PREPARING UNIVERSITY STUDENTS FOR SUCCESSFUL ONLINE STUDY

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Abstract
Charles Sturt University is large, regional, multi campus university in Australia where nearly 60% of its students study by distance education. Since 1998, those studying by distance have been afforded the benefits of an online environment to facilitate peer to peer and teacher to student interaction, along with access to services and support. Despite the benefits of technology, when this mode of study was introduced, little that students had previously experienced in traditional classrooms had prepared them for the era of online learning [1]. In order to address gaps in student readiness for successful online study, in 1999, CSU developed and piloted a short, voluntary, online subject called Skills for Learning Online.

Nearly 20 years on, internet access and usage rates have increased exponentially. Online learning has become the norm rather than the exception. Australian household internet access reached 86% in 2016 and 85% of Australians 15 years and older were internet users in the same year [2]. Some may assume that universities are now filled with digital natives who are not only tech savvy but who also possess the necessary skills to support online study success at a university level, but this is not always the case. While the digital divide has narrowed, it has deepened in some demographics. Not surprisingly, the proportion of Internet usage reduces proportionately with educational attainment and attrition rates of students studying online are more than double that of students studying on campus. [3].

Universities should not assume that students have the necessary skills or dispositions to be effective online learners. [4] If attrition rates are to be addressed, appropriate support strategies must be in place. This paper reports on the implementation, uptake and evaluation of the subject Skills for Learning Online over an 18-year period, the takeaway lessons of which are readily transferable across the sector in order to better support online students.

Keywords: online learning, student support, distance education, enabling.

1 INTRODUCTION
Australian universities are experiencing unprecedented growth in distance education with more than 200,000 students studying in external mode by 2013. This represents more than 14% of higher education enrolments. Charles Sturt University (CSU) is a large multi campus University in Australia with close to 40,000 students. 59% of CSU students study by distance education, more recently referred to as online education, and more than 60% of CSU students are the first in their family (FIF) to study at university. As the largest provider of distance education in the country for many years, traditionally this occurred mainly through the despatch of printed materials, supplemented by phone calls. In 1998 the University moved to a hybrid delivery model where the online environment was used to ‘wrap’ services such as library access, electronic assignment submission, access to lecturers and fellow students through email and forums around the well established print delivery model [5]. As internet access has grown, and online service delivery has become the norm rather than exception, so to have expectations around student access to and use of the online environment in support of their university candidature. Despatch of print materials at CSU has all but ceased. Online access is now a condition of enrolment and students are expected to be competent users of the online environment to access their study materials, teaching staff, fellow students and resources to support their learning. While the numbers of students enrolling in online education compared to on campus study at CSU is higher, the attrition rates of these students is also typically higher than their peers studying on campus. (2014 cohort first year attrition for online students was 32% compared to 13.4% for on campus students). While a complex interplay of reasons exists for these results, including the part time nature and the competing responsibilities of online students, fluency in the online environment is an important skill for these students if they are to transition successfully and succeed in their university
studies. It is incumbent on universities enrolling students in online study mode to provide adequate support to enable them to thrive in this environment.

2 METHODOLOGY

When online learning was introduced at CSU in 1998, it was widely agreed that support for students to develop skills in the ‘new’ technology was necessary in order for them to succeed at university study. Smith[1] outlined various drivers for ensuring this support was available, including students lacking the confidence to communicate in a public online environment [6] and the skills and/or appropriate expectations required to utilise the technology effectively. [7]

For these reasons, together with staff and student feedback, an online subject called Skills for Learning Online was developed and made available for students to enrol in free of charge utilising federal Government funding for enabling education programs. The subject was non credit bearing, self paced and equivalent to approximately 13 hours study. Accessible online in the same Learning Management System (LMS) that CSU subjects utilised, Skills for Learning Online provided students with a space to gain experience and confidence in using the environment in which they would be studying throughout their university career. As part of the subject, students were provided with practice in navigating the LMS, using the online assignment submission system, various online communication formats, and searching for and evaluating and referencing online information.

3 RESULTS

3.1 Initial pilot

Skills for Learning Online was piloted in 1999 with 167 students. Students received information about the availability of the subject in their CSU welcome pack, which provided the additional forms required to enrol in the supplementary subject. Administration of the subject was carried out ‘outside’ standard CSU systems, including enrolment, subject provisioning, student grading and certification. Student evaluation was positive, and the subject was the recipient of an Australasian Society for Computing in Learning in Tertiary Education Award for Outstanding Use of Technology in Teaching and Learning in Higher Education. Of the 52 students who successfully completed Skills for Learning Online in its first offering they indicated the following:

<table>
<thead>
<tr>
<th>Generally, how would you rate the value to you of Skills for Learning Online</th>
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<tbody>
<tr>
<td>Extremely Helpful</td>
</tr>
<tr>
<td>56%</td>
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<table>
<thead>
<tr>
<th>Do you think Skills for Learning Online will help you in your studies?</th>
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<tbody>
<tr>
<td>Definitely</td>
</tr>
<tr>
<td>75%</td>
</tr>
</tbody>
</table>

Typical of the qualitative comments provided was the following student comment:

On-line learning, I thought it was easy. Buy a computer, with the various attached hardware and software. Plug it in, find an internet server and off you go. As easy as that - WRONG. If I hadn't commenced this on-line learning course, I would be still trying to work out how to access my on-line subjects….I no longer feel like a cyber-dummy.

