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Impact of Online Education on Traditional Campus-based Education

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Abstract

The use of the Internet has produced a great transformation on people's lives and on the way that people do things. And although the changes brought about by the use of the Internet have not transformed campus teaching and learning at the same speed as they have transformed everyday life, there is no doubt that it is gradually producing an impact in campus-based education. This impact is especially noticeable in three aspects: access, the definition of classroom space and the implementation of practices that were unusual for placed-based education. This paper relies on the literature and expands on those aspects, and on the implications of introducing online learning in the traditional classroom and how it affects the people (teacher and learner), the processes (teaching and learning), and the organizations involved.

IMPACT OF ONLINE EDUCATION ON TRADITIONAL CAMPUS-BASED EDUCATION

The use of the Internet has had an impact on people's lives and on the way that people do things. It has produced a great transformation in commerce, entertainment, personal communications, learning, and socialization (Ayers, 2004; Ayers & Grisham, 2003; Bates & Poole, 2003; Hsu, 2002; Spector & Teja, 2001). Many everyday things are done differently and referred to differently because of the Internet. If people need to find information about something, they can "google" it; to buy or sell anything, people use "e-bay"; people don't commute to work, they "telecommute"; colleagues or people with similar interests can "meet in a virtual chatroom." New friends are made over the Web, and single people get into matchmaking Web sites to find a date or a mate; prescription drugs, greeting cards, birthday presents, even flowers can be purchased or delivered online. People go to college without ever physically attending a university campus, pay bills online, and manage their bank accounts without stepping into a bank.

This impact is also affecting university campuses. The use of new information technologies has had an impact on faculty life and work, it has "transformed the research and scholarship component of faculty life by easing the process of collegial communication and collaboration"(Baldwin, 1998, p. 11). Through the Web, faculty can check out books from the library, look at the roster of students, and verify that their paychecks have been posted. Technology has become a commodity, and higher education students and professors take it for granted (Ayers & Grisham, 2003; Baldwin, 1998). It would be rare to find a university in the U.S. that has no Internet connection and reasonable technology infrastructure. However, the use of the Internet in classroom

teaching is not as widespread as the use of the Internet for information, entertainment, communication, and research.

Impact on campus-based education

Although the changes brought about by the use of the Internet have not transformed campus teaching and learning at the same speed as they have transformed everyday life, there is no doubt that it is gradually producing an impact in campus-based education. Because this transformation is under way, the eventual outcome is still to be seen, however, it is not too soon to talk about the effects of online learning on the traditional campus based education.

The impact is especially noticeable in three aspects: access, the definition of classroom space and the implementation of practices that were unusual for placed-based education.

The first impact that online learning produces in the traditional classroom is *immediate access* to facts, information, people, services, and live events (Barab, Thomas, & Merrill, 2001; Bates & Poole, 2003; Gillespie, 1998; Harasim, 1990; Paloff & Pratt, 2001). Face-to-face classes can use thousands of educational resources that are available on the Web. Access to information is not limited to class materials, and access to class materials is no longer limited to the class time or to the physical space of the classroom. Online communications facilitate access to the instructor, the students, support staff or administrators, and the class is open twenty-four hours a day. This immediate access has had an impact in campus students' retention and learning achievement. Virginia Tech, for example, was faced with the high drop out rates in first and second year math, caused by problems in transfer of learning. The Math Department created "The Math Emporium," a

center that hosts over 500 workstations and is open 24/7. Students can access all the contents and practice of the two first years of math at the Emporium to refresh what they have seen in class, or they can take the class online, in which case they also have tutors as consultants available in person or online to help. Also senior college students can come any time to refresh their knowledge (Bates, 2000, p.31).

Also, and perhaps most exciting, online education provides easy access to peers, which allows the establishment of a network of scholars for the purposes of intellectual exchange, collaboration, collective thinking, and socialization (Baldwin, 1998; Harasim, 1990; McDonald, 2002). This has an impact on institutions and faculty professional life. When choosing collaborators, faculty is no longer limited by geographical boundaries. Faculty and adjuncts from a variety of geographical locations can collaborate and teach in a same institution while working and living in another area. On-campus teaching benefits from having access to experts in different disciplines; institutions are forming consortiums by which they share faculty and courses. Faculty benefits because the online environment broadens his opportunity as teacher and researcher in other campuses.

