



DISTANCE LEARNING

... For Educators, Trainers, and Leaders

ARTICLES

- ▲ Service Learning in Online Education
- ▲ Collaborative Learning in Higher Education:
The Use of Wikis in Language Classes
- ▲ The Relationship Between Online Course
Organization and Learner Outcome:
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- ▲ Enhancing Teacher Performance With Online
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(704) 752-9125
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www.infoagepub.com

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PURPOSE

Distance Learning, an official publication of the United States Distance Learning Association (USDLA), is sponsored by the USDLA, by the Fischler School of Education and Human Services at Nova Southeastern University, and by Information Age Publishing. *Distance Learning* is published four times a year for leaders, practitioners, and decision makers in the fields of distance learning, e-learning, telecommunications, and related areas. It is a professional magazine with information for those who provide instruction to all types of learners, of all ages, using telecommunications technologies of all types. Articles are written by practitioners for practitioners with the intent of providing usable information and ideas for readers. Articles are accepted from authors with interesting and important information about the effective practice of distance teaching and learning.

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Members of the United States Distance Learning Association receive *Distance Learning* as part of their membership. Others may subscribe to *Distance Learning*.
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DISTANCE LEARNING MAGAZINE
SPONSORED BY THE U.S. DISTANCE LEARNING ASSOCIATION
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MANUSCRIPT PREPARATION GUIDELINES

Distance Learning is for leaders, practitioners, and decision makers in the fields of distance learning, e-learning, telecommunications, and related areas. It is a professional journal with applicable information for those involved in providing instruction of all kinds to learners of all ages using telecommunications technologies of all types. Articles are written by practitioners for practitioners with the intent of providing usable information and ideas. Articles are accepted from authors with interesting and important information about the effective practice of distance teaching and learning. No page costs are charged authors, nor are stipends paid. Two copies of the issue with the author's article will be provided. Reprints will also be available.

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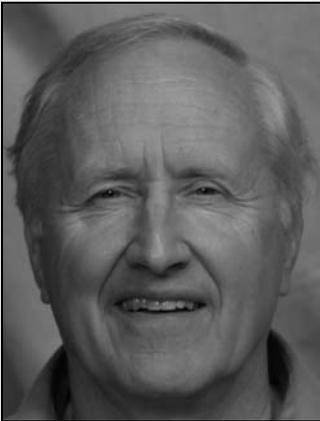
J. Nicholls Eastmond and Neal Legler

INTRODUCTION

If the last decade of technological growth and innovation has taught online educators anything, it is that learners separated by time and space need not work in isolation. Significant resources have been devoted to developing tools and best practices that effectively connect students to their instructors and their peers. The payoff has been great, as online education has arguably begun to adapt many of

the benefits of face-to-face learning, with the added advantage of flexibility for the student.

Yet with this growth and innovation, another type of isolation has remained largely overlooked; namely the isolation of the student, as a participating citizen, from his or her local, national, and worldwide community. A growing number of online courses succeed in connecting learners to each other, yet too many still fall short in



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connecting students to the realities of the communities in which they will operate.

Since at least the time of John Dewey, educators have taken growing interest in the principles of experiential learning as it relates to service (Giles & Eyster, 1994). Over time the notion and practice of service learning has evolved with application primarily in face-to-face contexts. While there are many definitions of service learning (Furco, 1996), each varying in its emphasized outcome, a good general definition is that provided by Eberly (1997): “the integration of community service with educational growth” (p. 19).

For our purposes, we will add that service learning is an approach that harnesses student energy and puts it to work on socially worthwhile projects, rather than assignments that have no practical value other than providing “practice.” Howe (1997) summarized the experiential benefits of service learning as follows:

It is based on active learning, which is characterized by very different behaviors on the part of both teachers and students. Both are engaged in planning what is to be done and how; both carry it out together, often outside the classroom in the world of reality—families, communities, groups with particular needs, institutions with adequate resources and dependent on volunteer assistance; both get together to evaluate what has been accomplished and to suggest changes that will produce better service. (p. vi)

As online collaboration technologies emerge and become established, the barriers to providing service learning activities to online students become fewer and fewer. With some innovation, we believe service learning can become an integral part of the online learning experience.

EXAMPLES OF PAST SERVICE LEARNING ACTIVITIES

Over the past decade, Nick Eastmond has attempted to integrate service learning

projects into his face-to-face classes (Eastmond & Vitale, 2002). For the purpose of promoting ideas for worthy service learning activities, we provide the following recap of several of the projects that have been successful in his classes. It is our belief that several of these could be implemented, in some form, in an online class. Note that, for practicality’s sake, we make no distinction between projects that are done on a volunteer basis or projects that are done under contract with monetary gain involved:

- A formative evaluation of distance education, using the two-way interactive EdNet video system in Utah, undertaken by an evaluation class and involving telephone interviews with the then-current group of students;
- A needs assessment study of the curriculum of the Department of Instructional Technology at Utah State University, done in preparation for an accreditation visit of the National Council on Teacher Education (NCATE), combining the efforts of an on-campus class with those of a distance education cohort taught face to face;
- An effort, spanning three terms of an honors course, to raise funds for the building of a school in the Republic of South Africa. The course addressed the topic of race and communication in the United States and the new South Africa. Students raised \$8,354 of the \$15,000 needed to build the school. That donation was supplemented by the New Zion Baptist Church of Philadelphia to build a four-room schoolhouse in the former Transkei, near Port St. Johns. One student from the final class, while on an internship in South Africa with her husband, visited the remote school and sent back pictures;
- A study of the impact of the 5-year plan for the State Library Division under the Library Services and Technology Act (LSTA), funded by the State of Utah,

with proceeds used to start an endowment for student internships in overseas locations;

- A qualitative evaluation study of the reasons teachers terminate their teaching contracts early, done as part of the Teacher Supply and Demand Study for the State of Utah (a paid project);
- An evaluation of the impact of the federally funded Reading First Program on the training of preservice teachers around the Navajo Nation. Over spring break, we took a handful of students and traveled to the Four Corners region of the United States to conduct interviews and focus groups with faculty and students at three universities (also a paid project);
- Three articles completed by student groups for submission to a special issue of the International Review of the *Educational Technology Research and Development (ETR&D)* journal. The project was unpaid, but a contribution was made to the profession; and
- A building project, culminating in a 16-foot bridge across a local canal and a wooden stairway, plus a trail a quarter mile in length. The project opened a new route for foot traffic to access the university campus. The class raised half of the funds to pay for the project, with the other half donated by a private foundation. Once again, the project was part of an honors class addressing race and communication in the United States and Africa. Building a bridge was a highly symbolic project for such a class (Packer, 2008).

While these examples deal mostly with education and social issues, numerous examples exist in other curriculum areas as well. The following are some ideas that others have suggested or implemented:

- For courses dealing with nutrition, Berman (2006) suggests that students can be involved working in local commu-

nity facilities such as soup kitchens or food pantries. Students should make the arrangements with the agencies and identify what their needs are and what the duties will be. Ideally, a project such as this would give students an opportunity to apply their skills in things such as menu planning, food preparation, and so on (Berman, 2006).

- Brigham Young University regularly has its senior communications students develop, as a capstone project, an advertising or public relations campaign for a nonprofit cause. Recently, a graduating advertising cohort was publicly recognized by the Office of National Drug Control for its work in developing an antidrug campaign (Nibley, 2004).
- Colorado State University has been known to offer service learning seminars for pre-med students. One such seminar focuses on the history and biology of HIV-AIDS, then gives students the opportunity to serve in nonprofit agencies focusing on HIV-AIDS prevention, education, and care (McCarthy, 1996).
- As part of a current events, political, or social science course, Berman (2006) suggests that students can work together to form a communications organization that gathers information about pending legislation and disseminates the information to the community, collects information from the voters, and sends the information to the local, state, or national legislators.

The examples above demonstrate that university classes can accomplish socially worthwhile ends and still achieve positive learning outcomes. In the projects the author carried out, students responded well, expressing satisfaction in feeling that their efforts were “for real,” and that the social outcome would be significant. The feedback from the students was similar to that quoted by Eberly (1997) in reference to

returning Peace Corp volunteers: “I learned more than I contributed” (p. 20).

Some of these examples could more feasibly be carried out in an online course than others. Those involving combined student effort on a physical structure or in a shared physical location would, no doubt, be difficult to achieve online. However, if students share access to similar communities, community services, or partners, wherever they may be located, they can be encouraged to serve where they are located and share their experiences with their online colleagues. Likewise, communities in need of assistance often exist beyond physical regions, extending online, for example. And today it almost goes without saying that the growing and ever more accessible suite of communication tools available to online learners can provide the means necessary for collaboration on shared projects and connection to online communities. What is most needed for identifying appropriate online service learning opportunities is ingenuity and a good understanding by instructors of the nature of their students and the communities they do or could have access to.

SERVICE LEARNING ONLINE: TRANSCRIPTION ACTIVITY EXAMPLE

Service learning activities implemented online do not need to be large in scale or expense to result in positive outcomes, including increased student investment in the class. One fairly simple example, which we recently implemented in an educational research course, demonstrates this point. The online course is media-intensive and designed to immerse educators in the research process through guided-design activities. While evaluating the course, we identified a need to make it more accessible to the hearing impaired by providing transcripts to the online course videos. Providing transcripts, we believed, would not only benefit hearing impaired students but would also increase the value of the course

for all students by providing another means of reviewing the content.

The course contained roughly 20 hours of video, spread across 5- to 15-minute clips introducing activities and readings. We saw this as an opportunity to employ the help of our students in transcribing the videos as an alternative service learning activity, with the understanding that they would be doing so to assist future students who might have unique accessibility requirements.

We chose to make the transcription activity optional, as an alternative to an online institutional review board (IRB) certification assignment, which would suit some students’ professional interests better than others. Providing options meant we needed to attempt to measure out an equivalent workload for students, no matter which option they selected. The full IRB option generally took students 4 to 6 hours to complete.

To achieve equity in completion time, we identified a standard range of minutes the students would need to transcribe and also created an abbreviated IRB assignment (estimated 40 minutes to complete) so that students would still be exposed to the core concepts of research ethics. We were careful to provide the alternative early in the course, before major projects and activities got under way. As such, it provided a useful introduction to the course and the activities that would follow.

IMPLEMENTATION

We offered the transcription alternative for two semesters; this was how much time it took to assign out all of the videos, given the number of students enrolled in the class. Each semester we included a description of the alternative activity and its purpose in the course syllabus. We left the choice entirely up to the students as to which activity they were more interested in. Students who knew they would be undertaking research connected with the

university (for a master's thesis or PhD work) were counseled against doing the short IRB and service learning option, since they would be required to complete the full IRB certification for their own research. Given these options, students had to make a choice. If their choice was service learning, they had to contact the teaching assistant for a specific video transcription assignment.

In both the 2008 and 2009 classes, we found that about a third to half of the students were eager to take the transcription option—more than we anticipated, to the point where we started to worry whether we would have enough videos to go around. There were several reasons for the demand. Some students appeared to find the service option a favorable alternative in terms of the requirements. One reported that he did not think it would take as long to complete (although he said he had decided otherwise by the time he finished). Others had more intrinsic motivations. For example, one student noted her connection to a family member who was hearing impaired, whom she felt would benefit from the sort of work she was helping with.

Of the students who responded regarding their experience with the activity, reactions were overwhelmingly positive. One of our hopes was that the activity would help exemplify the need and process of improving instruction over time through evaluation of existing needs and the implementation of solutions (one of the intended learning outcomes of the course). One student said that through the activity, she “[became] more aware of designing with accessibility in mind. Because of your awareness and drive to make this class more accessible—I have found myself considering these ideas as I design things at work.”

Others said the simple activity helped them get more out of the class. One student reported that “the experience was enjoyable because it led me to learn more

about what I was transcribing. I think it absolutely added to my experience in the course. I don't feel as if I missed out on the assignment that I replaced by doing the transcription. It is always good to feel like you can help others learn. Thank you for the opportunity.”

Another enterprising student, who wanted the experience to be a true service exercise, completed both options. She said transcribing helped her focus better on what the instructor was saying, while helping her feel rewarded for the opportunity to help out.

As a final point of feedback, one student who chose not to do the service learning option expressed appreciation that she was given a choice. For her, the alternative certification option fit her professional goals better, and the service alternative seemed a little overwhelming.

CONCLUSIONS

The transcription activity provided a small example of the sort of thing that can be done to add service learning to an online course, yet it revealed some useful anecdotes. For one, it reminded us that students often welcome opportunities to participate in service-oriented activities, especially when the activity relates to their own life experience, observations, or personal relationships. Some research suggests that a majority (64%) of college-age students are already involved in volunteer activities of some sort (Jacoby, 1996a), while other studies show a drop in the level of volunteerism from high school to college (Bringle & Hatcher, 1996). This suggests that students have the will to serve their communities but are dependent on others, particularly their instructors and institution, for the opportunity to incorporate service into their complicated schedules (Bringle & Hatcher, 1996).

Likewise, service learning has great potential to help students feel a stronger investment in a class, be it online or other-

wise. If done right, service learning can have a unifying effect on all involved. Eberly (1997) wrote, “[Service learning] can be a unifying force among those who serve. With the exception of the parent-child relationship, there is probably nothing that binds people together more strongly than working together in a common cause” (p. 29). This sentiment was echoed by a student who participated in the bridge building project noted earlier. He reported that, “Before the project, we didn’t interact a lot as a class. After the project we became friends” (Packer, 2008).

Imagine the potential of such an outcome among students of diverse backgrounds. As one Black student noted in reference to the school-building project in Africa, “It is quite easy to start a conversation when you are working side by side on something you both believe in” (Eastmond & Vitale, 2002).

Student feedback in our educational research course indicated that service learning can help students view their education in broader terms—beyond benefiting themselves and toward benefitting others. This broader focus can have a lasting impact on their thinking that is both motivating and instructive. Students who experience service benefits in a class setting, we believe, will be more likely to engage in service to their local, national, or world community in the future, and will be more sophisticated in searching out these opportunities.

Students will also learn valuable lessons about community and practical activities along the way. Referring to the bridge-building activity mentioned earlier, a student involved in obtaining permissions from the three organizational entities with proprietary interest in the bridge stated, “Obtaining permission was a more difficult process than actually building the bridge.” That is a lesson about the community that will last far longer and be felt more deeply than reading the same conclusions in a textbook chapter.

These and other benefits of service learning can and will be achieved more often in online instruction as instructors, administrators, and designers find new and innovative ways to integrate service into their curriculum and course design. Efforts to bring service learning online could most likely to be championed, as observed by Eberly (1997), by professors who have had previous experience with service learning and know from experience its benefits, either through U.S. Peace Corps service or other activities.

RECOMMENDATIONS

To those wishing to try service learning in their own online instruction, we offer some practical recommendations, based on experience.

1. Align the activity, literally or symbolically, with the educational objectives of the course. Provide opportunities for students to apply, focus, or reflect on the content and aims of the course, and where possible, involve them in the decisions about what the service project will be.
2. Find ways to align the activity with student interests and experiences and be sure that it meets a relevant need. Students will be more likely to find motivation and meaning when the activity has relevance and affects something or someone they know and care about. Where possible, involve students in defining the project.
3. Depending on the nature of the activity and its criticality to the course aims, service learning can be offered as an alternative optional activity. Online students tend to appreciate options, and service taken as an option can be more meaningful than a mandatory assignment for all.
4. Be prepared for student uptake on a service-learning option to be greater

than you might expect. Have enough work available to meet a high demand.

5. Fit your conception of community to the realities of the online course. Service learning endeavors are historically more challenging to implement successfully in nonresidential colleges (Bringle & Hatcher, 1996) because students are less capable of engaging in activities outside of the classroom. Online courses, where students are dispersed geographically and across time, are likely to share this challenge to a greater extent. In identifying a community to service and a community partner, if any, to engage with, be sure that it is a community, type of community, or partnering organization that all students have access to—be it an online, regional, national, worldwide, or demographic community. Where an online course provides additional variables in successfully connecting with a community or community partner from location to location, it may be wise to provide alternative activities or requirements should one or more students struggle to get started.
6. Provide easy-to-use tools for student collaboration and be sure students are properly trained through orientation modules and instructor outreach to use the tools. Asynchronous communication tools are necessary for online students, who struggle to find a common time to meet online. However, real-time communication tools, such as videoconferencing or chat, can prove useful at times for allowing students to work as groups or for allowing the instructor to touch base with groups or individuals.
7. Have a solid plan and structure in place for managing the service-learning activity (Berman, 2006). Any time online students are expected to collaborate together in achieving an end result, delays, setbacks, and pushed

deadlines are to be expected. Have clear directions and contingency plans in place.

8. Provide opportunities for reflection on the activity (Berman, 2006; Jacoby, 1996b). Reflection is one of the keys to successful experiential learning. In our experience, students are much less likely to find meaning in a project or connect the service activity with the objectives of the course unless they are encouraged to reflect upon their experience. Reflection can come in the way of journaling, discussing, creating papers or presentations, or even completing a simple evaluation or responding to a feedback request.

We have reached a time when students can be expected to interact throughout their lives in a broadened, global community, facilitated by modern communications technologies. The time has therefore come to extend service-learning opportunities from the live classroom to the virtual classroom and the online world. It is our hope that more educators will find ways to integrate service learning into their online programs. We look forward to hearing the success stories!

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Pedro Reis

LEARNING THEORIES AND PEDAGOGICAL PRACTICE

In this article, socioconstructivism and, more recently, connectivism are acknowledged as the learning theories that most influence our information and communication technology (ICT) pedagogical practice as e-learning course deliverers at Fernando Pessoa University.

