time alongside their study who may have difficulty in getting into the centre during office hours because of work commitments.

Home access to online content is becoming ever more viable as broadband connection costs decrease and bandwidth speeds increase. Current figures reveal that approximately 60 per cent of UK homes have access to a broadband connection (Ofcom, 2009). This is a significant percentage that will continue to grow under governmental aims to allow all UK residents access to broadband in their home by 2012. From research carried out in the school we found that 94 per cent of current students polled used broadband in their home (Marshall et al., 2009: 417). In light of this data, it is vital in a competitive market place that universities provide a level of support to students that is accessible online, from their current residence and outside traditional office hours.

The University of Wolverhampton already uses two virtual learning environments (VLEs) to assist student learning in the school. Both VLEs successfully offer differing pedagogic benefits. The first VLE acts as a repository for module information (uploaded by the academic staff member leading a particular module). It requires the student to subscribe to the topic that supports the module they study, in order for them to be able to access the study guides, briefs, reading lists, podcasts, etc. The topic contains very specific information for each module within each course run in the school. The second VLE focuses more on student engagement and relies on content being uploaded by the student for peer/staff formative feedback and in some cases summative assessment. Students create their own basic websites and blogs onto which they post written work, visual research and examples of practical work. It also provides a structure for students' personal development planning (PDP) and a framework for the peer to peer comments/feedback of video critiques posted to module specific blogs.

As successful as these two electronic support systems are, they do not provide the specialist information and support that a specific CLD website would offer. They both play very particular roles in the pedagogic development of the student and offer degrees of flexibility and overlap within each of their roles. However, they do not cover the particular issues dealt with by the centre or the role that the centre plays in the school. Often the emotional well-being of the student is dramatically improved by resolving issues that the centre can help with. This can impact positively on all areas of their academic and social life, allowing the student to continue with confidence through their course until graduation, and beyond into the working world. Any mechanism that aids the student experience (technologically biased or not) can only be as beneficial as the relevance of the content on offer and the availability of that support. As the CLD website will act as an extension to the physical centre, it is hoped that students react positively to its introduction and that those students that already use the centre will continue to seek support. It is also hoped that the presence of the website will result in an increasing number of individuals (who have not previously visited the centre) visiting and developing a relationship with the centre and its staff.

Funding for the project was provided by the Learning, Technology, Pedagogy and Research (LTPR) cluster, within the Institute for Learner Enhancement (ILE) at the University of

Wolverhampton. A bid for funding included the payment to the School of Art and Design for the cost of covering staff working on the project (three hours per week, per staff member), costs for software and hardware required to construct the site, and costs covering conference attendance and presentation outside of the university. The LTPR bid was written with the aim of producing a completed, functioning website after working on the project over two blocks of fifteen academic weeks each. This would be done over semesters one and two in the university calendar year 2008-9 and would be undertaken by two staff members up to the completion date. Both individuals have extensive experience in academic and technical roles, supporting students in art and design education and also work as freelance designers/illustrators for both print and web media.

Difficulties encountered at the beginning of the undertaking (regarding administrative and financial procedures) resulted in the actual start date of the project being delayed by seven weeks. With no prior experience of managing and working on funded projects, some naivety was shown regarding the levels of initial administrative groundwork required when working within the structures and systems already in place in higher education institutions. It was important that these early delays did not impact too heavily on the future success of the project and that the core sequential goals were still accomplished. As a result of this the research and design phase of the project was reassessed and focused towards key specific outcomes. A broader review of websites offering accessibility options would have been preferable but the level of research undertaken was still deemed to be appropriate to the aims of the project.

