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Dimensions of Student Success in Online Learning

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Abstract: Online learning has become a popular method of education. This transition is not a trivial matter, and while faculty members may have support in making this transition in their teaching style and methods, they may know little about how to assist students in succeeding in a new learning environment. Similarly, students may not be prepared to tackle the new demands put upon them. This research sought to identify the characteristics and qualifications of successful online learners, by examining primary screening documents from institutions, mapping these dimensions to the literature base, and weaving personal research projects through the resulting information.

1. INTRODUCTION

Online learning has undergone rapid development. We know the stated reasons for growth in this area: public media have raised individuals’ expectations, the digital economy has created a demand for technical expertise, and adults are demanding greater flexibility and control over their learning. Moreover, business and industry have begun to challenge the traditional models of learning and teaching, through corporate universities, for-profit institutions, and other less formal opportunities.

Educational institutions are responding rapidly to learners’ demands for 'anytime and anywhere' education by devoting substantial resources to the development of online distance learning. Throughout the world, traditional
and non-traditional individuals are taking advantage of these offerings. However, the transition to this online environment is not a trivial matter, and the challenge is to understand the relationships between the user and the technology, the instructor and the participants, and the relationships among the participants (Gibbs 1998, Palloff and Pratt 1999, Schrum 1998). Faculty members may have support in recreating their courses for digital media, yet they may know little about how to assist students in succeeding in a new learning environment and to adapting their teaching style and methods.

In an effort to provide information to assist faculty members to understand the demands their students face in online learning, and to design effective online environments to support these new challenges, this research sought to first identify characteristics and qualifications of successful online learners. Next, data were collected from successful online teachers to investigate strategies they have found useful to ensure student success.

2. PERSPECTIVES

Traditional distance learning environments were based on correspondence through passive media (paper, audio and video broadcast) and were most often conducted as independent experiences, with each learner corresponding only with the instructor. Recent developments in technology and access have offered organisations and universities the opportunity to improve these environments through increased communication, interactivity among participants, and incorporation of collaborative pedagogical models, specifically through electronic networks and groupware (Gerencher 1998, Gibbs 1998, Schrum 1998). Other advantages to using this type of distance learning are the potential combination of instantaneous (synchronous) and delayed (asynchronous) communication, access to and from geographically isolated communities, multiple participation within activities, and cultural sharing of diversity and recognition of similarities among the people of our world.

In this transformed model of distance learning, learners expect interactivity and close to ‘traditional’ classroom based education. The demand for online courses, enhanced by the ease of access, media attention, and interest from the private sector, has accelerated the rush toward online learning activities. Some of the courses are traditional subject matter courses, often undergraduate, while others are geared more to ongoing professional work activity. These include informal courses, professional development tutorials, and even full degree programs; however, much uncertainty exists about the conditions that are essential to create a successful experience for educators and learners.
Development of an online educational environment is a complex task. Faculty members have had an especially difficult time changing the ways in which they teach, regardless of these educators’ own personal use of electronic media (Candiotti and Clarke 1998). In an electronic environment the role of faculty changes in many ways, and in particular, each instructor must give up some control of the classroom environment. Faculty members are forced to develop and design their activities and interactions in new ways, and may be frustrated without the ability to recognize when students are puzzled (Schrum and Berge 1998). Kember (1995) urged designers to work toward deep learning, which requires moving away from excessive assignments and shallow assessments, and toward some individual freedom in activities. These challenges go far beyond the need to be comfortable with the reliance on technology to support their courses. Wiesenber and Hutton (1996) identified three major challenges for the designer to consider: increased time for delivery of the course (they estimate two or three times what is necessary for a traditional course), creating a sense of online community, and encouraging students to become independent learners. They also reported fewer interactions than expected from participants of an online course. These issues all have implications for faculty members and students in an online environment.

