

Essential, desirable or optional? Making distance e-learning courses available to those without internet access

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Abstract

The Open University, an open distance learning institution, is increasingly using a Virtual Learning Environment (VLE) that requires internet access. This paper investigates how the move to a VLE has affected one group of students who do not have internet access – offender learners studying in prison. Members of the armed forces and secure hospital patients also have restricted access to the internet. E-learning practitioners design courses on the assumption that students will have easy internet access and other appropriate technology. This is not always the case. This paper reports on an action research project that identified alternative approaches to learning activities that required internet access. Project initiatives enabled six offender learners to complete a course that had previously been classified as unsuitable for study in prison. The use of alternative approaches opens up the possibility of distance learning for students who would otherwise be excluded from distance e-learning courses. The author proposes an EDO framework, classifying activities as 'Essential', 'Desirable' or 'Optional'. The framework highlights activities needing alternative approaches if a student is to complete the course successfully. By applying the framework, practitioners can design and deliver a course that utilises technology appropriate to the student's environment.

Keywords

Internet, accessibility, prison, distance, learning, design

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Introduction

The Open University (OU) is a distance learning institution that 'promotes educational opportunity and social justice by providing high-quality university education to all who wish to realise their ambitions and fulfil their potential.' (The Open University). Putting this mission into practice has resulted in a strong presence in British prisons where around 1400 offender learners are currently studying approximately 200 courses with the OU. In its forty year history the OU has developed a reputation for introducing innovative methods of delivering open and distance learning. It is currently at the forefront of universities that are integrating e-learning into their courses and it is increasingly making use of a Virtual Learning Environment (VLE) to deliver learning activities and materials to its students. However, as a consequence of this, its ability to provide higher education in prison is threatened because few offender learners have internet access. The Prisoners Education Trust, who provide initial funding for OU offender learners, found that 'Most prisoners have little access to the telephone, no email communication with tutors and no internet access' (Prisoners Education Trust et al., 2009) and Honey (2009) concluded that 'The survey confirms that finding a safe way for prisoner learners to access the internet is an important priority.' (p.27)

Trials are taking place to provide restricted internet access in selected prisons (HM Government, 2008, p. 68) but it will be many years before internet access becomes the norm in prisons. Even then it cannot be assumed that every offender learner will have access to all the materials available to students outside prison. Within prisons, computer use and internet access are seen as a security threat (Callejo & Viedma, 2007, p. 19). Some sites may be blocked as unsuitable for prisoners; internet access is likely to be seen as a privilege that can be withdrawn as a punishment; government reaction to breaches of security and media reporting may result in internet access being removed without notice. These are just a few reasons why offender learners in prison will continue in the view that it is the 'lack of internet access for research material that is often the fundamental problem for OU student inmates' (Ben, 2009)

Offender learners are not the only students who have been impacted by the move to delivering courses via the internet. Students in secure hospitals and those on active service in the armed forces are amongst other groups whose internet access may be intermittent or non-existent. If the OU is to continue to offer higher education to these students it must not forget about their needs when designing and delivering courses.

This paper identifies possible alternative approaches to activities that would normally require internet access. It also proposes a framework to help course designers and course delivery teams to integrate these alternatives into their normal procedures. If the OU adopts these proposals it can continue to be open to all, not just those who have reliable internet connections.

Internet access

In 1999 Daniel, vice-chancellor of the OU at the time, opined that 'by restricting access to those with a networked computer it narrows rather than broadens the clientele served' (p. 297). This is still the case today. Without internet access the OU's offender learners are finding that their course choice is severely limited. The situation is rapidly deteriorating. Over a 6-month period in 2007 the number of OU courses available for study in prison dropped by over 10%, mostly due to problems with internet access (Adams & Pike, 2008). If this trend continues the OU will be unable to offer a viable degree path to offender learners. In a paper presented at the 5th EDEN Conference, Pike and Irwin (2008) noted that

'The OU in the UK has had a recent review of its Offender Learning and is working, with other organisations, to provide reasonable alternatives to its online elements until the prison service is better resourced.'

This study reports on the reasonable alternatives that have been identified to date.

Lack of internet access for prisoners is not specific to the UK. Salane (2008) paints a worse picture in France, where a total ban on internet access for prisoners exists. Her research identified that distance education by correspondence tuition was the preferred method for organising higher education in French penal establishments. And yet most of the courses contained links to the internet and expected students to access documents which were only available online. Students were reliant on family, friends and prison teachers to access the internet on their behalf and to provide them with materials in a paper format. Consequently they were unable to achieve the usual distance learning goal of becoming independent learners.