Once underway (in week seven, semester one) interviews were arranged with relevant key staff, whose input would dictate the construction and aesthetic bias of the site and the relevance of its content. Staff from the CLD, the Art and Design Subject Librarian and a colleague working in the Student Enabling Centre (SEC) assisted in shaping the project in the early stages. Core content for the site was suggested by staff working in the CLD office. Useful links to services offered by the university learning centres, contact information and some further content was garnered from the meeting with the Art and Design Subject Librarian. The staff member from the SEC (a department specialising in coordinating support for students with special educational needs within the university) offered advice regarding specific issues surrounding dyslexic learners and students with other disabilities. They also proffered guidance, having had previous experience themselves of building specific web content to aid dyslexic learners.

Approximately five per cent of art and design students in the school are registered as dyslexic. The CLD provides specialist support to these students so it is vital that the site accommodates dyslexic learners and their particular preferences. A site accessible to dyslexic learners needs to be image/icon heavy and to avoid using large amounts of text in order to avoid confusion and allow readers quickly to isolate important information that they need on the page (Davis Dyslexia Association International (DDAI), 2008).

The site design was strongly influenced by extensive research into viewing/usage preferences of dyslexic, dyspraxic and colour blind individuals. Colour choices, font sizes, site architecture and layout were engineered to allow ease of use for students with special educational needs. It was hoped that this approach would result in a website that proved to be both functional and visually stimulating for all learners in the school; for example, those with or without disabilities, school leavers or mature learners, and students compliant in current web technology or individuals with limited web experience. Issues surrounding inclusivity and intended audience remain an important factor and will be better understood and further developed following feedback when the site undergoes student testing and, ultimately, is launched. The core user group comprises visually and culturally aware, highly critical aesthetes so issues surrounding the design of the site were paramount (Malins, 2006).

The need to engage learners and not alienate them is key to the site's success. As the site offers support and its usage is not a core component of the student's course of study, the visual impact and 'acceptance' by the student body is vital. It was felt that some similar sites currently in use in the higher education landscape (nationally and internationally) were not engaging students visually but had to be used as an assessed component of the course. This can foster resentment at using e-learning systems both by staff and students, denying learners valuable experience of using online tools. The use of these tools will become increasingly prevalent in modern day life and education must respond to this and provide systems that integrate and assimilate with learners' lives in the 21st century.

Site content

Seven key topic titles were chosen for the subdivisions of the website. These divisions best encompass the areas of support that the office provides and also cover common student queries:

- Time Management
- Student to Student Mentoring
- Booking a Staff Tutorial
- Dyslexia and Special Educational Needs
- Academic Support
- Contact and Map
- eLearning and Software Support

Home/index page

The home or 'index' page carries the seven sub-divisions. Each icon representing the division was designed to be simple, bold, located in an uncluttered space and provide a strong visual

resonance to content. Information showing the icon title and sub-content is displayed when the mouse rolls over the icon and before the content is selected. This limits the amount of text on screen and continues the drive towards a visual simplicity.

Navigation

Navigation through the site is achieved by viewing content that appears to 'hover' over the main page and not by navigating away from it. It is important to limit the amount of page changes required to proceed through the website as dyslexic learners can struggle to navigate through a site and successfully return to the home page from their current position. 'Navigation should be simple and intuitive and not rely too heavily on short-term memory' (Samiei and Scott, 2003: 9). A further support mechanism was added that involves the introduction of a small diagram allowing students to view the steps taken to arrive at their selected content. It was felt that this may help to minimise the confusion of site/page navigation and the issues surrounding student recall of processes/steps taken. The diagram acts as an insurance tool and offers a return to 'original content' option, should the viewer need to return to the start having lost their way.

Design

To minimise visual complexity in areas of text, a sans serif font was chosen to be used universally throughout the site. This was a common request found in numerous studies on dyslexic individuals, and further simplified/enhanced the design of the site and continued its thematic drive towards simplicity and clarity. Other user specified adaptations include the option to change the background and text colours and the choice to change to a larger font size. This is now a common option on the majority of company/service websites online and points towards web designers and their clients having a growing understanding surrounding issues of accessibility. These design considerations were not seen as limitations but particulars of the design brief that allowed greater user preference involvement and enhanced the visual style of the site, continuing the 'ease of use for all learners' approach. Utilisation of the 'cookies' function in web browsing software will also enable the students' user specific viewing options to be remembered and displayed each time they access the website.