Constructivism is based on basic principles such as: knowledge is not transmitted, but constructed actively by the student; learning is, simultaneously, an active and

reflective process; the interpretation that students make of the new experience is influenced by their previous knowledge; the social interactions introduce multiple perspectives in the learning process; learning requires the understanding of the whole as well as of the parts, and these will have to be understood in the context of the whole. Consequently, learning must be centered on contexts and not on isolated facts.

If constructivist theory considers that learning is an active process of knowledge construction, as a result of the interaction of man with the environment, in this context, the tutor participates as a facilitator or stimulator of the learning process. The e-learning projects, which adopt this model, generally allow students to learn from a basic content that will have to be reconstructed in accordance with their previous luggage and rhythm. Students are stimulated to appeal to their own resources to carry out the proposed tasks. In this model, the hypertext resources, simulators and collaboration tools (chat, discussion, forums, whiteboard, wiki, etc.) are some of the main tools of computer science that can be used in distance education (Schlosser & Simonson, 2002).

However, the increasing complexity of knowledge, as well as the rise of educational networks gives origin to a social constructivist approach, which considers generic skills of collaboration, problem solving, and creating new knowledge as very important goals. Finally, connectiv-



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ism, a new learning theory proposed by Siemens (2004), is characterized by the “amplification of learning, knowledge and understanding through the extension of a personal network.”

In accordance with this theoretical background, in this article I shall focus on instructional practices that tend to replace learning models based on individual learning by those based on cooperation and aiming at acquiring basic social competences and, especially, communicative strategies, social abilities, negotiation, and leadership skills. Likewise, these experiences seem to prove a shift in the role of the teacher, changing from being a mere contents transmitter to a learning adviser who facilitates the access to information, its transformation into knowledge, and its practical application to new changing contexts (Garrison & Anderson, 2003; Moore & Anderson, 2003).

More specifically, I shall refer to two different occasions where the wiki, a Web 2.0 learning tool, was used in language classes: a class of intermediate Portuguese for college students whose mother tongue is Spanish, and a class of Portuguese communication techniques for Portuguese students. In the first class—nursing undergraduates—learners were divided into small groups and were instructed to create a glossary of health and medical terms. In the second class, a postgraduation course for nurses, students were asked to write branching stories, in which readers actively participate in the story plotline.

WIKI—WEB 2.0 LEARNING TOOL TO PROMOTE COLLABORATIVE WORK

Nowadays, language instructors can benefit from the affinity of learners for social networking through a wide range of Internet tools to promote those skills in an educational setting in order to maximize student-student interactions outside the classroom.

As a Web 2.0 tool, wikis can be generally described as collaborative websites in which information can be rapidly added, modified, or deleted. Extrapolating this practice to the classroom, several positive pedagogical applications and benefits can be achieved: wikis can be used as writing practice exercises, allowing both individual work and group work.

One of the greatest advantages of a wiki lies in its collaborative nature; that is, students share a common goal and each one feels the need to contribute with his or her best to a project. Thus, students do not compete. On the contrary, they collaborate, enhancing mutual help and solidarity. It also allows the development of accountability, since each student knows that others and the final product depend on his or her contribution.

The use of wikis relies on the notion of learning as a social process, which, as such, takes place when interaction between teacher and students, but also among students, is intensified (Alexander, 2006; Ebersbach, 2006; Peña-López, Córcoles, & Casado, 2006).

METHODOLOGY

The general purpose of this article is twofold: (1) to examine learners’ perception of possible advantages in the use of wikis in language courses and (2) to examine learners’ perception of the quality and quantity of collaboration that wikis do, in fact, promote.

The pool of participants for this study considered 27 Spanish college students from several third-year Portuguese language classes (winter term 2007) (Experience 1), and 18 Portuguese postgraduate college students of a Portuguese communication techniques class (spring term 2009) (Experience 2). Every class had the same instructor.

The students were familiar, from the beginning of each course, with the collaborative platform, Sakai, used as a complement to onsite classes, since these were

blended-learning courses. They were asked to use the wiki tool inside the platform. (Note: The Sakai project develops and distributes the open-source Sakai CLE, an enterprise-ready collaboration and courseware management platform that provides users with a suite of learning, portfolio, library and project tools: <http://sakaiproject.org/portal>. The Sakai platform has been adopted at UFP-UV-Universidade Virtual, since 2004: <https://elearning.ufp.pt/portal>)

THE EXPERIENCES

In both experiences, learners were asked to form groups of four to five members.

For the glossary project, one purpose of using a wiki was to promote collaborative work. Students were not competing, since they were not doing exactly the same thing, but each student knew he or she was contributing to a common project and the fulfilment of the project relied on each student's participation. This strategy increases, in every student, the notion of accountability, since each one is responsible for part of the work, and nobody wants

to be to blamed for the failure of the project. Additionally, using a wiki, each step of the work is shared by everybody involved (teacher and students). Consequently, the work of each student is perceptible, not only to the teacher, as often happened in more conventional teaching strategies, but also to their colleagues.

In Experience 2 learners were given time to brainstorm ideas for the main plot of their story. Figure 1 shows the blueprint that was shown to the students as a model structure for their branching stories.

In a branching story, the reader begins reading a story but does not progress page after page until reaching the end of the narrative. Rather, the reader is constantly presented with a series of choices that determine the outcome of the plot. Thus, although one can certainly talk about sequentiality, it would not be correct to characterize it as linear.

In fact, each selection the reader makes will take him or her to a random page in the book. This wiki branching story begins with an initial paragraph, which includes in itself the first set of internal links from which the reader selects one to set the

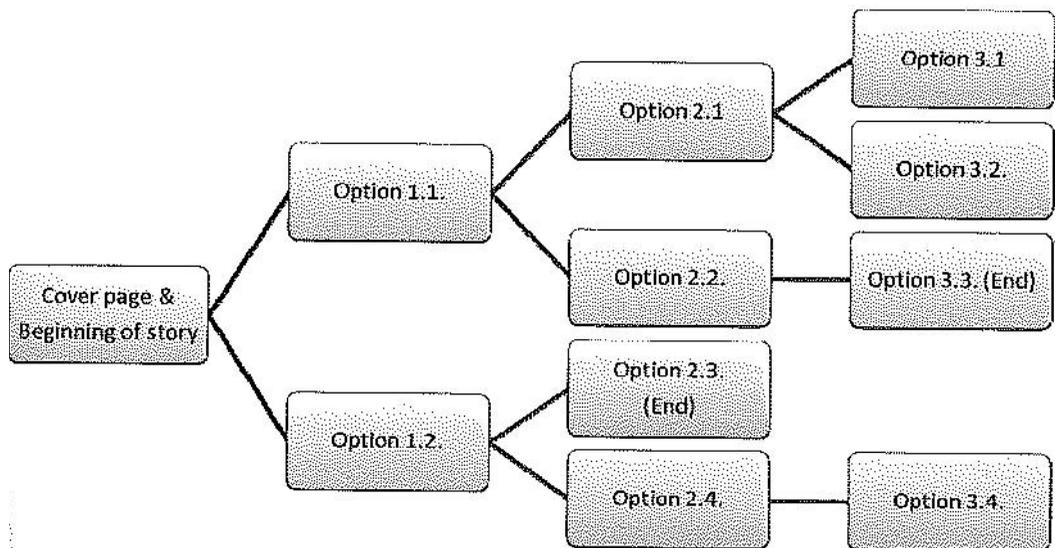


Figure 1. Model structure for a branching story.

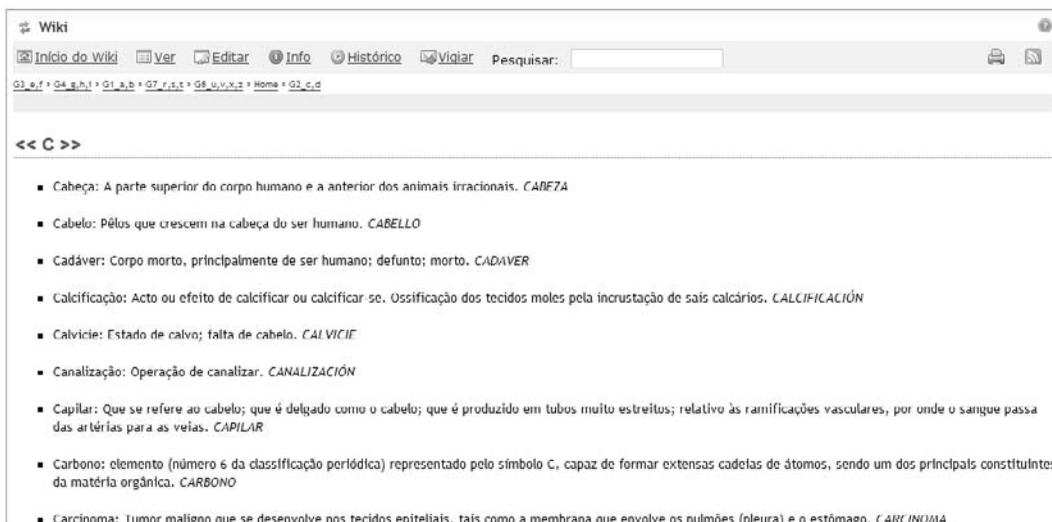


Figure 2. Screenshot of part of the page of one group for the glossary.

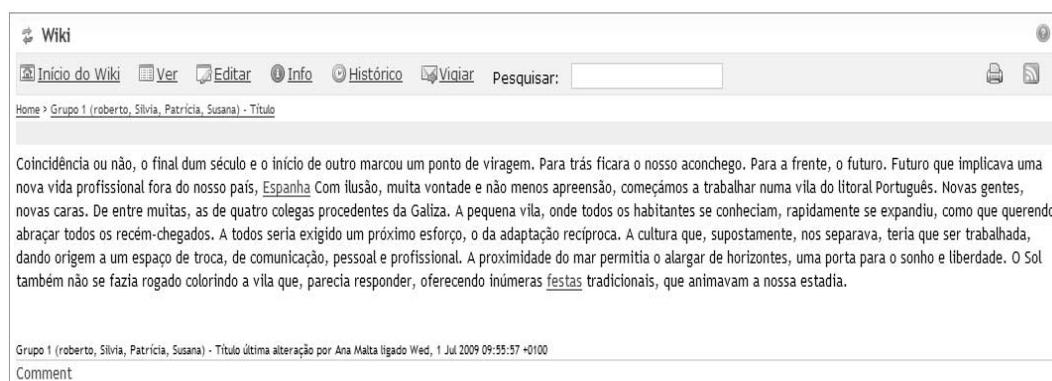


Figure 3. First page of the branching story created by one group.

next action in the story. Each choice the reader makes will take him or her to a new entry and then a new set of choices is presented. Besides promoting collaborative work, another major purpose of this work was to practice narrative skills inspired by episodes of students' professional experience.

In both experiences, the duration of the project was one month. Each group had 2 weeks to prepare a first draft. Then, corrections were gradually included according to the instructor's comments. Figure 2 shows

a screenshot of part of the page of one group for the glossary.

Figure 3 presents a screenshot of the first page of the branching story created by one group (the first set of choices available to the reader appear as hyperlinks).

Participants filled out an online questionnaire on their perceptions about their linguistic gains with the experience as well as about the success rate of group work interaction while working on the wiki project. There were nine questions, for which the possible answers were strongly agree,

agree, neutral, disagree, and strongly disagree:

1. I enjoyed participating in the wiki project;
2. The wiki project was a learning experience;
3. My group colleagues and I collaborated well together;
4. I would have preferred individual work;
5. I was able to use the target language and what was covered in class (grammar, vocabulary, cultural contents);
6. I consulted/checked with resources other than our class textbook to figure out language specific questions (grammar);
7. One of the students in my group (that can include you) took over a leadership role;
8. Everybody in my group was equally involved in the process and the creation of wiki content; and
9. My group was successful in creating an informative webpage.

RESULTS

According to the responses to Questions 1 and 2 on the learner's opinion about the learning experience, more than half of the participants (62%) enjoyed participating in the wiki project and over three quarters (78%) claimed to have learned something as a result of their participation in the project.

Questions 3 and 4 fell upon students' perceptions of the collaborative nature of the task. The answers to Question 3 reflect that 85% of all participants think that they collaborated well with their colleagues, while question 4 indicates that nevertheless, 32% of the students would have preferred individual work.

Questions 5 and 6 aimed to find out how useful the project was to enhance participants' linguistic skills. An overwhelming majority (92%) stated that they were

able to use the structures and content that they had been learning in class for the development of their wiki. A similar number of students confirmed that they had sought help from external sources to edit their wiki.

Questions 7, 8, and 9 tapped into participants' perception of how well group work was divided among team members. Responses showed that more than two thirds had a leader in the group who divided up the work and made sure that they were on track and complying with the set deadlines. In reply to question 8, a large majority of students declared that the work was well divided among group members. Finally, an even larger majority of participants considered that they were successful in generating a quality end product.

CONCLUSIONS

Given the answers to the questionnaire, as well as the products achieved, these wikis proved to be positive learning experiences in general terms: participants enjoyed working on a project in which they could use their language knowledge, in a flexible manner and have the cooperation and comradeship of their colleagues. In terms of gains in linguistic knowledge, students replied positively to the possibility of using grammar structures and content that they had learned in class.

Regarding the social and collaborative aspect of the project, the majority stated they had worked well together in groups, although a considerable number of students declared their dislike for group work. This relative discomfort with working collaboratively may be linked to the fact that some students do not like to depend on others, considering different levels of knowledge and commitment or different paces. Also the fact that the instructor assessed their final product with one group grade only may have been felt unfair by those students who may eventu-

ally have put more time and effort into the project. These may have felt that the grading system was not fairly evaluating each participant's contribution.

Acknowledgment: The support from Fundação Fernando Pessoa and Nova Southeastern University is gratefully acknowledged.

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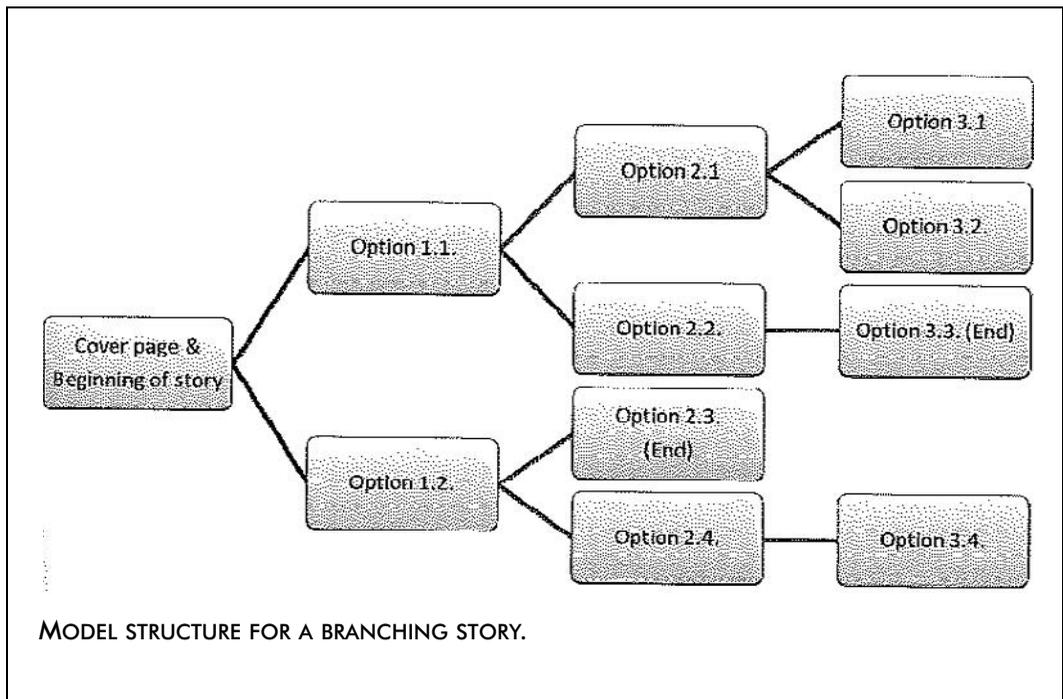
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The Relationship Between Online Course Organization and Learner Outcome

A Pilot Study

Vartouhi Asherian

INTRODUCTION

Online education, sometimes referred to as distance education, is a fast growing delivery mode for course content. Students are accustomed to learning online. Their expectation is that educational opportunities are available to them 24 hours a day, 7 days a

week. This expectation grows out of modern busy schedules that include the pressures of childcare, and jobs that require travel or odd hours. Some students cannot attend school and pursue a degree if this mode of delivery is not available. The online learning environment facilitates participation in education because it is practical to the users. It provides instructors with unique opportunities in presenting course material. Educational institutions can enjoy the reduced stress online education places upon their physical facilities. For these reasons and more one can expect online distance education to grow. So if this mode of instructional delivery is so desirable and widely available, then why do many students who take online courses drop out?

I taught online classes and assisted faculty in designing online classes for over 8 years. It is a challenging process due to constant changes in technology. However, despite improvements in technology one common reoccurring issue that faces faculty and administration is the retention of students. It is observed that online students drop out at a higher rate than do students taking traditional courses. Why is this so? This article is a single case and will examine the relationship between the



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structure of the online course and the learner's experience in an attempt to answer this question. It is assumed that if the student has a more positive experience, then retention rates for online courses can increase and individual students will gain more from their online learning experience.

STUDY DETAILS

The observation setting is the an "Orientation to Online Learning" online classroom. The participants in this classroom were professional teachers looking for credits that allow them to move up in their pay scale. This course was a prerequisite for a 15-credit certificate program. Completion of the 15 credits awarded the participants with an "Online Teaching and Learning" certificate. The online classroom was designed using WebCT 4.1, which served as the course management tool. The course was an accelerated two-week course. An Internet connection and a browser such as Internet Explorer, Firefox, or Netscape was required for students to participate.