Subject enrolments in Skills for Learning Online continued to increase and as a result, subject administration was completely mainstreamed into enterprise wide systems. The economies of scale associated with mainstreaming enrolment, subject site maintenance, and record keeping was significant and allowed the continued growth and management of the subject. The figure below shows subject enrolments and completions during the period 1999-2015.
Successful completion of the subject, that is, students successfully completing all assessment items in the subject remained at approximately 33% of enrolled students. Focus groups conducted to investigate reasons for non-completion on the subject included the following: students didn’t realize they had enrolled, once the materials were accessed they decided they didn’t need them, they used the material but didn’t complete the assessment items and they ran out of time.

3.2 Continuing research

The Guidelines for the Effective Support of Students from Low Socio Economic Status (LSES) Backgrounds [8] suggests the importance of the online environment in providing LSES students with the flexibility required to complete their studies but also cautioned that support is required to ensure students have appropriate expectations and the assistance required to master the student role, including digital literacy. Similarly, the national project investigating FIF students [9] reiterated the importance of not assuming that online students are digital natives and providing appropriate support to ensure these students develop the necessary skills and confidence to succeed. Kift and Veensra [10, 11] reiterated that attrition, especially in the first year of study is more likely to occur when students don’t feel adequately support by their institution. Baxter’s research at the Open University [12] also indicated the importance of digital fluency support for online students to ensure they were confident in developing and maintaining online connections with peers, a critical aspect of retaining online students.

Although the 2016 CSU Student Educational Technology Survey (N=1,236), indicated that 91% of students indicated that they felt confident in using Interact2 (the CSU LMS), this had to be considered in light of the likelihood that students who were not confident in the online environment are less likely to complete an online survey. Even so, 9% of students in the respondents group lacking confidence in the use of the LMS remained a significant figure indicated a continuing need for support for at least some students.

3.3 Next steps

By 2015, enrolments in Skills for Learning Online remained consistently around 200 students per year. Feedback indicated the enrolment process was cumbersome and many students were not aware of the availability of the subject. After consideration of the above factors, a decision was made to automatically enrol all commencing students (excluding those enrolled through partners and third parties) into Skills for Learning Online. Automatic enrolment commenced in 2016 with the student access, participation and completion rates summarized below.
3.4 Participation and Completions

In 2016, 14,978 students were automatically enrolled in Skills for Learning Online. In total, 13,445 students (89.77%) accessed the site at least once.

Of the 14,978 students enrolled, 2,315 students (15% of the overall enrolments) satisfactorily completed the subject (i.e., successfully completed all 4 assessment items).

3.4.1 Considerations

The decision to implement automatic mass enrolment was not without considerable challenges including technical, administrative, pedagogical and financial. The technical provisioning of the subject to all new commencing students required a team of IT specialists to develop a process that automatically enrolled students into the LMS as they enrolled in their degree. Load testing was required to ensure that significant numbers of students in a single subject site would not affect the user experience. For this reason, the decision was made to create separate subject sites each session rather than maintain a single ongoing site with every student of the university in the same site. Automation of subject enrolment was critical given the large numbers of students involved.

Communication to both students and staff regarding this initiative was paramount. Marketing websites and most importantly the enrolment web site were updated to indicate that students would automatically be enrolled in this subject upon acceptance of their offer to study at CSU. Care was needed to ensure students were not confused or thought the subject was compulsory, credit bearing or had an effect of their degree. Staff were briefed regarding the initiative through a series of communication campaigns to ensure they were in the best position to answer student inquiries as they occurred.

Subject design was reviewed prior to rolling the subject out across the University to ensure that it covered all the technologies that students were expected to use in the studies. This aligned with the findings of the National Report by Pitman [13] in which students indicated the importance of aligning enabling ‘course content, structures and processes with those at the institutions’ undergraduate level, so as to help acculturate students with their post enabling experience’. This exercise was challenging given the vast diversity of teaching strategies and online tools utilised across a university. The resulting decision was to include essential and compulsory technologies and tools that all students must use, for instance, the assignment submission system. The other pedagogical challenge was balancing the desire for students to experience collaborative learning environments with the need to allow continuous enrolment. This meant that there was no specified, time based ‘cohort’ that allowed the design of peer to peer activities. In addition, the desire to allow students to experience the synchronous ‘online classroom’ through Adobe Connect required the set timetabling of practice sessions. Not surprisingly, some students were unable to attend at the advertised times. A solution to this issue was to utilise the subtitled video recording of the session created for students with disabilities to be used more generally. The uptake of the Online Classroom Adobe Connect sessions can be seen in Figure 2 below.