Similarly, in their eurodesip study into the state of higher education in European penal institutions, Callejo and Viedma (2007, p. 77) identified that internet access was a major concern for higher education students in all countries taking part in the study - Spain, Catalonia, Germany, France, Greece, Rumania and Latvia. 85% of students responding to the survey considered that internet access was 'very inadequate', which was assumed to equate to no internet access being available from within the prison. Again the need for alternative approaches was highlighted:

'... but it seems difficult to think of carrying out university studies these days without the possibility of access to the Internet. From this point of view – and unless this can be complemented with alternative measures – it seems that students in prisons are putting up with a certain disadvantage in comparison with students at liberty'

(Callejo & Viedma, 2007, p. 78)

Lack of internet access is not just a problem in prisons. Much of the developing world lacks the infrastructure for internet access. A World Bank report into the use of ICT in education in developing countries recognised that rural schools in particular would experience difficulties in gaining access to internet materials and needed an alternative means of access.

'When no Internet is available, a CD with packaged web sites carrying educational content material is provided. This CD is installed in the Local Area Network for access by all computers.'

(Hepp K. et al, 2004)

Although this approach is of value, in that it delivers internet materials to rural areas without internet access, it was noted that it has its limitations. Access to some content, particularly content based on online database access, was still not possible. This scenario is applicable to VLEs, which typically use online databases as a platform for storing and delivering materials.

Wilson (2008) highlights the variable levels of internet access in sub-Saharan Africa, where again rural areas are particularly disadvantaged. She suggests that the more widespread use of mobile phones and other handheld devices in this region may provide an alternative means of access to Open Educational Resources (OERs). This may provide a solution for some students but not all. Mobile devices are currently unable to deliver the rich screen formats seen on computers and technicians need to make appropriate adjustments for the presentation of websites on mobile platforms. For some students mobile devices are as inaccessible as hardwired internet access. This is particularly true of prisoners in the UK who are banned from possessing or using a mobile phone. (HM Prison Service, 2008)

Learning design

Learning design is a much-used term in education circles but has no standard definition. It is often used synonymously with 'education design', 'instructional design', 'curriculum design' and 'course design' reflecting its use at different levels of design (Cross & Conole, 2009). Koper and Tattersall (2005) define learning design as

'A description of a method enabling learners to attain certain learning objectives by performing certain learning activities in a certain order in the context of a certain environment' (p. 388)

where a learning objective is 'the intended outcome for learners' (p. 388) and a learning activity is 'an activity carried out by a learner in order to obtain a learning objective' (p. 388). Using such learning design techniques, McAndrew and Weller (2005) analyzed certain OU course activities and felt that learning design provided appropriate tools for describing course structures. An OU course is structured from many learning activities. It follows that alternative approaches to activities that require internet access come within the learning design compass. If activities must be carried out in a certain order then the lack of internet access can inhibit progress. Lack of internet access is that part of the learner's environment that prevents them from attaining a given learning objective.

Rennie (2007) argues that technology, not pedagogy, is leading course design. He concludes that curriculum requirements must be matched to educational technology that is appropriate to the learner's personal requirements. In the context of this study, those personal requirements are an alternative means of access to resources that would otherwise require students to access the internet. He sums it up thus

'... a key objective in providing more flexible access to educational resources is to provide a mix of different technologies and communications media in order to encourage a higher level of self-directed learning by students.'

E-learning design practitioners use technology to support teaching and learning. Practitioners have straightforward access to current technology and are inclined to forget that students will be struggling with technology that is old, unreliable or non-existent (Selwyn & Gorard, 2003). Only a proportion of the students will have access to the requisite communications technology (Rennie, 2007). When accessibility

is considered, learning design focuses on students whose accessibility issues are of a personal physical nature i.e. disabilities (Seale et al., 2007). Legislation obliges organisations to provide alternatives for disabled students (Adam & Kreps, 2009). But economic forces determine that technologically disadvantaged students are not provided for (Selwyn, 2004), even when the same solution might be appropriate for both groups.

In short, design practitioners assume that easy access to appropriate technology is available to all. In doing so, groups of students for whom access is either difficult or impossible are assumed to be excluded from the course. This paper suggests that incorporating technology into courses does not have to imply exclusion – alternative approaches are available.