A volunteer was selected from this group of students. The volunteer had to be willing to install (CamStudio) recording software on his or her computer. This recorded the volunteer's navigation steps within the course using the recording software and a webcam to record facial expressions. The volunteer also had to be willing to install Skype for the interview process.

Spradley (1980, p. 48) warns us not to jump into challenging situations until we have learned the lessons about "gaining access." Based on this, Ms. H. was selected to participate in the current study because she was highly motivated to learn new online techniques. She was willing to download new software on her computer to record the sessions. Ms. H. is a single working mother in her mid-40s. She has taken classes online before and has solid computer skills. From June 15-19, 2007, four 10- to 15-minute sessions of

her online course navigation were recorded. The sessions captured her experience with the course in real time. She recorded her online navigation using a webcam and the CamStudio program. These experiences were used to structure a follow-up interview. On June 22, 2007, she was interviewed (using Skype) concerning her experience navigating through the above course. The interview was recorded using Power Gramo online recorder.

RESEARCHER ROLE

As Glesne (2006) states, "you need to clearly define your research roles" (p. 46). In this study the researcher's role was that of an observer. The researcher was hidden from the subject and did not drive the direction of the study participant (Merriam, 1998). The observation was conducted using a webcam and recorded with CamStudio software (see Figure 1 for a snapshot of the video taken during observation). The think aloud session was later transcribed and analyzed by the researcher.

OBSERVATION

Ms. H. started navigating the course by clicking on the Welcome button. This gave her a positive feeling and she became excited when she heard the instructor's voice. She listened to the message carefully and repeated the important information out loud. She then navigated to the course information and looked at the syllabus. Here she read the content and made mental notes of what was important. She was pleasantly surprised to discover that office hours are available online and that she did not have to drive to campus. After looking through the syllabus she then navigated to the activity checklist and carefully analyzed it. Ms. H. has taken at least 20 online courses and seemed to know her way around an

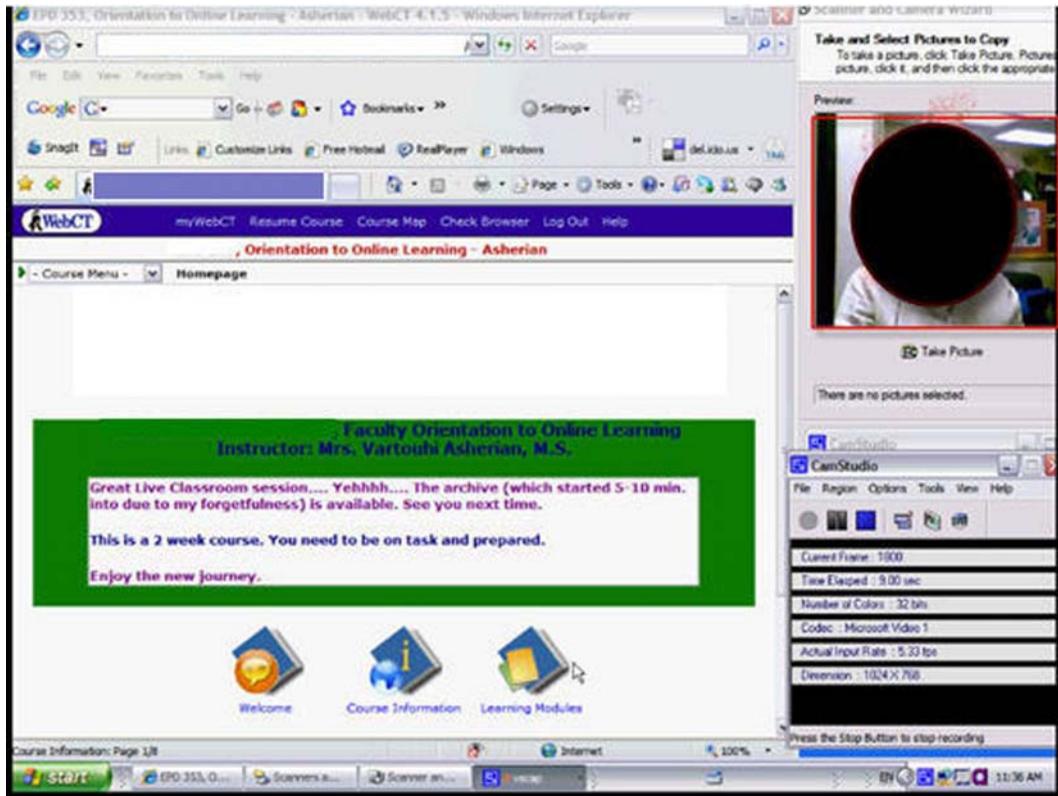


Figure 1. Snapshot of the video taken during observation.

online course. She can be considered an advanced user. Ms. H. found this course fairly easy to navigate. However, the audio clip that welcomed her to the course was a new feature for her. She was excited and pleasantly surprised by it.

Observation:

Okay, here I am on my course I think I should click where it says welcome pause

Okay, I am waiting play okay I have to hit play. Oh, it is an audio. That is my teacher.

Interview:

V: when you were listening to the welcome I could see your face lighting up thinking wow this is my instructor.

H: Yeah this is the first time I had an audio welcome message. I have not had audio welcome message before they all have just been something you read.

Her navigation from one screen to another was smooth. She did think that the communication tools that grouped mail and discussion board may be confusing for first time users. However, she commented that the course would lose its overall intuitive quality by changing it.

H: I think the communication icon being actually broken down into other icons. Which it does once you click on communication. It does break down into discussion board and mail. But if you are a first time user it might be helpful to actually see those things first and not have to click and see that just that old thing as "everything hanging off the end of your nose." Ha ha ... but that is pretty much the only thing of that as a first time user having it right there and maybe not make a logical connection of oh communication mail ha ...

V: Okay, I see your point

H: But then you'll have more icons on the homepage

NARRATIVE

The interview reviewed the experiences captured in the recording of the four segments of live online work or interaction with the course. It was a surprise to discover that Vygotsky's communication theory or inner speech was captured in the recorded observation.

Observation:

H: Let us look at WebCT mail. How do I send a message? Compose message?

H: how do I know who to send it to, I guess I can click on the browse button and click it. Okay, In the pop up window I recognize the first name, in there is my instructor. But I do not recognize the other names. So I click on the first name and highlight it and click select see what happens, oh it put it right into my send to spot. So this is going straight to my instructor and it has as send button here as well. I'll come back when I actually have something to send.

As a result the interview covered several topics that focused upon the intuitiveness and flow of the course. The interview started with a brief coverage on overall ease of navigation and course organization. It then evolved into a discussion on specific topics. It appeared that Ms. H. was using her prior knowledge at times "I guess I can click on the browse button and click it ..." and at times she was using the computer as a tool to guide and learn "OK" in the pop up window I recognize the first name, in there is my instructor." Ms. H. discussed the value of the home page's organization and how the syllabus clearly sets the course expectations. The use of the icons on the home page also made it easier for her to figure out where to start (see Figure 2 for an example of the home page). The select use of icons and the syllabus helped her stay on track and progress through the course in a logical fashion. Specifically she discussed how the opening of one icon led her to then open another in a logical and guided progression. Additionally, she discussed how the audio greeting found on the home page pro-

vided her with a sense of having received a personal touch from the instructor. It gave her a sense that the instructor was available to her.

Interview:

V: How did you feel about the audio vs. the written message? Was it better for you and your style of learning or ...

H: I read well and comprehend well so I do fine with the reading. The audio is just nice because it gives you a bit more insight or a little bit more personality of the instructor. Where you can get some of that personality with the text but not a lot it is pretty cut and dry. But, yeah, with the voice and the audio you kind of get a feel of your instructor more, more personal ...

Ms. H. was asked about potential changes to the course. She did not have anything specific to add. She was satisfied with the course structure. She stated that in her past experiences with online education she had to search for information because her instructor did not create links and provide clear references. Having easy access to resources was a clear incentive to taking another online course. Therefore the current course overcame these objections. A complete transcript of the interview is found in Appendix A.

DEVELOPMENT OF ISSUES

Carswell and Venkatesh (2002) conducted a study on web-based methods of instruction. Specifically, they investigated learning outcomes associated with the asynchronous distance education format. They gathered quantitative data and augmented it with qualitative data. The study made use of two theoretical perspectives from the technology literature and from the education literature to predict student reactions to this learning environment. The study included approximately 1,800 part-time graduate students that yielded 540 useful responses. The results from the qualitative portion of the survey were dis-

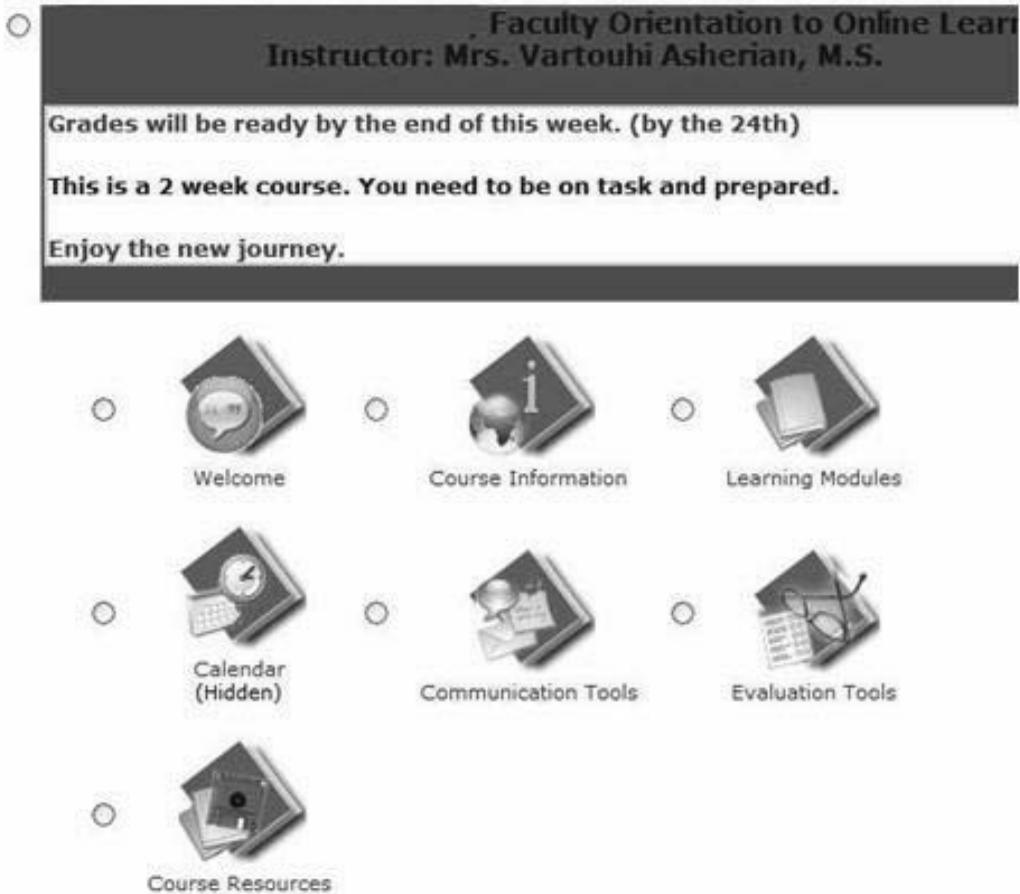


Figure 2. Homepage of EPD 353.

appointing in that they did not reach statistical significance. This may have been due to inadequacies in the learning outcome measures they selected.

However, the results from the qualitative portion of the survey were interesting. They found that if students are willing to use online learning technology, then the use of various forms of technology does not create an issue for students. A student's sense of satisfaction and performance is not altered if they are willing to make use of the technology. To students the issue is not so much the course learning environment, but rather the way the course is organized and taught. They want a course that is intuitive and where the

resources for their success are readily available. Also, the instructor needs to be seen by the students as providing additional value. The instructor should not be seen as a taskmaster who merely asks for assignments to be completed, or a parrot that repeats the readings.

Carswell and Venkatesh organized student comments into five categories. These five categories provide the students' insights into what makes the online environment effective and are described below.

1. *Course Organization*: Students were concerned about the ease of finding materials and information about

assignments such as requirements and due dates.

2. *Instructor Characteristics:* The instructor's responsiveness and perceived value to add something to the learning experience above and beyond what is provided in the course readings was seen as important by students.
3. *Learning Style:* If a student felt the course and medium matched their personal learning style and preferences then participating in an online environment was seen as a good match.
4. *Student Interaction:* Students perceived value in the course if interactions with other students provided something in addition to the readings and the instructions.
5. *Social Presence:* The relative availability of the instructor and fellow students was also seen as important to students. This could be either online or through other means.

Carswell and Venkatesh's categorization of student comments is especially interesting because of their relation to the comments made by Ms. H. during the course of her interview. She specifically commented on the following:

1. A clean and well-organized home page that made it easy to figure out where to start. She further commented that this was useful to her because her learning style was more visual than auditory.
2. The logical nesting of icons to guide the learner through the steps required to complete the course.
3. A well-written syllabus that provides clear expectations.
4. An audio greeting that makes the instructor appear to be more available and personable.
5. Clear links to resources and information that is required for completing

assignments and making the most of the course.

6. The availability of the instructor who in this course held virtual office hours, rather than held office hours at his or her physical office or substituted e-mail exchanges for set hours.

Four of the five Carswell and Venkatesh categories were spontaneously discussed by Ms. H. The only one she did not discuss was the availability of other students to interact with and facilitate the learning process (see Table 1). Ms. H.'s issues concerning an online course is aligned with those students who participated in the Carswell and Venkatesh study.

CLOSING COMMENTS

Clearly the present investigation is a case study that includes only one subject. The results may tell us more about Ms. H. than about other online learners. However, inasmuch as her general topics parallel those made by subjects in a larger study there is reason to lend credibility to her insights. The case study approach allows us to probe and study course design specifics in detail to further uncover how to best facilitate user intuitiveness by improving course design, increasing the perception of instructor availability, and making better use of student learning styles. Since this case study was done at the beginning of the course, the data are lacking. There needs to be further observations at mid-point and at the end of the course to provide an overall picture of the course's design. Therefore, further research needs to be conducted.

APPENDIX A

Interview transcript

Ms. H interview for Pilot study 6-22-07 by Vartouhi Asherian

V: Hello.

Table 1. Ms. H Interview Summary

	Course Organization	Instructor Characteristics	Learning Style	Student Interaction	Social Presence
Clean and well organized homepage	x				x
Nesting of icons	x		x		
Clear instructions (syllabus)	x				x
Audio message	x	x			x
Clear links	x	x			
Availability of instructor					x

H: Hello.

V: Wow

V: How are you this morning?

V: So I would consider you definitely an advanced user.

H: I am doing great.

H: I think so. <giggle>

V: Now just because we are recording this session it's not going to work. But Murphy's Law you know ...

V: Let me ask you this. Compared to these online classes you had taken, how different or similar this course was organized?

V: I have couple of windows popping up here. And you are Ms. H for the interview.

H: Eh pritty similar, it had a home page. It had the start here syllabus eh ... you know course content laid out your assignments the emails the discussion boards and then the grades where you are able to look up your grades and kind of keep track on how you are doing in the course.

V: I want to ask you couple of questions because it was very interesting when I went back and looking at the observation where you clicked and how you clicked in the course. First of all, is this your first online course that you have taken?

V: So it did not trough you off when you see the communication tools you figured there should be some other tools in there such as mail and discussion in there.

H: No, no this is not.

V: How many classes have you taken before?

H: You know once it dawned on me because some of my courses have said communication and some have had separate icons for email WebCT discussion board etc. It just, I guess, it doesn't really through you off it just looks different and you have to remember oh yeah communication logically that would be any type of communication so I probably should look here for WebCT mail and for discussion

H: Oh my goodness.

V: Just roughly.

H: 20

V: 20 online classes?

H: Perhaps, perhaps

board. It does not through you off but it lets you think and pause for a minute.

V: The other question I had is that when you were listening to the welcome message it was kind of ... I could see your face light up thinking, "Wow this is my instructor."

H: Yeah this is the first time I had an audio welcome message. I have not had audio welcome message before they all have just been something you read.

V: How did you feel about the audio vs. the reading was it better for you and your style of learning?

H: I read well and comprehend well so I do fine with the reading. The audio is just nice because it gives you a bit more insight or a little bit more personality of the instructor. Where you can get some of that personality with the text but not a lot, it is pretty cut and dry. But yeah with the voice and the audio you kind of get a feel of your instructor more ... more personal.

V: Okay interesting.

V: And when you looked at the course if can think back about the homepage. What do you think when you look at the homepage. Like what do you have in mind to start looking at first? To search for what is it that you want to look at first and search if it is not on the homepage.

H: If it is obvious of course it would be an icon that the instructor puts up that says start here or welcome. I think that's were you should go first if such one exists. If it does not the syllabus ... first place, I would go because then usually the welcome is embedded somewhere in the syllabus, if nothing else and then the bio of the instructor and then of course what is expected in the course. So that is the place I would start.

V: Did you feel overwhelmed when you were looking at the course homepage?

H: No, no. It was pretty not necessarily self-explanatory but it was clean it was not cluttered. It was not a cluttered home page. You could clearly see where to go. There was plenty of blank space as in the fact that it was not wall to wall icons. So it was easy to follow. Which is nice. And also, because it was not wall to wall icons you are not overwhelmed thinking oh my gush I got to click on all every icons there is much to do. So I like that. Some that have wall to wall icons you just look at it and feel like you are behind and you have not even yet started.

V: How about what did you find helpful to guide you in the course what was the most helpful thing in the course as you got started on it?

H: It kind of there were directions within the syllabus it lets you know where you could find other things. Then when you went to the communications tool the other icons then popped up to be more specialized for exactly for what you were looking at. So it kind of progressed in a logical way. You did not really have to hunt and search kind of thing necessarily. You did have to stop and think because it was not at the end of your nose but it was right there.