Figure 2. Student uptake of Online Classroom sessions

<table>
<thead>
<tr>
<th>Date</th>
<th>Participants</th>
<th>Date</th>
<th>Participants</th>
<th>Date</th>
<th>Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>20/1/16</td>
<td>188</td>
<td>25/1/16</td>
<td>143</td>
<td>27/1/16</td>
<td>162</td>
</tr>
<tr>
<td>3/2/16</td>
<td>40</td>
<td>5/2/16</td>
<td>37</td>
<td>10/2/16</td>
<td>28</td>
</tr>
<tr>
<td>12/2/16</td>
<td>39</td>
<td>15/2/16</td>
<td>57</td>
<td>17/2/16</td>
<td>42</td>
</tr>
<tr>
<td>19/2/16</td>
<td>17</td>
<td>22/2/16</td>
<td>25</td>
<td>24/2/16</td>
<td>22</td>
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<td>26/2/16</td>
<td>15</td>
<td>26/2/16</td>
<td>15</td>
<td>29/2/16</td>
<td>25</td>
</tr>
<tr>
<td>2/3/16</td>
<td>23</td>
<td>9/3/16</td>
<td>12</td>
<td>16/3/16</td>
<td>12</td>
</tr>
<tr>
<td>17/3/16</td>
<td>13</td>
<td>21/3/16</td>
<td>8</td>
<td>30/3/16</td>
<td>14</td>
</tr>
<tr>
<td>18/5/16*</td>
<td>22</td>
<td>19/5/16*</td>
<td>11</td>
<td>23/5/16*</td>
<td>29</td>
</tr>
<tr>
<td>25/5/16*</td>
<td>17</td>
<td>25/5/16*</td>
<td>13</td>
<td>8/6/16*</td>
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<tr>
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<td>5</td>
<td>6/10/16*</td>
<td>13</td>
<td>19/10/16*</td>
<td>5</td>
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</table>
The potential financial risk associated with opening a subject to tens of thousands of students at no cost was not insignificant. However, historical trends suggested that not all students would want or in fact need to engage with the subject. To mitigate risk, practice and assessment items were designed such that minimal facilitator time was necessary. This strategy has proved effective, and the subject continues to run economically with a coordinator contracted for student consultation time, marking and subject administration well within budget allocation.

3.4.2 Student evaluation

Students were surveyed at the end of their subject via Survey Monkey. While some feedback has been useful to highlight errors and areas for immediate updating, other aspects of student feedback were diametrically opposed and difficult to action. This is perhaps understandable given the broad diversity of student cohort. For example, the main themes resulting from questions regarding why students did not participate in the subject included: it was boring, it wasn’t compulsory, it took too long and students were already familiar with online learning. In direct comparison, the overall themes emerging from asking what was most helpful about the subject indicated it was extremely practical, it did not assume any prior knowledge and it should be compulsory for all students and they couldn’t cope without it.

4 CONCLUSIONS

Research, and the local experience at CSU continues to highlight the need to provide support for some students to master the student role in terms of technology use. While there are many students for whom this support is not necessary, it remains critical to provide opportunities to develop online learning skills in a low stakes, non threatening environment which is normalised and not seen as a remedial option. For this reason, the support should be made available to all students, using an opt out rather than an opt in model. This support is particularly important for students who come from educationally disadvantaged backgrounds and those who are the FIF to study at university.

Insights from nearly twenty years of providing online support for students at CSU suggest the following. The support should be flexible for students in terms of access and timing, and have a facilitator or expert available to answer questions as required. Although the support needs to be ‘just in time’ students are more likely to complete short enabling subjects as Skills for Learning Online before their formal study load commences. The support should provide authentic opportunities to engage in the required online learning environment prior to being presented with the cognitive load of subject disciplines. Students should be given opportunities to ‘test’ their new skills and knowledge and to develop confidence. Wherever possible, student feedback on performance should be automated to not only maximise financial efficiency, but to provide instant feedback on progress to students. A model of operation is required that allows the support to be provided free of charge, as fees act as a considerable disincentive to engage, particularly for students from LSES backgrounds. While the support and associated resources should be developed such that they remain as stable as possible (for financial reasons associated with redevelopment) it is critical that support resources directly reflect the online learning environment students are expected to study in. Any changes to this environment, which can be frequent, must be reflected in support materials to ensure expectations are realistic.

In conclusion, universities should not make assumptions about the digital literacy of their students. Support should be provided in such a way that all students may access appropriate support to develop the necessary skills at a time and location convenient to them. With strategic oversight and collaborative design, effective support can be afforded to all students to facilitate their successful university study. Skills for Learning Online will continue to be offered to all commencing CSU students to ensure equal opportunity for success in an online learning environment.

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REFERENCES