The distance e-learning process

An OU student gains a degree by studying a number of separate courses, typically over a period of six years. For most courses the OU allocates a specialist course subject tutor, known as an Associate Lecturer (AL), to support a group of students for the duration of the course. Face-to-face and/or online tutorials are usually available and the tutor will mark the students' assignments and provide rich teaching comments to further the students' understanding of a topic. Tutors are available by phone or email should the student wish to contact them for advice.

If the student is in prison, this support model must be adapted to fit in with the prison regime. A member of the prison's education staff is assigned as an intermediary and the tutor will communicate via phone or email with the intermediary, not the student. The intermediary may arrange face-to-face tutorials between the student and the tutor and will conduct all administrative procedures, such as submitting assignments, on the student's behalf.

The OU VLE hosts a course website for each course. This website is central to a student's participation in the course and students are advised to check it regularly. At the heart of the website is a study calendar indicating what the student should be studying each week with links to appropriate materials. Further links are provided to additional materials grouped by type. A typical website will have links to pages where students can download assignments (known as TMAs within the OU), online course materials and online versions of printed matter. Course News will alert students to errata in course materials, including errors in assignment questions, as well as providing any information not available at the start of the course. In addition, course websites can provide multimedia materials such as podcasts and videos and provide links to a plethora of other sites both within the OU domain and further a field on the world wide web.

The VLE is also a platform for a variety of collaborative tools. Forums, blogs and wikis are all employed to varying degrees. These tools expect students to work asynchronously and encourage social learning. There is also a facility for online synchronous tutorials on some courses. Student attendance at face-to-face tutorials is declining. Consequently many tutors are experimenting with online tutorials, using internet-based software, for both formal tutorials and one-off support sessions with individual students.

In addition there is an expectation that higher education students will need to research other materials as part of the learning process. Traditionally these materials have been in the form of printed books or journals. Increasingly, however, students are expected to search the world wide web to find literature to support their arguments.

As well as course-related materials the OU provides a wealth of study support materials to students. Help with skills such as tackling assignments, time management, numeracy and literacy has traditionally been provided to all students in printed format by the OU's regional offices, on request from either the student or their tutor. These materials are now provided via the OU's website, together with further wide-ranging resources, and are accessible to students as and when required.

In common with most other universities, the OU relies on computers for many of its administrative processes. Most courses expect students to submit assignments electronically and many communications are sent via email. OU students now submit over 60% of assignments electronically, instead of on paper, using either a web interface or email.

None of the above is accessible to students who do not have internet access.

Methodology

The author initiated an action research project to identify which activities cause problems and what alternative approaches are utilized when students do not have internet access. Students in prison were identified as a student group who, almost universally, had no internet access. Unlike other students within the OU, offender learners are not routinely issued with an Open University Computer username (OUCU) that allows access to the university's course web pages and systems.

The aim of the project is to provide a bank of alternative approaches that can be used across faculties when designing course activities. The alternative approaches should be suitable for use in the diverse prison regimes. They should also be applicable for other students for whom internet access is difficult for reasons beyond their control. An online forum, labelled Prison Tutors, was made available to OU tutors in order to gather information about their experiences with offender learners. Around 750 tutors are currently

allocated to students in prison. During the first two years of its existence over 60 tutors contributed to the forum with over 400 tutors having read the forum. Some of their contributions are quoted in this paper. Within the forum tutors related the challenges they faced due to lack of internet access and how they had overcome them.

To appreciate the students' perspective, six OU offender learners were formally interviewed in five prisons around the UK. Informal interviews also took place with the intermediary prison education staff responsible for these students.

Once alternative approaches had been collected and collated in a wiki, a trial took place that coordinated support for a group of offender learners and their tutors. A course was selected for the trial that had previously been deemed as unsuitable for studying in prison because students would not have the necessary internet access. Nine students in six prisons, together with their seven tutors (one of whom was the paper's author), took part in the trial. Tutors completed a questionnaire at the end of the course to assess its success and evaluate the appropriateness of the suggested alternative approaches.

Findings: The challenges and the alternatives

Course website

Course websites typically act as repository and delivery mechanism for printable files e.g. .doc and .pdf. It was found that tutors and prison education staff intermediaries printed these online materials and gave them to the student. The tutor often did this at their own expense. They then mailed the materials to the intermediary to pass on to the student.