The second impact can be seen in the notion of *classroom space*, which takes a whole different meaning as a synonym of *learning space* (Burbules, 2005). Online education blurs the line between distance education and traditional, place-based education, primarily because of the opportunity for discussion, collaboration, and the potential for building a sense of community among participants inside and outside of the classroom (Barab et al., 2001; Boetcher & Conrad, 1999; Harasim, 1990; McDonald, 2002; Paloff & Pratt, 1999). Faculty can choose between several available online applications to encourage online interaction via synchronous and/or asynchronous

methods. These methods are used to extend the classroom discussions, to allow for student insights on a new topic, to enhance a lecture, or to discuss readings. Collaboration among students in the same class, or between students and researchers residing in different geographical locations is possible as long as they can all share the virtual collaborative space of the online classroom. Online education represents an “augmented environment for collaborative learning” (Harasim, 1990, p.60). The Web becomes a virtual learning space where knowledge is shared and collaboration happens not only between those who are geographically dispersed, but also among those who work on similar ideas at different times and contribute to that knowledge creation. An early example of this is the “White Papers” of EPS313 (<http://lrs.ed.uiuc.edu/wp>). These are documents on different topics that were started in the summer of 1999 as a class project by students who were geographically dispersed. The information in this papers was enhanced and expanded by the students in the same class in subsequent semesters -2000, 2001, 2002, and continues-, resulting in a series of research based documents on different topics that are accessed daily by dozens of hits from campus students and others looking for information on “Credibility and Web Evaluation”, and other themes. Today, new developments, such as shared Web-spaces in which people contribute to a knowledge-based system, are increasing in popularity. Organizations try to capture their collective knowledge in closed, password-protected systems at the same time as open-access sites gather people’s knowledge and information in Web-based encyclopedias, such as *Wikipedia*—where anyone can create, edit, and access information on many topics. Learning and collaboration in virtual spaces is another impact that online learning is having on classroom education.

The third element considered here as an impact of online learning on classroom education is the implementation of practices that were unusual for placed-based education. Distance education practices have been adopted in the face-to-face classroom affecting the design and implementation of campus-based instruction. Traditionally, distance education was regarded as the “poor and often unwelcome stepchild within the academic community” (Merisotis & Phipps, 1999, p. 4). It was considered as lower quality education, or a poor replica of campus education (Allen & Seaman, 2004). However, distance education turned out to be more and more noticeable as a part of the higher education family because of the uses it makes of educational technologies and new pedagogical strategies that improve the process of teaching and learning. The instructional insights gained in the online distance world produced a transformation that also reached campus-based education. The developments that occurred with the incorporation of the Web into distance education practices—such as synchronous and asynchronous class discussion; extensive peer review of class documents; constant comments and reflections on opinions and answers given by classmates; online collaboration; document and application sharing—were rare or never part of campus-based courses for very practical reasons. In a face-to-face class, document sharing and peer reviews involved printing copies of documents, thus adding costs. Group work and collaboration or class discussions were limited by time and classroom space boundaries. Comments and reflections on contributions by classmates were also restricted to the duration of a class period and to the opportunity of *being seen and heard* in the classroom. These practices were incorporated in distance education with the advent of online learning, and they were later integrated into face-to-face teaching. Adopting

practices of distance education is also reflected in the flexibility of class schedules. Many courses using a mix of online and face-to-face components have less classroom meetings, and this also affects campus education in the availability of classroom spaces, in the skills needed by students to take a course, in the students expectations when they sign for a campus course, and finally in faculty time and preparation to teach the course. Faculty with experience in distance education feel more confident to adopt distance education practices in their campus teaching (Quinn & Corry, 2002; Smith, Ferguson, & Caris, 2002). These research results will also make an impact on faculty professional development.