V: Okay

V: When you first look at the course. Imagine this. This is something you may want to take a minute to think. But when you first look at the course where do your eyes go to start looking for information? Do you look right top left, bottom left or right bottom? Where does normally you have a tendency of looking at when you are navigating? And after that, which direction do you go? Is there a sequence to the madness here is what I am looking for.

H: I have found. Of course I am not a first time user of online courses. But I have found generally that there is a sequence or some set of order. Generally left to right. There may be 2 rows. But it is generally 1

go to the right and usually I have found the syllabus to be in the left hand side in the first row. That is what I have generally found. Either the syllabus or welcome to be to be there. Then you proceed across either 3, 4, 5 icons depending and then underneath possibly another row. But that is what I have generally found it to be. Occasionally ... here has been a welcome kind of ... right in the center. But it is generally there is ... there is some kind of pattern.

V: From the student point of view on this course particularly. What would you think would be helpful if it was changed? Like icon location or information wise. If you can think back I know you may have forgotten it already but just thinking back is there something you may want to have changed to pop up easier for maybe someone not as experienced as you?

H: I think the communication icon being actually broken down into other icons. Which it does once you click on communication. It does break down into discussion board and mail. But if you are a first time user it might be helpful to actually see those things first and not have to click and see that just that old thing as "everything hanging off the end of your nose." Ha ha ... but that is pretty much the only think of that as a first time user having it right there and maybe not make a logical connection of oh communication mail ha ...

V: Okay, I see your point.

H: But then you'll have more icons on the homepage.

V: I think one other question again from the learner perspective. Do you have more tendency of clicking on the homepage icons or clicking on the left hand side course menu which is a more of a sequential list?

H: I use both. Unfortunately I have found in some courses one works and one doesn't, which it should not be. They

should both work. I do like the icons just because I also like pictures. I am a very visual. I am text base but I do like pictures. I guess I do have a tendency to use the icons on the home page.

V: Do you think that is a learning style preference or is it a ...

H: I think it is a learning style preference one the visual, and then too I think some perhaps the first time users may not know to click on the words so they will go to the pictures. Or vice versa, I do not know that first time users would know without investigating. That they can use either or. Once I get into the course and am going between page to page. I find it easier using the course menu then always going back to the homepage finding the cute little icons and moving on.

V: That makes sense.

H: Yeah.

V: So it can be used interchangeably depending on where you are in the course.

H: Definitely, definitely I like having the option of both.

V: I know I am jumping around here at this point. I was looking at the observation notes when you read through the part that office hours are online. You kind of chuckled and you were kind of happy about that. Can you elaborate on that?

H: Yes, yes when I take an online class one of the reasons I take an online class is because my time is so short my work schedule and my childcare and so it kind of defeats the purpose in my mind of and online class to only have office hours that you have to be at a physical office to go and visit your professor. So I like those professors that have the virtual hours. And that tell you exactly what they are. Not just send me an email and I'll respond. Which is nice but actually virtual hour that you know they are on call during that time period. So if you have

something pressing you know you can get an immediate response. So I like that. That is very nice.

V: Couple more questions.

V: When you went to post a discussion. Were the steps intuitive? Or does it come from experience, or what can an instructor do to make it obvious and easy for the students to post their postings on the discussion board.

H: Boy. Some of them come from experience. Because the quick and easy thing is it does not say send it says post. Because it comes in the format of an email so I guess you are used to seeing send. Your private email usually always says send. This says post. So you just need to realize that it means the same thing. It's going to take it from your place to someplace else. Ha ha. So that was the only thing I think off the bat that might through some people and really it is in the same spot down the lower left hand side it should be fine or in the upper left. Otherwise it has a spot for subject. I guess as long as students realize that discussion board and when you look at it is obviously divided into some week by week or topic depending on you know what the instructors divided yours had different topic character and vocabulary. So to me it was obvious so if you had to post something you go post it under that particular topic.

V: One last question. You do not have to give names or specifics. Thinking back from the multiple courses that you have taken. Think of a course where you were so lost navigationally trying to find your information. Give an example if you have had such a course. And did you feel like that this is a course that I am so frustrated I cannot find the information, I want to drop, and that was a reason for you to drop the course or even think you want to drop the course?

H: I have not dropped a course just because time and finance did not permit to be able to do that for that particular reason. But there are some that it's a waist of your time as the student. You are having to work twice as hard to just find the information. The instructor has needlessly made it twice as hard on you and twice as much work just to find your info not even doing it, not even participating just hunting and finding where it is at.

V: Have you had that happen?

H: Yes. I really do not like that. And could be that the instructor is not aware, because they have never navigated it from the student's viewpoint. I do not know. But it is very frustrating. Because again generally the reason you take online course is because time is at a premium you have 24/7 access and you want to get on you want to find your stuff and you want to do whatever is required. So I do not like homepages that are cluttered.

V: Aha.

H: Because you have to decipher which icon goes where, which is the most important and you click on some of them and they are almost ahhh fillers. They do not have ... What they have can be found under another icon as well. So there was really no need for that icon it was just to make you do one more click open one more thing look at one more thing that you could have found somewhere else. So it was just a time consumer. Which I do not like.

V: Thank you.

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Enhancing Teacher Performance With Online Programs

Douglas P. Barnard and Terry Hutchins

One question we are frequently asked is, “how do you evaluate your online teachers when you don’t actually observe them in a physical setting?” The Mesa Distance Learning Program has wrestled with this issue for several years and has tried different approaches that would improve skills for teaching online (i.e., experienced teachers mentoring new teachers, online professional growth on demand, distributing recent research and new teaching techniques). Another concern is, “how do we

know, whatever we do, that it was effective and did, in fact, improve teacher performance? Where is the evidence?”

Most learning management systems can sample the interactions between the teacher and students. We can determine the amount and quality of feedback provided to students, and we can monitor and provide feedback on these and other activities on a daily or other interval basis. Over time, we worked with our staff to develop appropriate teacher expectations and to establish a score on each expectation. This



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could be interpreted to serve as a means to evaluate our teachers in terms of meeting our expectations. Of course, all of our teachers have to be highly qualified and certified in their subject area of expertise.

The first step was to identify the expectations needed to ensure a high customer response from our parents and teachers. We developed five topics we felt were critical to assess, and the criteria that tells us the expectation was met appears in Table 1.

Following each expectation is the criteria used to determine if the teacher met the expectation. "Falls far below the standard" means the expectation was not met. "Approaches the standard" means the standard was not met, but was close. "Meets the standard" means that the expectation was met. "Exceeds the standard" means the expectation was met at a higher level than expected.

We also surveyed each teacher to determine whether the criteria (enclosed within parenthesis) were appropriate. According to this survey, the teachers felt the standard listed as acceptable on the survey needed to be higher.

Another area we felt important to evaluate was the issue of feedback to students. It was not enough for the teacher to note "good job" or "nice work." We wanted quality feedback that could help the student improve. In our system, feedback was accomplished through the message box reply or on the lesson document itself. Since the management system kept track of all feedback, we could judge which type

of feedback was used electronically. However, our specialists felt a need to verify the quality by sampling teacher feedback several times per month. A scattergram was used to plot teacher feedback. A scattergram would have a green dot to indicate where that teacher was on the scattergram, whereas the blue dots represent all the teachers in a curriculum area or department, and the red dots represented all the other teachers in the program. The teacher met this standard if their green dot was in the upper half (scattergram 2). Teachers did not meet the expectation if they were in the bottom left quartile (scattergram 1).

At our annual teacher meeting, the evaluation system was explained to our teachers. All teachers were given feedback (scattergram 1) on how they met the expectation. Obviously, teachers could tell how well they were meeting the feedback expectations as compared to all other teachers in the program. It was pleasing to realize that a large percentage of our teachers were already meeting the expectation.

One month after informing our teachers about this electronic system of evaluation, and the initial individual profile provided at the meeting, we took our second look at the data. We were pleasantly surprised to note the differences. That is, scattergram 2 indicated that all the dots were in the correct quartile(s). The number of teachers meeting this expectation was 100%.

We had anticipated that some teachers would think that no action would be taken regardless of what they did or did not do.

Table 1. Expectations Needed to Ensure High Customer Response, and Their Criteria

Expectation	Criteria
1. Prompt message box reply average:	(10 hrs = meets standard)
2. Message box reply in 24 hours:	(90% = meets standard)
3. Prompt assignment grading average:	(24 hrs = meets standard)
4. Assignment grading in 48 hours:	(90% = meets standard)
5. Assignment feedback provided:	(90% = meets standard)

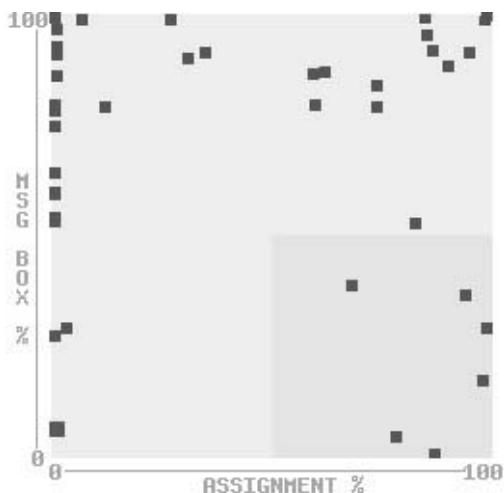


Figure 1. Scattergram 1.

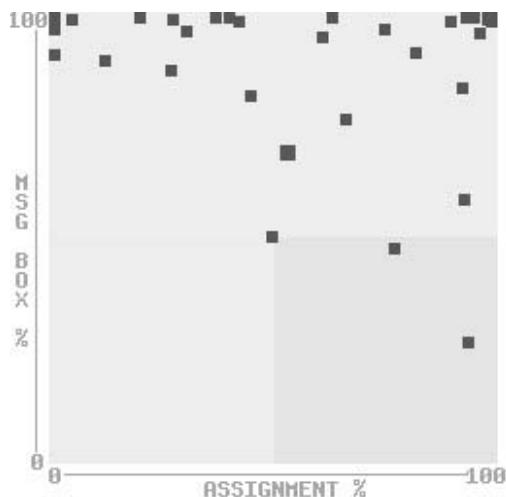


Figure 2. Scattergram 2.

Table 2. Monthly Standards Check/Consequences

Month/ Standard	1	2	3	4
Logical consequences	<ul style="list-style-type: none"> Specialist contacts teacher (optional) Teacher self-corrects Specialist documents actions 	<ul style="list-style-type: none"> Specialist contacts teacher Specialist documents actions Goal-setting Teacher must commit to improvement Warning: Sections closed if no sign of improvement/possible change in method of pay 	<ul style="list-style-type: none"> Specialist contacts teacher Specialist documents actions Goal-setting Teacher must commit to improvement Sections closed/change in method of pay 	<ul style="list-style-type: none"> Specialist contacts teacher Specialist documents actions Specialist contacts director with copy of documented actions Students transferred to another teacher Meeting with director regarding status with program

At the annual meeting, we also distributed a rubric outlining the steps that would be taken if standards were not met. The rubric is presented in Table 2.

For most teachers, the first step of the rubric was all we needed to have a highly performing staff. We've had to use all of the rubric steps for only one instructor. Currently, our specialists examine the individual teacher profile once a month and use the rubric if necessary. We have had

significant teacher improvement in meeting our expectations without really saying much.

To determine if the process used was statistically significant, we took, for each expectation, the first score provided at the fall meeting as our beginning point (pre-test). We then took the score 1 year later (posttest) to determine whether or not the gains in teacher performances were significant or not using a simple (*t*) test of signifi-



Figure 3. Prompt message box replies in hours.

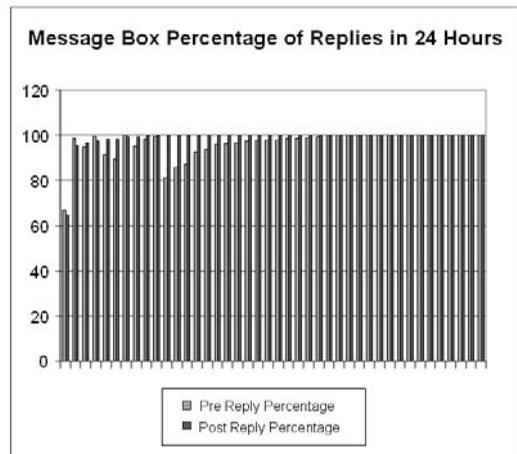


Figure 4. Message box percentage of replies in 24 hours.

cance. Although most of our teachers were meeting our expectations from day one, we were especially concerned about the few who were doing only enough to get by, but not really putting forth their best effort.

The first comparison measured differences in reply times between pre- and postintervention. At pretest, the average reply time was 7.6 hours. At posttest, the average reply time was 5.5 hours, a difference of 2.1 hours. These reply times were found to be significantly correlated $r(41) = .72, p < .01$. There was a significant effect for reply times, $t(40) = 2.91, p < .01$, with posttest reply times being significantly lower than pretest reply times.

The percentage of replies in 24 hours generally increased from pretest to posttest. There was a ceiling effect exhibited in much of the data, with both pre- and posttest percentages being 100%. As such, inferential statistics were not applicable to this type of data.

The third comparison measured differences in grading assignment times in a 48-hour period between pre- and postintervention. At pretest, the average grading time was 15.1 hours. At posttest, the average reply time was 11.4 hours, a difference

of 3.7 hours. These reply times were found to be significantly correlated $r(42) = .71, p < .01$. There was a significant effect for grading times, $t(41) = 3.36, p < .01$, with posttest grading times being significantly lower than pretest grading times (see Figure 5.).

The percentage of grades posted in 48 hours generally increased from pretest to posttest. There was a ceiling effect exhibited in much of the data, with both pre- and posttest percentages being 100%. As such, inferential statistics were not applicable to this type of data (see Figure 6).

The quality of feedback percentages generally increased from pretest to posttest. There was a ceiling effect exhibited in some of the data, with both pre- and posttest percentages being 100%. Inferential statistics were not applicable to this type of data.

The response times and quality of responses improved from pretest to posttest on all five measures. Teachers responded more quickly after the intervention, and the quality of their feedback improved as well.

Of course, those teachers doing a solid job from day one continued on that path for the year. By analyzing the data for just

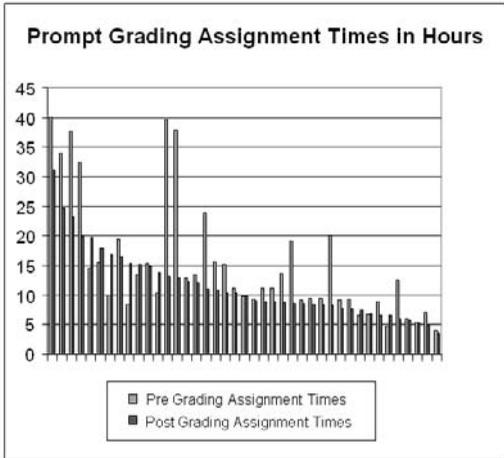


Figure 5. Prompt grading assignment time in hours.

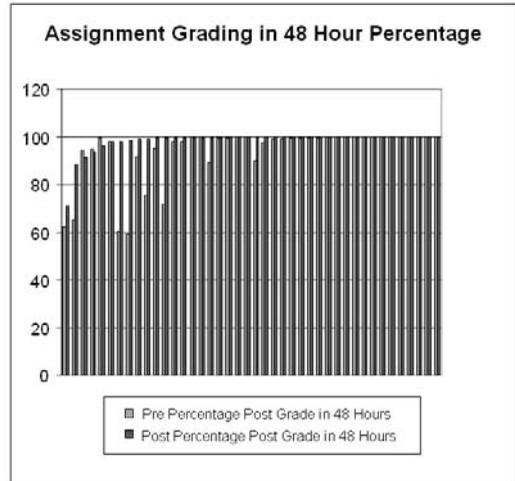


Figure 6. Assignment grading in 48 hours percentage.

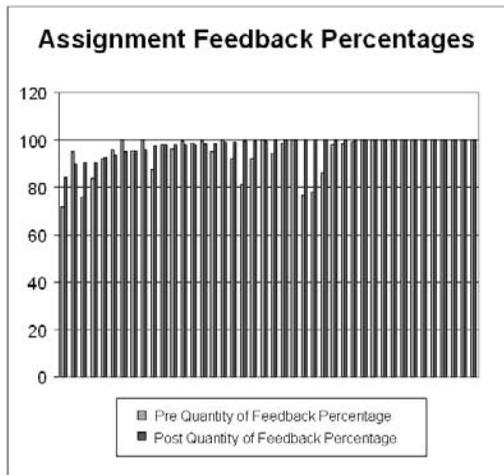


Figure 7. Assignment feedback percentages.

those not meeting expectations on day one, there was a significant difference in their score gains from pre- to posttest.

The original question was, “where is the evidence that indicates that, whatever is done to evaluate online teachers, that the process was effective and statistically significant?” This study shows evidence that

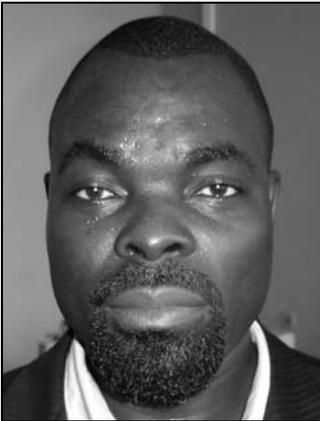
teacher performance was statistically changed for online teachers by providing a list of the expectations, by providing feedback to how each teacher scored on those expectations, and by providing specific consequences. We found that the process did change and improve online teacher performance.