Implementation

Once launched, the importance of raising awareness of the site and the benefits it offers to students will be vital to its future success. The proposed means of gaining a presence in the school is seen as paramount to the project's success and its longevity. Possible ways to publish and publicise include: adding a link to the site contained in a welcome e-mail sent by the school when students are accepted for a place; including a link to the site on the school's web pages, hosted on the University of Wolverhampton website; and also promotion by utilising the university's current VLEs. It was felt that it was important to introduce links to the support site on a web page or in an e-mail (that the student is likely to view) as these will

provide direct online access to the provision. A poster campaign would raise awareness of the centre and its accompanying website but would not offer immediate electronic means of access to the site. Raising awareness for e-resources/e-support through electronic means will convey the proficiency and consistency of the school's approach to e-learning and hopefully impact on students' understanding and appreciation of the blended learning strategy.

Conclusion

Unfortunately due to the delays in starting the project and further financial/contractual limitations, the project could not continue over its projected end date in order to catch up for the seven weeks missed at the beginning of the project. The economic climate has impacted on higher education institutions and priorities have understandably shifted, resulting in restructuring, reduction of spending and changes to staff responsibilities. These factors hampered efforts to extend the project and have unfortunately left the venture uncompleted at the deadline, although possibilities to continue at a later date may enable the e-support site to reach completion and launch.

Working on the project proved to be an invaluable experience to the two staff members involved, interestingly not in ways initially expected. The effort and time involved with administrative, contractual and financial organisation, at times, dominated the three hours per week that staff dedicated to the project. This, allied to the project running for only three quarters of its intended length, resulted in an unsatisfactory conclusion and an incomplete product although positives were still garnered from the experience. These include a better understanding of the physical, mental and emotional needs of students and ways that course content is adapted and delivered to best suit their specific learning requirements. Also, the experience of managing a project has proved to be invaluable and will better inform and enable successful completion of future ventures.

The future of the project will hopefully continue in two ways. Initially, it is hoped that the potential benefits of the site will be recognised by the institution, enabling further support and funding in the future (working towards a completed product for web launch and introduction to a student body). This could lead towards further expansion and release into the higher education landscape, nationally and internationally. Secondly, that the consumer led technological drive towards mobile devices will continue and the site could be further developed as a truly mobile learning support system (Dyson and Rhodes, 2009: 588). This can either be as a mobile browser friendly web page or as an application for operating systems such as Apple, Android, etc. Advancements in device/screen interfaces, battery life and processing power linked to continuing reductions of costs in electrical markets point to mobile devices being key platforms for software companies and web developers to target.

Staff interest in the project has led to a greater appreciation of the range of support offered and the importance of inclusivity and accessibility for all students. Following internal dissemination of the site's development, subsequent support mechanisms have been created,

including 'Dyslexia Network' and 'MA Community' blogs. These resources are directly informed and influenced by the CLD website project, evidenced through the design and content choices of the blogs and their applicability to the wide range of students studying in the school. Blog engagement by dyslexic, mature and part-time learners has steadily increased and helped foster a sense of community amongst a body of students who might previously have felt isolated and undervalued. It is this awareness and the need to provide resources to inform and support individuals within the university that has been a beneficial outcome of the work undertaken.

As institutions evolve to meet the demands of a consumer aware student body, they will need to adapt and make provisions to meet these demands. This requires a shift away from work created and published solely by technological enthusiasts or 'e-learning auteurs' towards adoption by the greater institution and its staff. This would lead to ownership and responsibility for technological material and means of distribution by the staff body and result in a shared confidence that is recognised and is of benefit to the students. It is with this in mind that possibly the greatest positive outcomes of the project will be to share, inform and excite other staff members about the potential of technological advancements and adaptation in education - moving towards an ever more digitally compliant approach to teaching and learning in higher education in the 21st century.

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