Implications

The immediate access, the definition of classroom space, and the implementation of practices that were unusual for placed-based education can be considered the main impacts of online learning in classroom education. And the implications of introducing online learning in the traditional classroom are multiple, and affect the people (teacher and learner), the processes (teaching and learning), and the organizations.

The people.

Campus-based faculty need to be prepared to: develop new teaching approaches that will gain from the immediate access to information; be willing to give up control in order to empower the learners to exploration; create opportunities for collaboration that go beyond the classroom boundaries in time and space; develop some familiarity with the technology in use; and be open to learn from others, including colleagues or students (Bates, 2000; Palloff & Pratt, 2001).

Students also need to be prepared for the changes that occur in the classroom. They come to the traditional, campus-based classroom with the expectations that classroom interaction happens only within the physical boundaries of the classroom, and they may have limited skills in the use of technology. Their previous learning experiences may not have prepared them for the “place-independent” (Harasim, 1990, p.60) learning that happens in the interaction with classmates or others who only participate via online communication and within a more flexible schedule than the rigid four-hours-per-week classroom meeting.

A successful implementation of online learning in the classroom requires training in technology and pedagogy; the development of a good support system, both academic and technical; and the availability of hardware and software for faculty and student use (Bates & Poole, 2003; Palloff & Pratt, 2001). Without satisfying these minimal conditions, the incorporation of online strategies in the classroom may be overlooked or have a negative impact on the experiences of the people involved.

The process.

Traditional campus-based teaching and learning is making a shift to a new way of education. The mix of distance and place-bound educational strategies in the classroom has an effect on the processes of teaching and learning (Dziuban, Moskal, & Hartman, 2004, Kaye, 1990; Harasim, 1990). Teaching strategies imply collaboration with others that can help students, not just as content experts but as technology experts and as instructional designers. Learning is not limited to classroom interactions, and interactions are not limited to instructor-student, student-student, and student-materials; there is also an interaction with the interface (Hillman, Willis, & Gunawardena, 1994; Moore, 1989)

and an active (and constantly transforming) pool of information and materials existent on the Web.

The organization.

The adoption of online learning in classroom teaching will have implications for the educational organizations (Bates, 2000; Estabrook, 2002). Changes may include a) flexibility in schedules; b) availability of classroom space; c) incorporation of staff specialized in educational technologies and instructional design; d) shared decision-making in the selection of hardware, software, and infrastructure; e) issues of evaluation and assessment; f) concerns about faculty time and compensation systems; g) changes in program planning and development; and h) considerations of support, training, and development (Bates, 2000; Bates & Poole, 2003; Estabrook, 2002; Palloff & Pratt, 2001)

The incorporation of online learning into classroom education does not compare to the changes involved in updating or replacing a textbook or hiring a new faculty member. The changes that online education brings to the classroom are more profound and should be part of the long-term strategy of educational institutions (Allen & Seaman, 2004; Bates, 2000). Online education has implications that will affect the way educational organizations work and that are comparable with the changes to administrative systems brought about by the advent of computers (Bates, 2001).

Conclusion

Although people are getting their information and entertainment from different sources and they are processing and using it in different ways, many college classes still go on as they have for generations, isolated from the powerful networks that people use

in the rest of their lives (Ayers & Grisham, 2003). What Seymour Papert said almost 10 years ago is still true: a doctor or a banker from the 1890s wouldn't know what to do in a modern hospital or bank. But a teacher from the 1890s or from a medieval university classroom could probably find his or her way around the modern classroom (Bates & Poole, 2003; Swan, 2004).

The use of Web technologies has had an impact on classroom teaching, but this influence is not as extensive or widespread as it is in communications and entertainment. Higher education institutions have invested in hardware, software, and wired classrooms, but not as much in resources for research, or in training, and support. Therefore, the center of knowledge creation—teaching and learning—still remains very much unchanged. Both the impact and the implications of online learning for classroom education need to be seriously addressed. Online education entails a new educational paradigm, closer to the transformative mindset that is ongoing in the twenty-first-century world outside the classroom.