'I'm not clear on who provides the student with TMA questions when they are only available online (I sent a hardcopy of TMA01 just in case)'

(Prison Tutors forum)

In some cases the intermediary had internet access in the prison. This enabled them to check the website regularly and print off the course materials for the student. This required the intermediary to be issued with an OUCU and password in order to access the site on the student's behalf. In other cases the intermediary would access the website from their home computer and print off materials to bring into the prison.

It was felt that this task would become onerous as the number of VLE-reliant courses increased. Students are expected to check the course website at least once a week. For a student studying just a few courses at any one time this is manageable. But for a prison intermediary checking course websites for several students, who are probably all studying on different courses, the task mushrooms becoming time-consuming and unmanageable. An RSS feed alerts students with internet access to important site updates and may provide an acceptable means of moderating the intermediary's workload. Another suggestion was for course managers to email prison intermediaries, alerting them whenever anything was added to the course website.

One innovative prison has provided a standard Moodle software platform to host a range of non-OU courses for its offender learners. Any course that has been developed for the Moodle platform should therefore be capable of being transferred into a prison environment. Only links from the course website to external internet sites will be unavailable. The OU also uses the Moodle platform but has added many specialised components making transfer a complex task. Nevertheless, the majority of the course website for the trial course was made available on this prison's internal network after some technical hitches had been resolved.

Podcasts and videos

Podcasts and videos are increasingly used as an alternative medium for providing learning materials. Typically these media are streamed to the student's online computer but an offline version is often provided for downloading. Students can then play the downloaded podcast or video on another device such as an MP3 player. Students without internet access cannot play the streamed media but may have a suitable device for playing the downloadable version, which can be provided as an attachment to an email or on a CD or DVD.

Some OU courses provide podcast and video transcripts for disabled students. These transcripts provide an alternative medium for offender learners when it is not possible to provide podcasts and videos in an digital format.

Collaborative working

Many courses are now using VLE tools to integrate collaborative working into the course. If online collaboration is not possible an alternative offline approach is required that provides the collaborative materials in either printed or digital format.

'I got around this one by anonymising examples of the messages post [sic] to the TGF [tutor

group forum] and printing it off for my student to use for his assignment'

(Prison Tutors forum)

Students in prison are able to relate their contribution to their tutor who can, if required, add it to the collaborative tool on their behalf. In order to pass the course it may be sufficient for the student to write a narrative account of the collaborative activity. For this to take place, the student must be provided with either a digital or printed version of the tool's student-generated content. In this way the learning outcomes of the course can be met without any collaboration actually taking place.

Collaborative working raises specific issues for offender learners beyond those associated with internet access. Most prisons do not permit communication with students outside prison. Additionally many outside students may not wish to collaborate with offenders. To protect other students, collaborative materials must be anonymised and any personal details removed before being made available to offender learners.

Online tutorials

Offender learners are unable to attend face-to-face tutorials occurring outside prison. Instead tutors conduct one-to-one or small group tutorials in prison. The introduction of online tutorials will not be discernable to offender learners and tutors will continue to conduct tutorials in prison.

Phone tutorials are permitted in some prisons but these must be monitored by the intermediary. Video conferencing facilities are increasingly available in prisons for legal purposes. It is possible that these facilities may provide an acceptable alternative to online and face-to-face tutorials, although there are no known examples of their use at present.

Information retrieval

Most courses rely on the student being able to retrieve course-related information from the world wide web. Where web references are given in course materials intermediaries and tutors often provide students with printed versions of the relevant web pages. As with the course materials, this is largely dependent on the goodwill of the intermediary and the tutor.

If students need to search the web for suitable material then an intermediary or tutor must act as a proxy and perform a mediated search. The student provides search terms for the proxy to enter in an appropriate search engine. The student then identifies suitable sites from the resulting list. Material from the selected sites can thus be provided in a suitable format. This can be a very lengthy process with inevitable delays at each stage if internet access is not readily available to the intermediary in prison.

The OU library can also perform mediated searches. The library already carries out mediated literature searches on behalf of disabled students and is willing to extend this facility to offender learners.

There have also been instances where a variety of downloaded websites have been provided on CD or by email to simulate a web search. This introduces copyright issues and the sites' owners may need to approve reproduction of a site's content.

Non-internet based materials are often overlooked by those outside prison who take easy internet access for granted. Offender learners have access to books in the prison library that may contain the requisite knowledge. They may also have access to CD/DVD-based materials (e.g. Encarta) that can be searched to find the required information.