Challenges in Higher Education Distance Learning in the Democratic Republic of Congo

Banza Nsomwe-a-nfunkwa

INTRODUCTION

Open and distance learning has created opportunities for all sorts of people in all walks of life to access education (Badza & Chakuchichi 2009). However, distance learning in the Democratic Republic of Congo is still a field demanding a lot of research and practice to ensure successful implementation.



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The use of information and communication technology (ICT) in distance learning in the higher education sector is facing a lot of problems in the Democratic Republic of Congo. This article addresses only some of the main obstacles; the complete list is very long.

The first problem is the limited technologies. The Democratic Republic of Congo depends on its ICT through imported goods; all hardware and software are made outside of Democratic Republic of Congo.

The second problem is the exorbitant costs for such technologies; because all the equipment is imported, it is subject to taxes, shipment fees, and so on.

The third problem is that many higher education institutions are located in rural areas that stable electricity—or lack electricity entirely, creating a major obstacle to the effective use of ICT for distance learning.

The fourth problem is that in some corners of my country, old technologies such as tape recorders and video are still a novelty; how can we even think to talk about new technologies in those areas?

The fifth is a lack of trained instructors. Technologies can be readily available at any place, but it will be very complicated to use it effectively because of the lack of trained people.

NEED FOR DISTANCE LEARNING

The Democratic Republic of Congo, with 49 years of independence from Belgium, has never entered such a huge problem of reconstruction and development as today. The program of reconstruction of the country is divided into five sectors: education, electricity, water, health, and infrastructure. In light of this huge program, the country is in great need of skilled people to contribute to and participate in the Congolese work market.

Because the country has a high rate of illiteracy, a new condensed and functional version of the content of learning is needed so the population can learn in their spare time. Many workers are highly interested and motivated to learn in their spare time, because they can be working and learning at convenient times, improving their skills to match the evolution of their jobs. People are working under stress created by new jobs, social need, and economic situation; self-training is needed for many people to update their skills and knowledge.

CHALLENGES TO DISTANCE LEARNING IN THE HIGHER EDUCATION SECTOR

It is easy to talk about distance learning and its needs in the Democratic Republic of Congo but is very hard to talk about the challenges because they are so numerous.

The first challenge is connected to the quality of materials. Here the big question is how much the people trying to develop these materials are qualified for this job, abiding by national requirement and policy.

The second challenge is related to a lack of financial resources. In the last few years of war, the financial area is facing many problems. It is unclear if the Democratic Republic of Congo is ready to provide adequate financial resources to distance learning.

The third challenge concerns the attitude of Congolese society to distance learning. From the colonial educational system, psychology, and the attitude of the Congolese people, they were and still are prepared to respect and accept conventional education and not really to consider distance learning. They argue that the face-to-face educational system is the best.

The fourth challenge is the lack of distance learning management skills. In the Democratic Republic of Congo, distance learning is hesitantly being accepted step-by-step by few people. However, the management of the distance learning system is still a huge challenge.

The last challenge is technophobia.

STRATEGIES

Distance learning is a very complex and complicated system. To find solutions to all challenges facing the Democratic Republic of Congo in the establishment of distance learning in the higher education sector, I put forward some suggestions:

1. Information about distance learning should be provided to the people of the Democratic Republic of Congo.
2. If distance learning in the Democratic Republic of Congo is to succeed, it is an obligation to prepare distance educators.
3. Organize conferences, seminars, discussions and reflection on the topic of distance learning and its impact on the Congolese people's well-being.
4. Organizing training on the management of distance learning by the Congolese people.
5. Organizing workshops on the design and development of distance learning courses.
6. Help new distance educators learn about methods of teaching
7. A huge campaign to encourage the people of the Democratic Republic of Congo to study at a distance.

8. Organizing training on the evaluation system before, during, and after the lesson.
9. Prepare counseling and support services for distance learners.

CONCLUSION

Effective use of distance learning in higher education in the Democratic Republic of Congo is still a long way from realization. I do believe that a huge campaign on the impact and benefit of distance learning in the Democratic Republic of Congo will

contribute to development of appropriate solutions to the many challenges facing distance learning in my country. Then this developing country can enjoy the benefits of new information and communication technologies.

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BARRIERS TO DISTANCE EDUCATION IN THE REPUBLIC OF CONGO

1. LIMITED TECHNOLOGIES
2. EXORBITANT COSTS FOR TECHNOLOGIES
3. UNSTABLE ELECTRICITY
4. NEW TECHNOLOGIES HAVE NOT REPLACED OLD TECHNOLOGIES

Learning Mathematics at a Distance in Pakistan

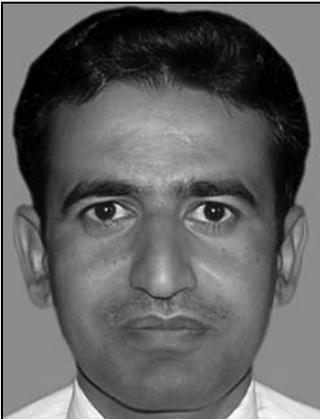
Students' Opinions

Shahinshah Babar Khan

INTRODUCTION

Education provides a way to progress and prosperity. The nations with high literacy rates are more prosperous and more independent and the nations with low literacy rates are depending on other nations even for the use of their own resources. *The Dakar Framework Education for All* (United Nations Educational, Scientific, and Cultural Organization [UNESCO], 2000, p. 8) says that education is a fundamental human right. It is the key to sustainable development and

peace and stability within and among countries, and thus an indispensable means for effective participation in the societies and economies of the twenty-first century. It is an admitted fact that education plays a vital role in the personality of individuals. Educated peoples can play their role effectively in the progress of the nation. The importance of education has been increased with the emergence of globalization. This phenomenon has created many opportunities and challenges for the nations all around the world. Globalization has affected the educational system of the whole world. Almost all countries in the world are trying to educate more and more people so as to play their role for the economic development of their country. The aim of distance education is to educate those people who were dropped at any stage or unable to attend conventional institutions due to different problems. Distance education accommodates such people in all respects. Pakistan is one of the most populated countries in the world. According to a Government of Pakistan (2009) economic survey for 2008-2009, "total population in Pakistan is 163.76 million in 2008-2009" (p. 177). Pakistan's National Educational Policy (2009) declares that education is a vital investment for human and economic development and is influenced by the environment within which it exists. The government of Pakistan is determined to raising her literacy rate, though it is a big challenge. In a 2007-



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2008 economic survey of Pakistan (Government of Pakistan, 2008), the role of education in economic development is stated in the following words:

Education is central to socio-economic development of a country. It plays a critical role in building human capacities and accelerates economic growth through knowledge, skill and creative strength of a society. Education also creates awareness, tolerance, self esteem and confidence which empower people to defend their rights. (p. 169)

In Pakistan, due to different problems the majority of students drop out after completing elementary school. Bilquees and Saqib (2004) conducted a study entitled *Drop-Out Rates and Inter-School Movements: Evidence from Panel Data*. One of the objectives of this study was to determine and analyze the factors that force the students to drop out. They found that female drop-out rate in rural areas (24.6 %) is high as compared to female drop-out rate in urban areas (17.0%). While male dropout rates for urban and rural areas are virtually identical (23.7 % and 23.5 %), they found that economic factor is the main reason of high male drop-out in urban and rural areas. Moreover, less government efforts and cultural values are the main reasons of female dropout in rural areas.

Pakistan's national average ratio of secondary to primary school is 1:6 but, in certain parts of the country, it reaches 1:13 (National Education Policy, 2009). Government is trying its best to bring these dropped students back into the educational stream. In 1974, the government of Pakistan established Allama Iqbal Open University (AIOU), which imparts education through distance mode. Currently, AIOU is one of the mega universities in the world. It is providing education from certificate level to PhD level in arts as well as in science subjects. At the secondary level mathematics is a compulsory subject in the conventional institutions and holds the

same position in the distance education system. Mathematics is also a compulsory subject at the secondary school level offered by the university. The main aim of teaching mathematics at this level is to create critical thinking among the students, and to enable them for the use of mathematical laws and principles in the actual situation.

LITERATURE

Education is universally considered to be an important tool of change that has a strong correlation with the overall social and economic development of a country (S. Siddiqui, 2007). UNESCO (2006, p. 4) describes that in many emergency situations, children and youth may be cut off from formal schooling activities as a result of ongoing conflict and insecurity. It may therefore be useful to consider distance education alternatives to enable them to continue learning. In documenting the reasons why young people do not have access to education, the following questions are asked:

- Is the distance to school too far or the route too insecure for the children to travel?
- Are children and youth engaged in income-generating activities school hours?
- Do young women have children of their own or other domestic responsibilities that prevent them from attending formal schooling?
- Do postprimary opportunities exist locally?

Distance education provides a solution to all these problems. At present it is not possible for every one to attend the conventional institutions; there are some requirements for these institutions that bind the students for the whole time. On the other hand, distance education provides the opportunity for learning with

earning. Globally, the concept of the conventional institution is changing. People are showing more interest toward distance education systems. "Schools and universities will change more drastically than they have, since they assumed their present form 300 years ago when they organized themselves around the printed book" (Drucker, 1992, p. 97). Studies (Kubala 2000; Sullivan 2001; Weems 2002) show that students' primary reasons for taking distance courses are flexibility in scheduling and convenience of place.

As Butcher (2000) notes,

Distance education describes a set of teaching and learning strategies (or education methods) that can be used to overcome spatial and temporal separation between educators and learners. These strategies or methods can be integrated into any education programme and potentially used in any combination with any other teaching and learning strategies (including those strategies which demand that learners and educators be together at the same time and/or place.)

In Pakistan, a significant segment of the population is not enjoying the basic right of education. According to the Government of Pakistan's (2008) *Economic Survey of Pakistan (2007-08)* the literacy rate of the age group 10 years and above is 55% (male 67%, female 42%). The government of Pakistan is well aware of the relationship between education and development and is trying its best to increase the literacy rate. UNESCO (2007) issued a report entitled *Universal Periodic Review (UPR) of Pakistan, 2007*, and pointed out the following challenges which the Pakistan government is facing to ensure the provision of free basic education to all are below:

- financial constraints—inadequate provision for education in the state budget;
- low absorptive capacity of the education system;
- political interference at various levels;

- direct costs borne by parents, for example: stationery, uniforms, transportation, payment of charges under "school fund," and pocket money for lunch/snacks during school hours;
- poor physical facilities in rural schools and distance to schools in rural areas; and
- teacher absenteeism.

In 2001, UNESCO conducted a study of distance education and the future of distance education in the nine countries collectively known as E-9 (Bangladesh, Brazil, China, Egypt, India, Indonesia, Mexico, Nigeria, and Pakistan) and pointed out the following facts about Pakistan:

Eight million children of 5-9 age groups are never enrolled in school and half of the 12 million that are enrolled may drop out before completing primary education. Of all the E-9 countries, Pakistan has the lowest survival rates at the fifth grade. (UNESCO, 2003, p. 30)

To meet these challenges, in 1974, the government of Pakistan established Allama Iqbal Open University. The idea of the open university was described in Education Policy (1972-80) in the following words:

Open universities are being used in several countries to provide education and training to people who cannot leave their homes and jobs for full time studies. An open university will, therefore, be established to provide part-time educational facilities through corresponding courses, tutorials, seminars, workshops, laboratories, television and radio broadcasts and other mass communication media. (p. 22)

Allama Iqbal Open University offers Secondary School Certificate (SSC) in the following four disciplines: SSC (General), SSC (Health), SSC (Home Economics), and SSC (Dars-e-Nizami).

In Pakistan, mathematics is taught as a compulsory subject from Grade 1 to Grade

10. It is no exaggeration to say that the history of mathematics is the history of civilization. Mathematicians can take pride in the fact that their science, more than any other, is an exact science (Sharma & Sharma, 2008, p. 5).

According to M. H. Siddiqui (2005):

Today's world is much more mathematical than yesterday's, in that productivity in today's world requires greater mathematical abilities than did yesterday's. Even most common percents, ratios and discounts are done with calculators instead by hand. Tomorrow's world will be even more mathematical than today's. (p. 156)

The National Curriculum for Mathematics Grade I-XII (Government of Pakistan, 2006) says that mathematical structures, operations, and processes provide students with a framework and tools for reasoning, justifying conclusions, and expressing ideas clearly. Learning of mathematics needs understanding of basic ideas in mathematics, ability to compare different quantities, and differentiation between the basic concepts. There are some concepts that are abstract in nature; in understanding these ideas students feel many problems. Many mathematical statements are abstract in nature; the result is that students take very little interest in them. To create necessary interest is a constant problem for the teachers (Reddy & Nagaraju, 2007).

According to Saeed (2007):

At secondary level, there are four main streams: arts and humanities, science, computer, and commerce. The majority of the students either opt science or arts and humanities group. Mathematics is one of the compulsory subjects for these four streams of the students. The overall performance of students in mathematics and English is low through out the country. This is evident from the results of the Boards of Intermediate and Secondary Education (BISEs) about one-third of the

students qualify mathematics with the minimum passing marks i.e. by securing 33% of the total score. Though it is difficult to ascertain without evidence, but the researchers have experienced that many students at secondary level leave schools owing to difficulty in English and mathematics. (p. 44)

A document from the Ministry of Education (2003) of Rwanda states that there are fewer students studying mathematics at advanced level and university level compared with other subjects such as humanities and arts. There is a high failure rate of students in national mathematics examination at all levels. In distance education system, at secondary level mathematics is taught with the same spirit. The aims of teaching of mathematics to the distance learners are to enable them to understand the world around them and use mathematics for day-to-day life.

THE STUDY

The population of the study was the students of secondary level of Allama Iqbal Open University. A total of 100 students were randomly selected from Bahawal Pur Division. These students have left their education many years ago due to different problems. Currently, they were busy in some job. Distance education once again provides the opportunity to learn. A questionnaire was developed using a five-point Likert scale for knowing the opinion of distance learners of secondary level about secondary school mathematics. Five options (*strongly agree, agree, uncertain, disagree, and strongly disagree*) were given and they were asked to choose one option. The researcher himself distributed the questionnaire to the sample in Bahawal Nagar district, while in districts Bahawal Pur and Rahim Yar Khan, questionnaires were distributed with the help of mathematics teachers. The questionnaire was translated into

Urdu (the national language of Pakistan) so that the students could understand it clearly. Each option was assigned a numeric value: SA (*strongly agree*) = 5, A (*agree*) = 4, UNC (*uncertain*) = 3, DA (*disagree*) = 2, and SDA (*strongly disagree*) = 1.

DISCUSSION

Currently, distance education is working parallel to traditional learning. Pakistan is one of the countries that introduced the concept of distance learning when this idea was very new to the whole world.

Table 1. Survey Results, by Item

Item No.	Statement	SA	A	UNC	DA	SDA	X	SD	t Value	Significant/ Nonsignificant
1	Mathematics is an interesting subject.	25	5	43	24	3	3.25	1.17	2.14	Nonsignificant
2	Mathematics helps in day to day life situation.	52	24	21	2	1	4.24	0.922	13.44	Significant
3	Learning of mathematics helps in understanding of other subjects.	55	13	21	10	1	4.11	1.12	9.93	Significant
4	Secondary school mathematics create critical thinking and logical reasoning.	45	44	3	5	3	4.23	0.95	12.92	Significant
5	Mathematics' learning is only the memorization of formulae and putting some values in them.	23	47	1	9	20	3.44	1.45	3.03	Nonsignificant
6	Lack of basic knowledge in mathematics is a barrier to better understanding.	39	52	2	6	1	4.22	0.84	14.60	Significant
7	Assignments of Mathematics help in preparation for final examination.	37	54	6	2	1	4.24	.74	16.75	Significant
8	Tutorial meetings provide chances to clarify those questions which are difficult and more conceptual.	36	50	6	5	3	4.11	0.94	11.79	Significant
9	In tutorial meetings, teachers use different methods of teaching mathematics for better understanding.	23	38	6	30	3	3.48	1.23	3.91	Nonsignificant
10	Learning of mathematics through distance mode is easy as compared to conventional learning.	12	48	20	17	3	3.49	1.0	4.85	Nonsignificant

Allama Iqbal Open University of Pakistan is adopting new technologies and new trends to facilitate its consumers. While in distance mode, student and teacher are far away from each other, though students interact with each other in tutorial meetings; however, these are not a compulsory component—many students ignore it and the students who attend these meetings seek answers to questions they find difficult and teachers concentrate on the queries of the students. Distance learners at secondary level think that mathematics is not an interesting subject, but mathematics is very important for day-to-day life. Mathematics trains the students in using logic and reasoning and provides a foundation for understanding other subjects in a logical way. Mathematics at this level fosters critical thinking and understanding of the patterns around us. When students were asked if “mathematics learning is only the memorization of formulae and putting some values in them,” they disagreed. They expressed the view that mathematics is not the name of some formulae and their use in the abstract situation. Lack of basic knowledge in mathematics is a barrier to better understanding. Assignments are a compulsory component that aims to provide practice and prepare the students for the annual examination, and students confirm that assignments are very helpful for their final examination. Tutorial meetings provide a forum for teachers and students to interact with each other and discuss their problems and try to find the solutions of such problems. Students were of the opinion that tutorial meetings are helpful for clarify such concepts which required basic knowledge. When the students were asked about the methodologies of teaching mathematics in the tutorial meetings, they noted that the teachers used only traditional methods of teaching mathematics. The students also noted that learning of mathematics through distance mode is not easy as compared to conventional learning.

FINDINGS

The following are the seven main findings of the study.

1. In distance learning, students at the secondary level feel that mathematics is not an interesting subject.
2. Learning of mathematics is helpful for day-to-day life and also helps students in understanding other subjects.
3. Mathematics encourages critical thinking.
4. Learning of mathematics is not only memorizing facts and formulae.
5. Lack of basic knowledge in mathematics is a hurdle in understanding of mathematical concepts.
6. Assignments and tutorial meetings are helpful for learning mathematics.
7. Learning of mathematics through distance mode is not easy as compared to conventional learning of mathematics.