3. METHODS

These data derived from a variety of sources. To begin, an examination was made of over seventy institutions from around the globe that currently offer online learning opportunities. While many more institutions do offer online courses, only those that appeared to have an educational focus, and other components that seem essential for post-secondary education (library facilities, student support personnel, etc.) were considered. The original group was narrowed again, so that only those that provided potential students the opportunity to investigate their own suitability for this environment, through a substantive needs-assessment, which included advanced organizers, surveys, or other materials designed to provide potential students with necessary information were ultimately included.

A document analysis was then completed on those needs assessment or pre-enrolment instruments. Standard document analysis techniques were employed to compare the similarities, distinguish the areas of divergence, and identify the various functions of presentation, scoring, feedback, and supporting documentation (Miles and Huberman 1984). After the analysis was completed, a substantial literature review was undertaken, to verify the practical field analysis and to identify areas or characteristics that were
missing from that analysis. The literature was thus woven through the resulting characteristics of successful students.

In addition, the author has completed several research studies that investigated various perspectives of online learning (Schrum 1992, Schrum 1998, Schrum 2000, Schrum and Berge 1998). In each study, completed primarily at the author’s institution, an ongoing focus of investigation was the identification of factors that influenced student success, gathered from students’ perspectives. These experiences were analysed through constant comparative methods, and were woven into the material presented in this paper.

Finally, this information was aggregated and presented to experienced online educators. These individuals verified these seven characteristics, and provided rich descriptions of the ways in which they ensure student success, as related to these dimensions. These data were also analysed using constant comparative methods (Lincoln and Guba 1985).

4. DIMENSIONS

Seven dimensions were found to impact the success of adults who enroll in distance learning courses and degree programs. Of course, not all dimensions are significant for each student, and only the individual will be able to determine those that are most pertinent and essential in his or her life. Moreover, while these dimensions are presented separately, in reality they do not function independently. Rather, they are interconnected, as are the pieces of a puzzle, and work together to support or challenge the online learner. The seven significant dimensions that emerged from the data included:

4.1 Access to tools

The first dimension concerns tools that students must have readily available. Research has demonstrated that easy access to technology, at home and perhaps at work, is one of the most significant contributors to success in online learning environments (Bonk and Dennen 1999, Schrum 1998). Access to all these tools is essential in a convenient and timely fashion, however, any discussion of specific tools is subject to revision almost immediately. Yet it is worthwhile to create a minimum standard for hardware and software, plus peripherals. An institution can provide a highly successful way of testing the equipment by offering potential students a free mini-course to experiment with the components and also to demonstrate exactly what an online learning experience might be like.
4.2 Technology experience

While having convenient access to the tools is the first step, experience using the tools for personal or work related activities is also important. More than one study has suggested that students who have little technological experience would delay learning new content while they learned the tools (Schrum 1998, Yakimovicz and Murphy 1995). Important experiences for new online learners include the ability to write documents using a word processor, printing, sending email on a regular basis, sending and receiving files via email, conducting searches through the World Wide Web, and accessing online information.

Students who are comfortable and adept at these tools will be able to solve small technical problems, such as rebooting their machine, installing software, resolving printer questions and cartridge changes, and answering simple configuration issues. They will also be able to distinguish between the problems they can solve and those problems that are not related to their individual hardware and software, and thus know when to contact the system administrator or institution to report difficulties and request assistance.

4.3 Learning preferences

Students may be concerned that they might miss traditional face to face instruction. It is true that each person learns in a unique way – in general, people know the ways in which they are best able to remember a phone number or address. Some people will write it down, others will say it several times, and still others will make a rhyme out of it. Each is appropriate for the individual who uses it. It is important to recognise that when one learns off campus, individual strengths and weaknesses may be amplified (Bonk and Dennen 1999).

4.4 Study habits and skills

One of the greatest benefits of learning at a distance is also one of its greatest challenges. Learners appear to appreciate the greater control over their learning, yet with that control comes substantial responsibility for completing assignments and being prepared. It may be more difficult to stay focused on those assignments so it is essential that students adopt a model of self-directed learning.

An individual’s study habits play an important role in the success of that student. Learners must be able to turn off the television and concentrate on their work in a timely fashion, in order to stay on track in turning in assignments. It is fairly clear that those students who do not keep up with the
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