Study support

Regional offices still provide offender learners with printed study support materials if they are available. Other education providers and publishers produce similar materials that are already available in many prisons and can often be used in lieu of the OU's support materials. Open educational resources (OERs) provide a rich vein of materials that can be exploited if they are provided in an offline format via CD or email.

The innovative prison that hosts non-OU courses on a standard Moodle platform is particularly well-resourced in this respect. It can provide any Moodle-hosted study skill course that is available in the public domain. In addition it has been possible to provide the OU's innovative OpenLearn website in a standard Moodle format. OpenLearn makes a selection of course materials freely available as OERs. In addition to some study skills topics, OpenLearn provides offender learners with a taster of many of the accredited courses that they might like to consider for future study.

Assignment submission

On some courses the submission of assignments in a digital format via an electronic submission system is optional, on others it is compulsory.

'There is no alternative to electronic submission of the ECA [End of Course Assignment] and if it can't be submitted electronically he will fail the course'

(Prison Tutors forum)

Assignments can be either hand-written or in digital format. If internet access is not available, hand-written or printed digital assignments can be submitted by post together with the appropriate paperwork. Details from the paperwork can then be entered into the electronic system and the assignment converted to digital format by scanning if necessary.

If internet access is available to the intermediary then there are two paths into the electronic submission system. Submissions can either be via the submission website or by email. Electronic submission can initially be intimidating for intermediaries who are not comfortable using computers but once the procedures have been established it is generally preferred by those concerned.

Howsoever the assignment is submitted, it is important to determine an appropriate means of returning the marked work to provide timely feedback. Printed work can be returned by post. Assignments in a digital format can be returned via email. However, email attachments can be rejected because of size or content so it is essential to check that the marked assignment has been returned successfully. If internet access is available to the intermediary, the marked work can be downloaded and then either printed off or passed to the student in digital format.

The trial

Once all the alternative approaches had been collated, a trial was instigated on a computing course that involved many of the above facets of course delivery via the internet. The course represented a quarter of the study required in the first year of a traditional full-time degree. Students were expected to spend between five and eight hours on their studies each week, over an eight-month period. Because of a high dependence on internet access the course had previously been classified as unsuitable for study in prison (unless specific approval was granted by the prison governor). The requirement for collaborative working was seen as a particular obstacle.

In common with all students on the course, offender learners received printed materials and CDs at the start of the course. The printed materials contained practical guidance and sixteen study texts, the main teaching medium for the course. Students outside prison were expected to login to the course website at least once a week. The following advice was available to intermediaries, with regard to the technology requirements for the course.

'Course website [access required] for downloading assignments, study calendar & some course materials. The Prison education manager to download web based items on behalf of student. If unable to submit the TMA or the CMA electronically then paper submissions are allowed. If internet access is not available they may not be able to complete all the assessments in every TMA and so may lose up to 9% of the total marks for the course. Course requires computer with facility to access material on CD-ROM. These programming activities do not require access to the internet. The browser is needed to run the html files.'

Nine students registered for the course on the understanding that 9% of marks might be unavailable to them if they didn't have internet access. However, alternatives were provided for all assessed activities that required internet access in an attempt to reinstate these marks. Two students withdrew from the course before it started, one because he was unexpectedly released from prison and the other because he was transferred to another prison. One student did not complete the course – he was released and chose not to continue his studies. The remaining six students passed the course.

The course was analysed to establish, in detail, where internet access was required. In order to make the task manageable each activity requiring internet access was classified as one of 'essential', 'desirable' or 'optional'. Alternative approaches were suggested for all essential activities, most desirable activities and some optional activities.

The assignments (plus errata) and a printable version of the study calendar on the course website were identified as essential course components requiring alternatives in a format accessible to the student in prison. The provision of support materials on citing references, taking screenshots, submitting assignments and using the course software was considered a desirable activity. Other desirable activities included the provision of course news, formative multiple-choice exercises and non-assignment related errata. Optional activities, which were optional for all students not just offender learners, included podcasts, videos, interactive quizzes and links to websites for further reading.

Submitting assignments is clearly an essential activity so submission on paper via the postal service was permitted, but not encouraged, as an alternative to online submission.

Collaborative working in online forums formed not only a desirable part of the learning process but also an essential part of some assignment questions. Postings from imaginary forum discussions were compiled in a text document and presented in a format that mimicked the online provision for some of the desirable and all of the essential forum activities.