RECOMMENDATIONS

In distance learning the content of secondary level mathematics is almost same as the content of mathematics taught to the students in the conventional institutions. AIOU split the syllabus of secondary school mathematics in two parts: part one is offered in the second semester and second part is in third semester. If the syllabus may be divided into four parts, it will facilitate students. Moreover, regular classes in evenings may arranged for a specific period in the conventional institutions where students may enjoy the actual situation of learning. It may also help them in building more solid concepts of mathematics.

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Customizing Online Learning

Irving H. Buchen

Of all the compelling reasons why distance education has exhibited such impressive growth across the board and attracted so many new students and business advocates, nothing matches its compulsive developmental nature. Typically, the advances like those dizzying variations of smartphones are technologically driven. Incrementally non-stop, the technology of e-learning has addressed, closed, and even transcended the gaps between face-to-face traditional and distance learning.

Increasingly, online delivery can currently take place in real or simulated time, with total voice and visuality; and accom-

panied by multiple sources or frames simultaneously available and displayable. Information sharing and knowledge transfer thus now occur in data environments so rich and multiple that they resemble news or war situation rooms offering unlimited access to an incredible range of sources capable of sustaining any feeding frenzy level.

The net result is the repositioning of the e-learner, who now has at his or her fingertips a span of access and control that leaves conventional modes behind. The old goal of trying to catch up or proving to be as good has been replaced by a delivery standard of best practices that makes online learning the standard to match or beat. But essentially that was inevitable and only a matter of time; because e-learning has put all its delivery eggs in the one basket—of technology—which tirelessly and incrementally distances itself from yesterday's incarnations.

But while all this sensational perfecting of the technological environment is going on in the foreground, a quieter but equally creative drama is going on in the background but focused now on the learner not as user but as customer. A number of structured relationships have been developed to demonstrate once more the capacity of online learning to be not only learner-centered, but also now to customize the delivery of its services—to be a structured learning version of Facebook and Twitter.

The two general service areas focused on are academics and careers. The first is pre-occupied with management in the here and now and uses e-tutoring and e-coaching. The second area services career develop-



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ment especially in the future and provides access to job trends and fields, here and abroad. But common to both is a passion for diagnostics and metrics. Customizing can only be effective if it is focused. Thus, all efforts are preceded and buttressed by tests and surveys; and the directions and foci dictated by such precise findings.

Increasingly online universities are in the testing business. They may broker access to outside validated instruments at slightly discounted prices or in many cases develop with the expertise of their faculty consultants their own instruments. Thus, e-tutoring is used to deliver customized services in two major areas—online learning management and subject matter catch-up. But like all call centers, the ally or enemy is time—and the quality of the testing database.

To be effective, productive, and cost-limiting, e-tutoring has to rely on diagnostic findings to zero in on what is needed; and to do so as a time-driven way. That clears the field and allows the focus to pinpoint and isolate the application of remedies. Indeed, testing has become such an indispensable ally of tutors and time that many are now being trained as testing interpreters. In some cases that has also been linked to when to make referrals—when tutoring has to be shifted to coaching because of the complexity of the problem and the time required. Most universities do not charge separately for tutoring but employ cost-sharing for coaching.

Although initial references to written materials for help are routinely offered by tutors, learners seldom choose that route of follow up. It is evidently not what they prefer or value. Clearly, such use also pales beside the word-of-mouth reputation of how much faster, more targeted and customized tutorial services are. Indeed, in many ways tutors and coaches are perceived as critical as faculty, sometimes even more so in the experience of turn-around. What also attracts learners is the diagnostic art of distinguishing between tutoring and

coaching. Preliminary estimates determine whether the problem posed is fixable with tinkering or tweaking or requires the kind of depth of overhaul that takes one back to square one. Indeed, square one problems are quickly tagged as such for coaching.

Thus, if the problem is punctuation—of whether periods or commas go inside or outside of quotation marks—that is a tutorial problem. If the problem is appropriate lengths and substance of paragraphs, or transitions between paragraphs or summaries, it can start with the tutorial but it is likely to evolve into a coaching challenge. In all cases links to academic advisors and faculty are maintained for feedback.

Although addressing the management of online learning is an area of expertise built up over the years by e-tutoring, there are a few new wrinkles. The first is to couple employment. Issues of work-life balance are now doubly compounded. The second issue is that multitask management has become a new norm. The third issue is the increase of travel but now in an increasingly global world where there are often problems of language fluency and technological obstacles of connectivity and compatibility. But these are manageable compared to the customizing of career counseling.

Far more formidable than academic counseling is career counseling. That is largely due to online learners being older, already employed, and generally career-wise. They are also unusually resourceful and expert job searchers and researchers. When asked what would be most helpful, their characteristic answer is data but in the special form of career trends. They want to follow the practice of Wayne Gretzky, who skates not to where the puck is but where it will be. Indeed, rather than trying to replicate such professional services, some universities have contracted with monthly trend newsletters in the fields of their degrees that explore on a global basis job career directions; and share the contents with both current students and alumni.

Often this is further customized and supplemented by offering career related webinars using alumni as presenters. In some cases, companies with job openings are also invited to post them on university websites. Whatever costs are involved in customizing this service are more than made up using career change as a fertile ground for attracting new enrollees to short term turn-around certificate programs geared to the changing job market.

Finally, there are some tentative signs of an ambitious extension of this customizing of career services which may involve major policy level discussion and change. Although too early and isolated to recommend or describe in final and implementable form, it nevertheless builds on the five major and documented mega career disruptive patterns: job obsolescence; knowledge aging; new jobs that never existed before; at least three to five major career changes in a lifetime; and paradigm shift-created jobs.

But in this case, rather than only trying to anticipate and track what will develop in a “fluxy” future, there is an attempt to be part of the solution rather than the problem—to put in place that which matches rather than only tries to catch or keep up with the five job patterns—to guarantee the job currency of the diploma through life-long education.

Customizing here takes the radical form of a career-long partnership between learner-alumnus and university to minister to the knowledge and job obsolescence of its graduates. In effect, the university guarantees the duration and durability of its diploma. It offers continuing education of the original career choice to assure performance competence. In terms of updating and upgrading, alumni are treated like university employees—entering into an open-ended growth contract with their alma mater that now plays a lifelong

parental role of looking-out and looking-ahead for its offspring.

In many ways, such customizing of ongoing job competence is already being done although in partial, piecemeal uncoordinated and unofficial ways. Many alumni programs already are extensive and impressive and functioning as second universities already. Then, too, many also are currently using distance education to deliver such career support worldwide. But if what is sought is a basic career change, that is not part of the basic guarantee. Like the shift from tutoring to coaching, that is a square one situation and requires a separate degree solution. To be sure the university can play a significant transfer role there and then offer the same guarantee partnership to that new career choice. If the university already has demonstrated living up to that facilitating role earlier that will often clinch the new arrangement and decision.

Will it happen? It is likely. All that it will take is one or two major e-learning universities seeking comparative and competitive advantage announcing such a new arrangement and topping it all off by adding it to their vision and mission statements. Meanwhile, it might be a worthwhile exercise to bring together a task force of attorneys, accountants, admissions/recruiting professionals, continuing education and alumni directors, e-learning specialists, etc. to discuss the prospect and run simulations.

But whatever the outcome three patterns are clear: only distance learning institutions seem to be contemplating such a major shift; the track record of e-learning and e-coaching and effective use of diagnostics augurs well for it being successful; and finally it is but the latest version of a long term trend of servicing of learners in general and of late customizing that delivery.



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Unified Learning and Collaboration

Meeting the Needs of Education and Training in the Twenty-First Century

Gary Dietz

While a blended solution of asynchronous and synchronous learning remains valid today, the scope of what educators and learners need has broadened. As instructors and trainers change with the times to teach digital-native learners, their practices must change to reach them.

Learning must be less structured and more informal, self-enabled, interactive, and collaborative. The early success of new

tools, like social networks, video, wikis, podcasts, instant messaging, and more, show a demand for learner-driven education. At the same time, educators are resource-constrained and must economically find and leverage relevant content and peer expertise to develop new practices with these twenty-first century tools—while maintaining high-quality teaching and learning.

This article introduces a unique approach called “unified learning and collaboration” (or ULC), the delivery of a cohesive set of technology solutions to bring content, instruction, and community expertise to teachers, trainers, and learners, regardless of who or where they are, what or when they need to learn, or their individual learning styles. The true power of ULC lies in seamless integration—making access to these things easy, end-user adoption quick, and use intuitive.

UNIFIED COMMUNICATIONS

You may be familiar with the term unified communications, or UC. But if your core mission is education or training, UC is not nearly enough. I’d like to make a case for adding an “L” and expanding the “C” to make unified learning and collaboration, an approach that meets the challenges of education and training in the twenty-first century more comprehensively, better ser-



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vicings educators, administrators, and technologists.

To address the current and long-term needs for academic institutions and training organizations, it's critical to target the things that need to be "unified" beyond communications. While there are many solutions to communication challenges, they do not deliver a cohesive set of technology solutions to bring content, instruction, and community expertise to educators and learners—anytime, anywhere, and for any learning style.

UNIFIED LEARNING AND COLLABORATION

By unifying your enterprise technologies—video and web conferencing, instant messaging, phone, learning and content management systems, social networks, and more—you can make learning and collaboration happen better, faster, and more efficiently. You can do this on a large scale across your enterprise while still retaining a personalized approach to each individual and learner. And you can realize superior learning outcomes as a result. We call this unique approach unified learn-

ing and collaboration, or ULC (see Figure 1).

- Unified: Bringing resources like content, instructors, and community together to leverage technologies and bridge time, location, and cultures.
- Learning: Delivering personalized content based on an individual's needs and learning style.
- Collaboration: Getting the right people together at the right time to share knowledge, work together, and reach objectives.

ULC makes communication instant, collaboration continuous, and learning accessible, personal, and meaningful for today's learners. In addition, your administrative staff is more productive, your instructors can connect with colleagues wherever they are, and your information technology staff can leverage and more easily manage your technology infrastructure.

Unlike UC, the goals of ULC are broader, implying that we must move beyond merely communication and data transfer to knowledge creation, where on-demand access to expertise, content, and communication creates a unified learning

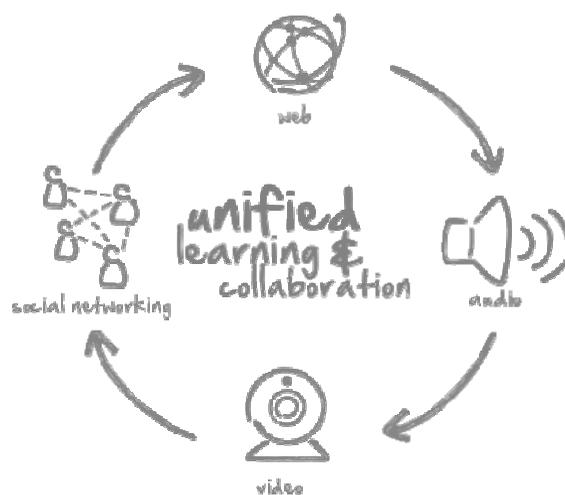


Figure 1. Unified learning and collaboration.

solution that is greater than the sum of its parts. With ULC, we can help people create knowledge, not just deliver data, facilitate contextual collaboration, and enable operational efficiencies.

UNIFYING CONTENT, INSTRUCTION, AND EXPERTISE

According to the recently released U.S. National Education Technology Plan (NETP) (U.S. Department of Education, 2010), an essential component of what the report calls a twenty-first century model for learning powered by technology is a comprehensive infrastructure for learning that provides every learner, educator, and level of our education system with the resources they need when and where they are needed. The report goes on to describe an infrastructure that includes people, processes, learning resources, policies, and sustainable models for continuous improvement in addition to connectivity, hardware, and applications.

Illuminate concurs. To ensure that learning happens in a better, faster, and more efficient way, we must unify enterprise technologies to provide easy access to resources that include content, instruction, and expertise. Embedded in and surrounding these three core blocks are a wide variety of components, including:

- real-time (synchronous) sessions;
- non-real-time (asynchronous) sessions;
- video-focused sessions;
- data-collaboration-focused sessions;
- blended focus of location, technology, and learning styles;
- large-group interactions;
- small-group interactions;
- one-to-one interactions;
- mobile learning and educational networking;
- planned and spontaneous interactions;
- multiple moderation modalities from tightly controlled to open;

- learning management systems and portal integrations at log-in as well as granular learner and instructor level; and
- edges of platform open for third-party development.

SUPPORTING “CONNECTED TEACHING”

The NETP introduces the concept of “connected teaching,” in which isolation is replaced with connection that includes 24/7 access to the information, tools, content, resources, systems, and expertise that empower educators to improve their own instructional practices and create engaging and relevant learning experiences for their learners.

The components to support connected teaching are available now. Unified learning and collaboration is about unifying enterprise technologies—infrastructure, applications, and social networking—in a way that’s optimized for education to improve learning and ensure efficient administrative operations. ULC is not just about communication. It’s about the context of that communication and making it instant and accessible, personal and meaningful, active and participative, and connected to relevant content and instructors, and expertise.

FACILITATING THE BUSINESS OF EDUCATION

Education and training in the twenty-first century is all about keeping existing learners and attracting new ones with universal access, personalized and flexible learning, and a global reach. It’s also about maintaining competitive advantage, reducing costs, and creating a culture of collaboration between departments, campuses, institutions, and organizations.

ULC is not just for the classroom. On an organizational level, this approach can help increase competitive advantage, support strategic planning and decision

making, and enhance productivity for faculty and staff. The time has come to blend pedagogy with sound business decision making. With ever-decreasing budgets, academic institutions and training organizations must balance important educational impacts with bottom-line revenue implications, including a rapid return on their investment in technology. A ULC approach can help of all sizes integrate online interaction into all their daily activities, enabling them to communicate, collaborate, and educate more effectively in the global community.

CONCLUSION

ULC can enable academic and training organizations to realize exceptional outcomes that include:

- enhanced learning experiences;
- increased learner comprehension, knowledge, and satisfaction;
- increased retention and completion rates;
- larger educational impact through opened classroom boundaries;
- increased adoption of learning technologies;

- enhanced teacher effectiveness;
- operational efficiency and increased productivity;
- leveraged technology infrastructure and rapid return on investment; and
- reduced travel and physical infrastructure costs.

At Elluminate, we understand that twenty-first century education requires twenty-first century solutions. As the NETP explains, we don't have the luxury of time. The time to act is now. Welcome to the age of unified learning and collaboration.

For more information about unified learning and collaboration, download the entire white paper from http://www.illuminate.com/Resources/White_Papers/?id=95/

To view a unified learning and collaboration presentation, visit <http://www.youtube.com/user/Elluminated#p/a/u/2/tpJBeyAGkY8>

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U – L – C APPROACH

UNIFIED
LEARNING
COLLABORATION

The Global Campus

Examining the Initiative From the Perspective of Diffusion Theory

Kevin E. Johnson

The University of Illinois Global Campus is a rather new initiative with the mission to “become a national leader in online education, focused on innovation, quality, superior instruction, service, and accessibility” (University of Illinois Global Campus, 2007, p. 1). As a campus, The Global Campus itself is not accredited and relies on partnerships with other colleges and departments to design and develop its online programs and courses. Therefore, faculty senate buy-in and support at all three land-based campuses is essential.



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This unique structure has encountered its own challenges to the point of forcing The Global Campus to close its doors as a separate campus and return distance education programming to the individual campuses.

In September of 2005, a newly appointed president, Joseph B. White, made it clear in his inaugural speech that the University of Illinois should strive to become a leader in providing quality education in a more accessible and user-friendly fashion (White, 2005). Since that time, efforts ensued on creating a fourth campus: The University of Illinois Global Campus. In 4 short years, The Global Campus formed and developed distant programs, enrolled students, conducted virtual classes, and come full circle to closing its doors for restructuring.

The University of Illinois Board of Directors approved the creation of The Global Campus in March 2007. The board's decision was based on several market analyses and the president's vision for increasing the university's presence in the distance education field. The board approved the initiative based upon a proposal brought forth by a core team of professionals, headed by Chet Gardner, who was appointed special assistant to the president in 2006. The proposal included a strengths, weaknesses, opportunities, threats analysis, market analysis of initial programs, and processes and policies for registering students, designing quality courses, hiring faculty, and measuring success. Originally, it was intended that The

Global Campus would become a for-profit arm of the university as well, which ultimately was changed due to all three campus faculty senates expressing lack of support for a profit-based business model.

Once the board approved the initiative, the core team was provided with a budget and the green light to hire additional staff. The staff had less than nine months to establish its new virtual campus before going live with its first two programs in January 2008. For the next year, The Global Campus was criticized for the lack of enrollment numbers and continued lack of support by many faculty and academic units. It was decided that one possible solution was to become accredited so that the virtual campus could work toward academic independence. In November 2008, the board of trustees approved the request to seek accreditation, which was quickly added to the Global Campus project management schedule to be completed by Fall 2010. To help address faculty concerns, the board of trustees approved The Constitution for the Academic Policy Council of the University of Illinois Global Campus, which established a faculty oversight committee of Global Campus academic programs and educational policies. Despite these efforts, on April 15, 2009, the president and University of Illinois Senates Conference produced a document that outlined a redesign for the Global Campus that would return all academic responsibility over to each of the campuses and stopping all efforts of The Global Campus to become a separate campus.

So, what went wrong? Let's look at the initiative through the eyes of Rogers' (2003) elements of diffusion and try to identify components of the theory that may have helped The Global Campus initiative be more successful. According to Rogers (2003), *diffusion* is "the process by which (1) an *innovation* (2) is *communicated* through certain *channels* (3) *over time* (4) among the members of a *social system*" (emphasis added, p. 5). Let's first examine

these components one a time in order to get a picture of the entire system.