References

- Allen, E., & Seaman, J. (2004). *Entering the mainstream: The quality and extent of online education in the United States, 2003 and 2004*. Needham and Wellesley, MA: Sloan Consortium.
- Ayers, E., & Grisham, C. (2003). Why IT hasn't paid off (yet)? *EDUCAUSE Review*(Nov-Dec 2003), pp. 41-51.
- Baldwin, R. (1998). Technology's impact on faculty life and work. *New Directions for Teaching and Learning*, 76(Winter), 7-21.
- Barab, S., Thomas, M., Merrill, H. (2001) Online Learning: From Information Dissemination to Fostering Collaboration, *Jl. of Interactive Learning Research* 12(1), 105-143.
- Bates, A.W. (2000) *Managing technological change: Strategies for colleges and university leaders* San Francisco, CA: Jossey-Bass
- Bates, A. W., & Poole, G. (2003). *Effective teaching with technology in higher education: Foundations for success*. San Francisco, CA: Jossey-Bass.
- Boettcher, J., & Conrad, R. (1999). *Faculty guide for moving teaching and learning to the web*. Mision Viejo, CA: League for Innovation in the Community College.
- Burbules, N. (2005). *The impact of new technologies on knowledge practices in higher education, Bureau of Education Seminars*. College of Education, University of Illinois at Urbana Champaign (Feb, 3rd, 2005).
- Dziuban, C., Moskal, P., & Hartman, J. (2004). Higher education, blended learning and the generations: Knowledge is power--no more. *Journal of Assynchronous Learning Networks (JALN)*, 2005(Feb. 2).

- Eastbrook, L. (2002) Online education and organizational transformation. *Perspective in Quality Online Education*, 1(2), 3-5.
- Gillespie, F. (1998). Instructional design for the new technologies. *New Directions for Teaching and Learning*, 76(Winter 1998), 39-52.
- Harasim, L. (1990). Online education: A new domain. In R. Mason & A. Kaye (Eds.), *Mindwave: Communications, computers and distance education* (pp. 50-62). Exeter, UK: Pergamon Press.
- Hillman, D. C., Willis, D. J., & Gunawardena, C. N. (1994). Learner-interface interaction in distance education: An extension of contemporary models and strategies for practitioners. *The American Journal of Distance Education*, 8(2), 30-42.
- Hsu, Wei-Yuan (2002). Online education on campus: A technological frames perspective on the process of technology appropriation. Unpublished Doctoral Thesis, University of London, London.
- Kaye, A. (1990). Computer-mediated communication and distance education. In R. Mason & A. Kaye (Eds.), *Mindweave: Communication, computers and distance education* (pp. 3-21). Exeter, UK: Pergamon Press.
- McDonald, J. (2002). Is "as good as face-to-face" as good as it gets? *Journal of Asynchronous Learning Networks*, 6(2), 10-23.
- Merisotis, J. P., & Phipps, R. A. (1999, April). What's the difference? A review of contemporary research on the effectiveness of distance learning in higher education. Washington, DC: Institute for Higher Education Policy (IHEP).
- Moore, M. (1989). *Editorial: Three types of interaction*. *The American Journal of*

- Distance Education, 3(2),1-7
- O'Quinn, L., & Corry, M. (2002). Factors that deter faculty from participating in distance education. *Online Journal of Distance Learning Administration*, 5(4).
- Palloff, R., & Pratt, K. (2001). *Lessons from the cyberspace classroom: The realities of online teaching*. San Francisco, CA: Jossey-Bass.
- Smith, G. G., Ferguson, D., & Caris, M. (2002). Teaching over the web versus in the classroom: Differences in the instructor experience. *International Journal of Instructional Media*, 29(1), 61-67.
- Spector, J., & de la Teja, I. (2001). *Competencies for online teaching*. Syracuse, NY.
- Swan, K. (Nov. 6, 2004). Subject: *Michigan Virtual U. Shifts Its Focus to Elementary and Secondary Schools*. In Sloan Consortium Mailing List, Sloan-C
<http://www.sloan-c.org>