It was also essential that students had access to alternative materials for those assignment elements requiring web searches or specific websites. Suitable web pages were identified and downloaded and then provided in a format appropriate for the individual student e.g. CD, paper.

Only one student submitted paper assignments, the rest were submitted electronically. In two prisons education staff were prepared to retrieve information from the web on the students' behalf. Two tutors preferred to use the collaborative materials from their own tutor group discussion forums rather than use the centrally provided support materials, probably due to a familiarity with the content. Podcasts and videos were provided in two of the prisons – one via CD and the other as part of the Moodle/intranet version of the course website.

The average marks for the offender learners on each assignment were mostly comparable to those of the entire cohort (Figure 1.). The greatest disparity occurred in the third and fifth assignments, which had a heavy bias towards questions involving computer programming. Analysis of the individual questions showed that most of the students performed well on the questions requiring internet access. They performed less well on the programming questions, which did not require internet access.

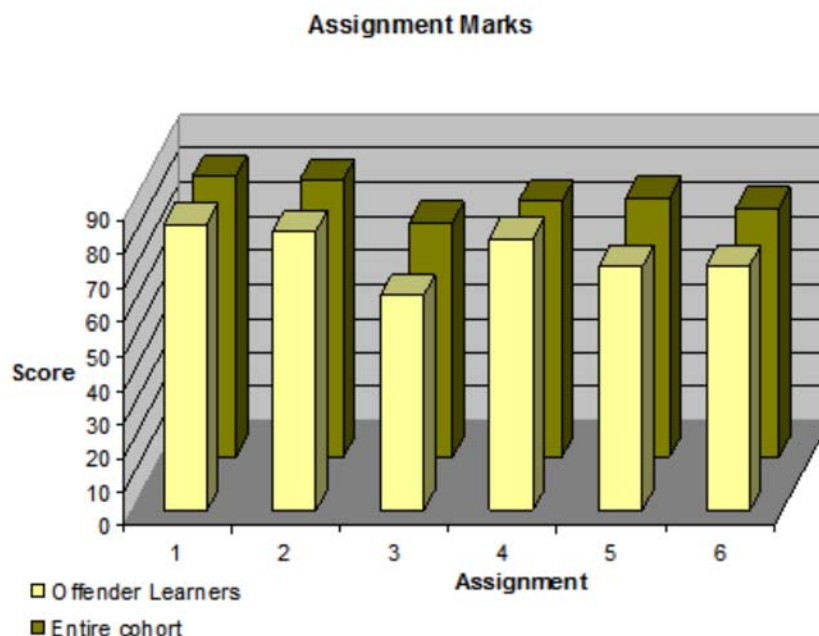


Figure1. Comparison of assignment marks

Discussion

Alternative approaches

It is clear that providing alternative approaches to activities that require internet access is currently a time-consuming activity. Both prison intermediaries and tutors often developed identical approaches independently. As more courses rely on internet-based components, the burden on intermediaries and tutors is increasing. The goodwill and underlying desire to support offender learners in these two groups is being severely tested, suggesting that formal centralised support is required.

'I think it is too much to expect either the prison Education Officer or myself to provide hard copies of everything they need.'

(Prison Tutors forum)

Moreover the importance of an intermediary cannot be over-estimated when providing an alternative means of access for students who have no internet access themselves. In common with offender learners in France (Salane, 2008) these students need to identify a suitable person who can access the materials on their behalf and convert them to an appropriate format. This study has identified that the appointment of intermediaries is currently done on an ad hoc basis with no one formally appointed to act on the student's behalf. There is no formal support from the course delivery team who leave tutors to support their students in the best way they see fit. The trial attempted to rectify this situation by formalising the support for tutors and providing consistent alternative activities to those activities requiring internet access for all the offender learners. The support work to analyse the course, identify components requiring alternative approaches and provide those alternatives, took five days. To continue support on future presentations of the course, a request has been made for further funding for two days per presentation. This funding will make assignment materials available in an accessible format for those students who have no internet access.