INNOVATION

Even though the University of Illinois is already comprised of three land-based campuses, only a few individual departments have implemented distance education courses within their program. For example, the Urbana-Champaign campus' Graduate School of Library and Information Science (GSLIS) offers a fully American Library Association accredited master of science degree program (<http://www.lis.illinois.edu/programs/leep/>). For the most part, program planning, instructional design, and delivery methods specific to distance education are foreign concepts to university faculty and college/department administration. Therefore, the innovation in our scenario is the construction of a new virtual campus that challenges the social structure of the members associated with the existing culture.

In order for faculty to adopt such an innovation, they must understand the five *characteristics of innovations*. These characteristics also help determine and individual's rate of adoption as well. They consist of *relative advantage*, *compatibility*, *complexity*, *trialability*, and *observability*. When we examine these one at a time relative to The Global Campus, we can begin to see where considering Rogers' (2003) theory in the initial planning stages may have encouraged a more successful implementation.

1. *Relative Advantage*: one's perception of how advantageous the innovation in terms of economics, social prestige factors, convenience, and satisfaction (Rogers, 2003). For a majority of the Global Campus adopters, the advantages of The Global Campus are indirectly related to the individual. Unless the individual became a course designer or an instructor, the benefit to oneself is minimal at best. One must

look at how partnering with The Global Campus benefits students, the department, and the overall university system. This is not to say this can't be achieved, but understanding this in the initial planning stages may have helped administration focus on approaches to getting more buy-in.

2. *Compatibility*: determines how compatible the individual perceives the innovation to the adopting society (Rogers, 2003). In the initial stages, The Global Campus was to be a for-profit arm of the university that relied solely on the idea of hiring subject matter experts to design courses and adjunct faculty to teach them. Faculty senates shared their concerns regarding content development and oversight of instruction being taken out of existing department and faculty responsibility. However, similarly speaking, faculty also expressed concern about their workloads and their inability to take on additional responsibilities.
3. *Complexity*: "The degree to which an innovation is perceived as difficult to understand and use (Rogers, 2003, p. 15). The starting of a new campus is always complex in nature. However, most people understand the nature of developing policies, procedures, and other technologies to create an on-ground campus. The creation of a virtual campus is something few can relate to and may be perceived as overly complex and technical simply due to ignorance. This in itself is a gap The Global Campus administration tried to close by conducting face-to-face meetings where field experts, administration, and faculty could discuss and answer questions.
4. *Trialability*: the degree to which an individual is able to practice the innovation before making a decision (Rogers, 2003). The Global Campus worked hard to meet with other successful programs such as University of Massa-

chusetts, University of Phoenix, and Capella University before deciding on a model. However, no faculty were a part of these exhibitions and demonstrations. Faculty and administration, however, were invited to participate in the proposal process for deciding on a learning management system.

5. *Observability*: the degree to which the results of an innovation are visible to others. Global Campus administration provided faculty and college administrators with economic projections specific to enrollment and university income (Rogers, 2003). Other than financials, the only measurable outcome for which adopters could observe progress was enrollment numbers. Unfortunately, The Global Campus was unable to meet project enrollment numbers within its first year of operation. On the same note, Global Campus staff had only 9 months to put a campus together, which was 4 months less than expected based on the time needed to get board of trustee approval. Timing affected not only initial startup plans but program approval and marketing efforts as well, which all contributed to the campus' ability to achieve enrollment numbers.

COMMUNICATION AND COMMUNICATION CHANNELS

Specific to diffusion, *communication* occurs when some method is used to connect those with expert knowledge and experience regarding the innovation with those without knowledge and experience surrounding the same innovation (Rogers, 2003). In 2006, White appointed Gardner to lead The Global Campus initiative. Gardner, at the time, was serving as the assistant vice president for academic affairs. His first task was to develop a core team of experts to develop a proposal to submit for review by the faculty senate at all three

campuses before presenting it to the board of trustees for approval. Faculty and staff were invited to campus presentations and provided the opportunity to give feedback and discuss concerns. Though this strategy provided opportunities for faculty involvement, no faculty participated on the core team.

TIME

Time with respect to diffusion reflects three measurable components of the discussion process which include (a) the time it takes for an individual to be introduced to the innovation to the time it takes the same individual to determine whether to adopt or reject the innovation, (b) the timeframe in which the innovation is adopted relative to that of other adopters, and (c) the rate of adoption by those within the system (Rogers, 2003). With regard to The Global Campus, time was of the essence. However, in its lifespan of 4 short years, too many adopters determined to reject the innovation to the point of pressuring the initiative's administration to close the doors.

SOCIAL SYSTEM

Rogers (2003) defines a *social system* as "a set of interrelated units that are engaged in joint problem solving to accomplish a common goal" (p. 23). Innovation decisions can be made based upon one of three types of choices: (a) *optional innovation-decisions* where "choices to adopt or reject an innovation that are made by an individual independent of the decisions of the other members of the system" (p. 28), (b) *collective innovation-decisions*, which are those "choices to adopt or reject an innovation that are made by consensus among the members of a system" (p. 28), and (c) *authority innovation-decisions*, which are "choices to adopt or reject an innovation that are made by a relatively few individuals in a system who possess power, status, or technical expertise" (p. 28).

It was the decision of President White to move forward with developing The Global Campus, therefore, causing the initial choice to be one of authority. However, due to the political nature of a system as large as the University of Illinois, no one person has sole authority to implement such large initiatives in a manner that rejects the input, concerns, and voices of its members. Such authoritarian introduction of The Global Campus may have been the single greatest factor in its downfall.

In order for an authoritarian approach to be successful in terms of diffusion, the authoritarian figure must require implementation and have full authority to do so. The University of Illinois, like many institutions of higher education, shares operational power among tenure-track faculty, governing boards, and advising committees. Therefore, the successful creation of a separate virtual campus would have required full autonomy and administrative control or the overall support of the faculty senates and chancellors at all three campuses.

Without an authoritarian figure dictating adoption, change must happen through the use of *opinion leaders* who serve as respectable members of the society and are early adopters of the innovation (Rogers, 2003). With no opinion leader sitting on the initial core team The Global Campus initiative could have been perceived as an us against them (faculty against administration) scenario, causing resentment and negative attitudes toward change from the onset. Michael Lindeman (personal communication, October 21, 2009), director of program and course development for The Global Campus, feels that appointing a faculty member (or other opinion leader within the system) to lead the initiative rather than an existing administrator would have earned more initial respect by the adopting community. By doing so, faculty may have felt that the existing academic oversight and rigor would have been less questionable. How-

ever, one must still wonder if things had been different, how different would they actually be? Would the mission to reach more students be successful if the university's current model had simply transferred to an online delivery modality? Would tenure-track faculty rely on adjunct faculty to help ensure multiple sections of a course could be offered? No one knows. What we do know is that due to the administration's inability to get the faculty senates' and chancellors' support, The Global Campus closed its virtual doors on December 31, 2009. Individual campus units became responsible for the creation and implementation of any distance education adventures. May The Global Campus torch not burn out, but be passed, carrying reminders of past mistakes and successes, and may each campus stay true to the original mission of The Global Cam-

pus: "become a national leader in online education, focused on innovation, quality, superior instruction, service, and accessibility" (University of Illinois Global Campus, 2007, p. 1).

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"THE UNIVERSITY OF ILLINOIS GLOBAL CAMPUS IS A RATHER NEW INITIATIVE WITH THE MISSION TO BECOME A NATIONAL LEADER IN ONLINE EDUCATION, FOCUSED ON INNOVATION, QUALITY, SUPERIOR INSTRUCTION, SERVICE, AND ACCESSIBILITY."



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Student Preparation for Distance Education

Mark Taormino

INTRODUCTION

The focus of this article is to identify characteristics of successful online students to support an informed enrollment decision when entering a distance education program. According to Boyd (2004), “there may be only certain kinds of students under certain conditions who can successfully learn via the online format” (p. 31).

The growth of online educational opportunities has provided access to many students that otherwise might not have had the opportunity for study. Morris and Finnegan (2008) stated “nearly 35% of all

higher education institutions in the United States are considered fully-engaged in offering online courses and programs” (p. 56). There are many colleges and universities offering distance education programs, often with very robust marketing initiatives to reach prospective students. For students new to distance education, a likely question for them is if distance education is a suitable learning path. More pointedly, how can potential students identify the traits, characteristics, and competencies needed for success in distance education programs?

A learning institution needs to partner with students when advising them about a specific program of study. Perhaps equally important is to counsel students on characteristics of successful online learners. Schrum and Hong (2002) suggested that potential students might not be aware of the challenges they could face in an online learning environment. Student awareness of the characteristics, traits, and skills for online learning is an important area of dialogue between the student and learning institution. According to Boettcher (2007) “The period of data gathering and decision making is an important advising juncture for many online learners; a time during which institutions have an opportunity to capture the learner and forge connections that last over time” (p. 2). Identifying desirable characteristics of online learners can serve both students and institutions to help create a strong relationship between the student and institution, leading to student persistence and successful program



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completion. Both institutions and students share a common interest in successful program completion.

A detailed and accurate understanding of online learning can help students make the right decision toward pursuing online study versus classroom based education. Howland and Moore (2002) found that “accurate expectations of learner responsibilities” was an important element for student success (p. 187). Schrum and Hong (2008) suggested that a common misperception might be that people believe that distance education is quick and/or easy. Such a misperception might lead to student dissatisfaction and attrition. Morris and Finnegan (2008) expressed a concern about higher drop-out rates in online courses than in comparable face-to-face courses, and the need to understand the linkages between behavioral factors, including those factors related to student persistence and success online. Boyd (2004) also expressed a concern about student attrition rates in online programs. Because student drop-out rates can be higher in online environments than in classroom environments, students can benefit from understanding some of the characteristics that can serve as a catalyst for successful learning. There are important characteristics of successful online students that should be shared with students throughout the recruiting and advising process.

Self-assessment to help determine suitability for online learning is not a new idea, and there are many easy to use student self-assessment tools. Examples of some sites include:

- OnlineLearning (www.onlinelearning.net);
- Penn State University (http://ets.tlt.psu.edu/learningdesign/assessment/onlinecontent/online_readiness);
- Maryland Online (http://marylandonline.org/assessments/online_learning_for_me); and

- Oregon Network for Education (<http://oregonone.org/DEquiz.htm>).

Many colleges and universities offering distance education programs have online self-assessment tools for prospective students. However, it is unlikely that these survey tools are scientific predictors, and should not be used as a predictor of success but rather as a guidepost to indicate learner suitability. In a study to evaluate the predictive value of two popular web-based surveys, “Is Online Learning Right for Me?” and “What Technical Skills Do I Need?” Hall (2008) found the instruments had “little ability to predict student performance in distance education courses” (p. 17). Hall advised that the primary value of the instruments was to raise awareness to students planning to enroll in distance education courses. Student advising with an education professional connected to the institution would likely be a preferred route to help guide new students. Because many institutions offer online programs, there are often enrollment counselors skilled in guiding students into appropriate programs of study. Nova Southeastern University employs student enrollment counselors, such as Daisy Pino. Pino earned a doctorate in instructional technology and distance education, is well versed in the characteristics of successful online learners, and the necessary prior preparation for new online students. Guiding students to online programs requires dialogue across a variety of issues, but perhaps none more important than the ability to harness self-discipline with respect to time management. According to Pino “time management is key.” Students need to plan their time accordingly to have sufficient opportunity to complete assignments and work iteratively based on feedback. Without time management, there is no time for students to consider feedback to increase their learning (Taormino, 2009).

ONLINE STUDENT CHARACTERISTICS

There is a substantial body of literature focusing on the characteristics of successful online learners. Boyd (2004) created a category framework in four different areas; technical factors, environmental factors, personal characteristics, and learning characteristics. Although the characteristics within each category were not unique to the research of Boyd, the categorization offers a good method of organizing characteristics and traits of successful online learners.

TECHNICAL FACTORS

Because online learning requires the use of technology and computers, student capability with software and hardware is a central issue. Technical factors relates to the ability to use current computer and Internet technology, particularly with respect to navigating Internet and intranet sites. Whereas navigation is a broad idea, the use of Internet functionality such as hyperlinks, search engines, retrieval, and saving are some basic computer skills that are essential. Further, the ability to send and reply to e-mail using a specific e-mail system used by an institution or course, downloading and installing software, managing text/audio/video files, course management systems, and online threaded discussions are also essential technical skills for student success. Howland and Moore (2002) noted that students who found online learning difficult were significantly challenged with technical elements such as word processor compatibility, sending and receiving files, and creating file attachments.

Technical skills are sometimes viewed as prerequisite to taking an online course. Blocher, Sujo de Montes, Willis, and Tucker (2002) noted that many institutions have created instruments to provide feedback to students about technical skills used in online learning because "accessing online education opportunities often requires

specific, and sometimes, arcane technology skills" (p. 3). Possessing appropriate technical skills is highly desirable upon initial entry to a program, however Boyd (2004) stated that "in fact many students develop them while taking the course because it requires them to use the computer extensively" (p. 33). Oh and Lim (2005) suggested that pre-instructional activities should be offered prior to class to bring novice users to a minimum level of technological competency. Schrum and Hong (2002) reported that it was a significant challenge for students to learn technology along with content. Drawing attention to technical skills as a recommended condition of entry to an online program is likely a sufficient measure. A specific level of technical proficiency measured as a precondition for acceptance into an online program does not offer an assurance of program success. DeTure (2004) found that online technology self-efficacy scores were poor predictors of student success in distance education courses delivered online, and that a higher level of confidence using online technologies was not correlated with a higher grade point average.

It is worth noting that an often overlooked technical skill is typing (Boyd, 2004). Almost all communication in online environments involves typing, and it is an obvious time disadvantage for students that cannot touch type. Because online classes rely on the use of text communications, the ability to type is an important skill to help student use time more efficiently.

Even in the event of student technical proficiency, support issues related to software reliability, navigation, and access will emerge. Mupinga, Nora, and Yaw (2006) found that the most primary need of online students is technical help. Having students enter a program with a general understanding of the importance of technical skills is a logically good idea. Also important is the student expectation that technical skills are a work in progress, and

can be acquired and improved concurrently with course content.

ENVIRONMENTAL FACTORS

Environmental factors include geography, time, and other commitments that might compete with learning time such as the support of one's family. Most students participate in online learning because of scheduling issues, and the flexibility inherent to distance education (Bocchi, Eastman, & Swift, 2004; Boyd, 2002; Richards & Ridley, 1997; Schrum & Hong, 2002). However, online learning does not mean that less time will be expended in the learning process. Time requirements for online courses vary, but estimates range from 4 hours per week to 20 hours per week (Illinois Online Network, 2007; Schrum & Hong, 2002). Students need to consider that online courses might require more time than traditional classroom based courses (Boyd, 2004; Howland & Moore, 2002). The issue of time management is closely tied to the idea of self-regulation where students must be willing and able to dedicate study time (Blocher et al., 2002; Schrum & Hong, 2002). Boyd (2004) suggested that students could benefit from setting specific study times, just like any other appointment on a calendar.

Misperceptions about time commitments, particularly when trying to balance work, family, and school, can impact online learning success. Howland and Moore (2008) stated that "students need reasonable expectations regarding the requirements of an online course" (p. 190). Further stated was that online students spend more time on courses because of the need to read what might otherwise be explained verbally in a face-to-face setting. A threaded discussion might take 4 or 5 days, which otherwise might only take 10 minutes when face-to-face.

PERSONAL CHARACTERISTICS

Successful online students are highly motivated (Howland & Moore, 2002; Schrum, 2002). Online students often work individually, but also interact with other students and the instructor. Students are often surprised by the frequency of interaction in online courses (Howland & Moore, 2002). Boyd (2004) stated that "in short, successful online students are highly motivated by their goals and their ability to shape their learning experience" (p. 35).

Students might have misconceptions about distance education, including the degree of effort that is required. As stated by Schrum and Hong (2002), "people may believe distance education is quick or easy, however, they quickly learn that many programs challenge the learner with reading and writing assignments" (p. 62). One of the misconceptions about distance education as quick and easy could be because online information is ubiquitous, easily available, and can be freely used despite the importance of copyright statutes. Boyd (2004) included integrity as one of the important student characteristics. In any learning environment, including online, plagiarism, copyright violations, and cheating cannot be tolerated. Student integrity is a characteristic that should not be assumed, but clearly enumerated in any list of online student characteristics.

LEARNING CHARACTERISTICS

Learning characteristics include areas such as learning styles, written communication skills, and self-reliance/self-direction. Distance learners need to either possess or develop independent learning styles as part of their overall learning characteristics. Howland and Moore (2002) suggested that self-reliance meant that students were often responsible for finding answers to their own questions, and that successful students recognized the need to be more proactive and independent in an online learning environment. The individual

learning styles of students is an area of much interest by researchers, particularly in the area of internal locus of control. Empirical research has shown that students with a high internal locus of control are more likely to succeed in online learning environments (Dille & Mezack, 1991; Liu, Lavell, & Andris, 2002; Morris & Finnegan, 2008). However, some studies have found that different learning styles are common among student populations, with no particular learning style more predominant or preferable (Mupinga et al., 2006; Oh, & Lim, 2005).

Because of the reliance on written text for communications and academic assignments, students should possess effective writing skills. Students must be comfortable with the fact that many or most learning activities will be written assignments. Students that might have a preference for a more traditional exam-based evaluation of learning might not be satisfied with written assignments as a primary method of evaluation.

Although certain learner characteristics are beneficial to support learning persistence and program completion in online environments, classroom based learners can adapt to online learning environments with some initial preparation. Solimeno, Mebane, Tomai, and Francescato (2008) did not find any significant variance in learning despite different personality traits and learning strategies of students in face-to-face and online learning environments. The desire and motivation to learn, combined with an awareness of some of the important skills, can lead learners to succeed in a distance education environment.