The prison that had its own Moodle platform is analogous to Hepp et al's (2004) CD of websites installed on a local area network. The prison encountered similar problems. The content on the local network was not updated in parallel with the internet version of the course website. Again a more formalised and central support system is required. The course website was received enthusiastically by both students and prison staff. Prison IT staff were keen for the provision of course websites to be extended to students on other

courses. Students particularly welcomed the chance to see a course website and get a more realistic student experience. Unfortunately automating the transfer process is proving difficult and technical resources are not available to extend this means of providing course websites to those students who don't have internet access

Analysis of the assignment marks shows that the offender learners were not disadvantaged by the lack of internet access. Programming is a topic that many students find challenging and they frequently require extra assistance from their tutors. The poor performance on programming questions is thought to relate to the lack of face-to-face tutorials at the appropriate time and poor alternative communication channels, in particular email, for providing timely advice.

Initial reactions to the centralised support for tutors have been favourable. This has resulted in the support being made available to a second cohort of eleven offender learners (located in nine prisons) and their six tutors. Two of the students from the initial cohort have moved on to another course and are benefiting from a similar support regime. Both these trial extensions will help to expand on the limited initial research data and define the areas where most support is needed. Although the data has been gathered in the context of prison education it is assumed that its conclusions have applications for other student groups. This hypothesis needs to be tested by identifying other student groups who may have problems with internet access and providing them, and their tutors, with similar support regimes.

EDO framework: Essential, Desirable, Optional

If the OU is to continue to provide higher education in prisons, and other arenas where internet access is problematic, it must address the issue of lack of internet access. This can be achieved by formalising its methods for providing alternative approaches to activities requiring internet access. Ultimately this is a learning design matter.

Re-use of resources is a principle of learning design (Cross & Conole, 2009) that is not apparent in the OU's current approach to prison education. There is a bottom-up attitude to supporting students without internet access. Tutors are independently developing their own alternative approaches and have no means of sharing these resources across course, faculty or geographical areas. A top-down attitude will result in consistent standards and economies of scale. If alternative approaches are incorporated into courses at the design stage, pedagogy is more likely to lead the design process instead of technology. This would reverse the situation seen by Rennie (2007).

A framework is proposed based on defining activities as **Essential, Desirable or Optional (EDO)**. For essential activities an alternative approach must be found if the student is to complete the course successfully. Although students can pass the course without the desirable activities, their overall grade is likely to be affected. Every effort should be made, therefore, to provide alternatives to at least a selection of these activities. Optional activities are those either clearly marked as optional in the course activities or those where it is felt that a large proportion of students outside prison do not engage with the activity.

By using the EDO framework, tutors can immediately see where they, or another intermediary, need to deliver an alternative approach to a course component. As centralised support is available, tutors can select from a range of possible alternative approaches and select one that is appropriate for their student.

Although the genesis of the EDO framework is based on activities requiring internet access, it is extensible to all learning activities. Current trends in e-learning, such as formal/informal learning and social learning, are presenting students with a multitude of activities upon which to scaffold their learning. Each student has their own learning style and will find some activities more appropriate to their style than others. A student will need signposts to find a route through a course that best matches their learning style. These signposts should indicate which learning activities are necessary parts of the course and which learning objectives can be achieved by making an appropriate selection from a range of activities. Highlighting activities as essential, desirable or optional allows students to map a route that is suited to their requirements but which allows them to meet all the learning objectives. For students who are time poor, an EDO framework will help them make the best use of their time.

Conclusion

Lack of internet access may inhibit distance learning but does not prohibit it. Traditional channels of communication in distance learning still exist and can be utilised when required. Students who do not have internet access may wrongly assume that they are excluded from courses that have key components requiring internet access. To facilitate distance learning on internet-based courses, suitable alternative approaches, that match the technology available to the student, should be identified.

Finding alternative approaches makes a course accessible for those who might otherwise be excluded. Alternative approaches introduced to make courses accessible to disabled students can also make courses accessible to those students who have problems with internet access. Centralised support benefits from the wealth of experiences of practitioners who have developed their own practical alternatives on an ad hoc basis. By adopting this approach the OU, and other distance learning organisations, can increase the range of courses available to all students, not just those with internet access.

Using an EDO framework to rate the internet-based course activities as essential, desirable or optional is a new learning design process that has applications beyond those associated with internet access. Further

research is needed to identify other learning scenarios where the framework can usefully be applied. Possible applications include

- identifying suitable routes through course activities in formal/informal or social learning contexts
- mapping learning activities to learning styles
- designing accessible courses for learners who have physical disabilities or learning difficulties

Internet access is taken for granted by many but, when constructing distance e-learning courses, we must not forget those for whom internet access is spasmodic, limited or prohibited. If we do, we risk excluding large sections of the student body.

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