CONCLUSION

Considering the review of literature, highly valuable skills, traits, and characteristics of online learners include:

1. time management;
2. motivation;

3. active participation;
4. willingness to independently seek information and research (self-reliance);
5. comfort with technology;
6. ability to communicate effectively, particularly in writing; and
7. student integrity.

Matching student learning preferences with appropriate learning opportunities is of high importance. Some students might not enjoy a high level of reliance on technology mediated instruction and communication, which could lead to a decision to pursue a more traditional education delivery path. Surely some students will recognize that a high level of self-discipline and rigorous adherence to time management might not suit their preferences. It comes down to a personal choice, and institutions can help students prepare for the online experience through effective communication and dialogue to increase student awareness.

The opportunity for students to understand and recognize the tenets of online learning, and how student roles might be substantially different to what they have become accustomed to in the classroom, can serve as a valuable decision-making opportunity. Learning institutions play a role in surfacing important information to prospective students to assure an accurate understanding of successful learner characteristics.

The most important point of all might be that with the desire and motivation to learn, anyone can become a successful online learner. There are no real barriers to prospective students given a willingness to modify learning characteristics where needed. When said that online education might not be for all, it is reasonable to conclude that the genesis of the statement speaks mostly to student preferences and desire. Recognizing the importance of technical skills, such skills can be acquired incrementally and concurrently with

course content. Certainly it would be preferable to enter an online program possessing a minimal level of technical skill, but the lack thereof is not a rigid barrier to eventual online learning success. The characteristics of successful online learners can be developed, acquired, and/or refined. There is no formula for online success, but essential ingredients surely seem to be an awareness of important characteristics, particularly student motivation and desire. Once students are aware of desirable characteristics, the process of becoming a successful online learner is something that is attainable for most all potential learners.

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Social Networking in E-Learning Environments

Robert Gibson

INTRODUCTION

This analysis examines how social networking applications such as Facebook, Twitter, Ning, and other popular so-called “member communities” are utilized in online learning environments. This review is broken into several sections, including the following:

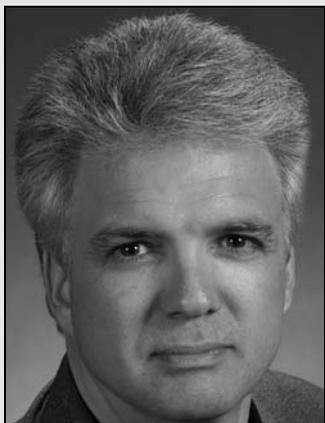
- an analysis of contemporary social network applications, including an evolutionary overview;
- an analysis of current utilization metrics;

- an analysis of how such applications are utilized in online and traditional environments; and
- a literature review of social networks used in various learning environments.

BRIEF HISTORY OF SOCIAL NETWORKING

Interestingly, social networking is still very much in its Internet infancy, yet evolving at a breathtaking pace. Research varies as to the first officially recognized social network member site. Some research suggests that Friendster.com and sixdegrees.com, both launched in 1997, were two of the first social networks (Dwyer, Hiltz, & Widmeyer, 2008). Friendster.com still operates; however, sixdegrees.com ceased operation in 2000. Despite these claims, classmates.com, launched in 1995, may actually be the very first social network (Classmates.com, 2009). Classmates.com still operates and has spawned a host of copycat websites that cater to reuniting students.

Despite this awkward, nearly silent introduction of so-called “social” or “member networks,” this segment of the Internet is now growing three times the rate of overall Internet (Nielsen, 2009). According to Nielsen’s Netratings (2006), social networking sites are growing at the rate of 47% annually, reaching 45% of total web users. Social networking and blogging are now the fourth most popular online activities, according to Nielsen’s *Global Faces and Networked Places* report (2009). More than 67% of the global online population now



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regularly visit a social network site and this sector accounts for 10% of all Internet time (Germany, Switzerland, Great Britain, and Italy are among the fastest growing segments). Social networks and blogs are now the fourth most popular online category—ahead of personal e-mail. Now loosely defined as “member sites,” they collectively account for one in every 11 minutes online. Orkut.com in Brazil (operated by Google) actually has the largest domestic online reach (70%) of any social network anywhere in the world, whereas Facebook has the highest average time per visitor among the 75 most popular brands online worldwide. However, the amount of time spent on Facebook.com increased by more than 566% in one year alone (Nielsen, 2009). The stock value of these companies reflects their stratospheric growth. Recent reports at mashable.com now value Facebook.com at more than 6.5 billion—more than CBS (Ostrow, 2009).

SOCIAL NETWORKING DEFINED

Boyd and Ellison (2007) define social networks as “web-based services that allow individuals to 1) construct a public or semi-public profile within a bounded system, 2) articulate a list of other users with whom they share a connection, and 3) view and traverse their list of connections and those made by others within the system. The nature and nomenclature of these connections may vary from site to site” (p. 2). According to the Wharton School of Business ((Knowledge@Wharton, 2008), as of October 2008 social networks impacted more than 230 million people worldwide. Kazeniac (2009) reports that Facebook.com now leads all other social networking sites in terms of number of users and visits per month (see Table 1).

SOCIAL NETWORKING IN EDUCATION

Steve Hargadon (<http://www.stevéhargadon.com/>) sponsors a blog that investigates

the use of social networking entitled *Social Networking in Education* (<http://socialnetworksined.wikispaces.com>). In that blog, Hargadon describes several interesting uses of social networking tools in education. Keep in mind that these descriptions are not necessarily limited to traditional educational delivery methodologies, but can traverse into the strata of elearning.

According the 2007 report from the National School Boards Association entitled *Creating and Connecting: Research and Guidelines on Social and Educational Networking*, some interesting data emerges regarding social networks and online students:

Message posting:

- 59% of online students say they discuss education related topics, including college or college planning; learning outside of school; news; careers or jobs; politics, ideas, religion or morals; and school work;
- 50% of online students say they talk specifically about schoolwork;
- 21% say they post comments on message boards every day (7% in 2002); and
- 41% say they post comments once weekly (17% in 2002).

Music sharing:

- 32% of online students say they download music or audio that other users uploaded at least once a week;
- 29% of online students upload third party music or audio themselves; and
- 12% of online students say they upload music or podcasts of their own creation at least weekly.

Video sharing:

- 30% of online students download and view videos uploaded by other users at least once weekly;
- 9% upload videos of their own creation once weekly; and

Table 1. Social Networking Sites

Rank	Site	Number Users	Monthly Visits	Previous Rank
1	Facebook.com	68,557,534	1,191,373,339	2
2	Myspace.com	58,555,800	810,153,536	1
3	Twitter.com	5,979,052	54,218,731	22
4	Flixster.com	7,645,423	53,389,974	16
5	Linkedin.com	11,274,160	42,744,438	9
6	Tagged.com	4,448,915	39,630,927	10
7	Classmates.com	17,296,524	35,219,210	3
8	Myyearbook.com	3,312,898	33,121,821	4
9	Livejournal.com	4,720,720	25,221,354	6
10	Imeem.com	9,047,491	22,993,608	13
11	Reunion.com	13,704,990	20,278,100	11
12	Ning.com	5,673,549	19,511,682	23
13	Blackplanet.com	1,530,329	10,173,342	7
14	Bebo.com	2,997,929	9,849,137	5
15	Hi5.com	2,398,323	9,416,265	8
16	Yuku.com	1,317,551	9,358,966	21
17	Cafemom.com	1,647,336	8,586,261	19
18	Friendster.com	1,568,439	7,279,050	14
19	Xanga.com	1,831,376	7,009,577	20
20	360.yahoo.com	1,499,057	5,199,702	12
21	Orkut.com	494,464	5,199,702	15
22	Urbanchat.com	329,041	2,961,250	24
23	Fubar.com	452,090	2,170,315	17
24	Asiantown.net	81,245	1,118,245	25
25	Tickle.com	96,155	109,492	18

- 22% have uploaded videos they've created at some point.

- 25% update their personal website weekly (up from 12% in 2002).

Photo sharing:

- 24% of online students post photos of art created by others at least once weekly;
- 22% post photos or art of their own creation; and
- 50% have uploaded photos or artwork at some point.

Blogs:

- 17% of online students add content to blogs at least weekly; and
- 30% have their own blogs (up from nearly 0% in 2002).

Site building:

- 12% of online students have updated a personal website or online profile daily; and

Creating content:

- 16% of online students use online tools to create and share sophisticated compositions;
- 14% create new characters;
- 10% contribute to online collaborative projects weekly or more frequently; and

- 9% submit articles to sites or create polls, quizzes, and online surveys.

Popular social networking activities among online students (K-12):

- 41% post messages;
- 32% download music;
- 30% download videos;
- 29% upload music;
- 25% update personal websites or online profiles;
- 24% post photos;
- 17% blog;
- 16% create and share virtual objects;
- 14% create new characters;
- 10% participate in collaborative projects;
- 10% send suggestions or ideas to websites;
- 9% submit articles to websites; and
- 9% create polls, quizzes or surveys.

The following is an overview of some of the most popular member community applications and how they are being “repurposed” for academic purposes (pp. 1-3).

TWITTER

According to the website *Social Media Defined* (<http://www.socialmediadefined.com>), “Twitter is a microblogging application that is more or less a combination of instant messaging and blogging. Twitter has quickly established itself as a powerful tool for communicating news, market trends, questions and answers, links, and a whole lot more with numerous benefits for business and personal use.” Twitter currently boasts more than 12 million users, and is projected to reach 18 million users in 2010 (Nielsen, 2009).

The concept of Twitter is very simplistic. Users subscribe for a free account at twitter.com. Once a “persona” is created, users then post updates via the Twitter web interface (normally using a computer or

mobile device, such as a cell phone). These updates are intentionally short bursts of information—limited to 140 characters per “post”—the equivalent to one or two sentences. Other individuals subscribe (follow) those updates or “tweets.” They can read the tweets via their cell phone or their computer. Some twitter utilities allow for photos and up to several seconds of video to be included with the tweets.

Many mainstream uses of Twitter include following important breaking news from outlets as CNN and local newspapers; business marketing applications; technology tips; celebrity musings; and, most perhaps most notably, politics. Twitter was recently credited for influencing the 2009 elections in Iran (Reed, 2009).

Although originally intended for use by the general population and for social purposes, it nonetheless has found its way into academia—if not by accident. The educational community has begun to embrace Twitter and find creative uses for the application. Some examples of Twitter in education include:

- *Back-channel chat* where participants at conferences provide bursts of feedback regarding conference proceedings to other conference attendees and to people who cannot attend the conference themselves (Hargadon, 2009); or preceding a conference via keywords (Parry, 2008) Incidentally, I recently followed the tweets of several participants at the Blackboard World 2009 annual conference. Several users also uploaded links to keynote addresses via Twitter;
- *Follow webinars*. A person recently used Twitter during a webinar to post specific keywords denoted by a hash (#facebook), and then participants searched on those keywords to see what other people in the webinar (at other locations) were saying about the topic (Mullings, 2009);

- *Class chatter* allows students to continue discussion topics outside the classroom (Parry, 2008);
- *Follow professionals who are actively engaged in particular topics or events.* For example, students can follow any number of correspondents at MSNBC, CNN, and other news outlets;
- *Writing assignments* in which students build on each other's tweets to generate a story, poem, or haiku (Parry, 2008);
- Collaboration with students in other countries regarding specific topics;
- *"Track" a word.* This will subscribe you to any post that contains said word. So, for example, a student may be interested in how a particular word is used. They can track the word and see the varied phrases in which people use it. Or, they can track an event, a proper name, or a movie title. (Send the message "track _____" to Twitter) (Parry, 2008);
- *Storytelling.* George Mayo, an eighth-grade English teacher, recently used Twitter as a tool to collaboratively write a story with his students (Ash, 2008). Mayo invited his students and students around the world via his Many Voices Twitter account to add to an ongoing story with individual "tweets." After 6 weeks and the help of more than 100 students and six different countries, the story was finished (Parry, 2008).

Some popular Twitter applications for academia include:

- *Twitterfall.com* Type in a keyword, such as "Iranian elections" and watch the results in real time;
- *Twittervision.com* and *Freshlogic Atlas.com* allow users to see where certain tweets are originating based on topics. These applications utilize "Geotagging" that is able to locate a user anywhere in the world;
- *Historicaltweets.com* allows students to pose as historical and significant societal

figures, posting tweets as those individuals; and

- *Twiddeo.com* allows users to upload short videos to Twitter.

Some of the problems involved with using Twitter:

- Marketers and pornographers are beginning to consume Twitter, leading to many unwanted "followers" who post egregious and unwanted messages. Short of "unfollowing" these individuals, it is difficult to filter them before they attempt to follow a student or faculty;
- So called "trending topics" can contain offensive material;
- Student or faculty tweets can easily be lost in the torrent of tweets that are sent daily. To manage and filter tweets so that they are organized, third-party applications such as Tweetdeck (tweetdeck.com) must be used to generate tweet "groups" based on the user;
- Since tweets are intentionally short, users must remember to utilize sites such as bit.ly or snipr to truncate long URLs; and
- "Retweets" or messages sent to a specific user often lose context because the full thread is often lost. The original message text counts against the 140 total characters.

FACEBOOK

Facebook is a social networking website that was originally designed for college students, but is now open to anyone 13 years of age or older. Facebook users can create and customize their own profiles with photos, videos, and information about themselves. Friends can browse the profiles of other friends and write messages on their pages (TechTerms.com).

However, the use of Facebook.com for academic purposes is a bit challenging and controversial. Recent articles in the *Chroni-*

cle of Higher Education highlight many of the potential pitfalls that can arise, including one professor who posted comments on her profile regarding the proceedings in an academic meeting. She apparently did not realize or understand these comments were disseminated to a broad range of individuals within her social network (Young, 2009). Blogscholar.com (2007) warns that information posted on Facebook is never private. Furthermore, any information, photos, videos, and so on, becomes the intellectual property of Facebook. Data can even be retained by Facebook after the member deletes his or her account.

Negative stories also abound about professors “friending” their students. For example, some students may not know exactly how to respond to “friend” requests from their instructors—perhaps perceiving this as an edict that may impact their grade if they decline. Other students may use this “friendship” as leverage to request favors from the professor, including class quota overrides (Lipka, 2007). Some faculty have suggested that Facebook creates “relationships in which friendship and professionalism are not clear and brightly bounded, but are tied to real political economic stakes” (Golub, 2009).

Academic libraries are another area that seemingly could leverage social networking applications such as Facebook. However, a study at the University of Michigan in the fall of 2007 found that 77% of students did not welcome the idea of libraries using Facebook. The biggest reason cited is that they feel the current methods to contact librarians (in-person, e-mail, instant messaging) are more than sufficient. More than 14% of students felt it was inappropriate because they perceive Facebook and MySpace as social tools, not research tools (Chapman, Creech, Hollar, & Varnum, 2007). This was substantiated in a study conducted by Hendrix, Chiarella, Hasman, Murphy, and Zafron (2009) who found in a

survey of academic librarians regarding Facebook that 54% of those surveyed said there was no academic use, 34% were unsure, and only 12% felt that such promise existed.

Despite these challenges, some faculty and academic librarians are engaging Facebook or Facebook-like applications in academia, if only in a limited capacity. Michael Wesch from Kansas State University indicated that he uses Facebook to bring class discussions to students “in a place where they have already invested significant effort in building up their identity, rather than asking them to login to Blackboard or some other course management system where they feel ‘faceless’ and out of place” (Battelle, 2007). One British university recently began offering a master’s degree in social media (Schroeder, 2009).

The following are few examples of how Facebook might be utilized in certain academic situations:

- Julie Damron at BYU has used Facebook in her Korean courses for 3 years. Students post notes on the whiteboard; post photos; create a profile with personal information. Students learn more about one another and about the professor (Damron, 2009).
- academia.edu is a “Facebook-like” application specifically dedicated to academic social networking. Using academia.edu, faculty can generate peer-relationships with faculty from other institutions.
- William Drummond from Berkley used Facebook “groups” in place of a course management system. However, he employed the highest level of security to ensure that only his students were able to access the group (mms://uocat-davis.wmod.llnwd.net/a2636/e1/TLTC/TLTC_William_Drummond.wmv).
- Social scientists and cultural anthropologists join and use Facebook and other member sites to research how social networks are formed (Rosenbloom, 2007).

- Facebook now offers “schools” with student information system data integration: <http://www.inigral.com/products/schools.htm>.
- Some faculty use Facebook to study multilingualism: <http://www.facebook.com/group.php?gid=18977111129>.
- Specialized Facebook “networks” have spawned, such as Sciencewomen: <http://apps.facebook.com/blognetworks/blog/sciencewomen/>.

Some popular Facebook applications for academia include:

- *Wordbook* allows users to bridge Word-Press and Facebook. Posts to a Word-press blog automatically post to Facebook.
- *Blackboard Sync* allows students to check Blackboard course information directly from Facebook.
- *Booklist* allows users to share their library or favorite books.
- *Worldcat* allows users to search for books through Facebook.

NING

Ning is a social networking application that allows subscribed users to generate their own custom social network. Launched in 2005 by cofounder Marc Andreessen (Netscape), Ning is Chinese for the word “peace” (Wikipedia, 2009). Ning includes some interesting and useful out-of-the-box tools, including a blog, discussion board, groups, and video and photo uploading capabilities.

Unlike Facebook and Twitter, Ning allows for much more granular control over its user community, including the site template. For example, faculty can easily control who has access to their Ning community using address importation or e-mail invites. In addition, faculty can customize the Ning community using a number of built-in templates (individual members can apply custom templates to

their own Ning “space” as well.) This type of customization and control provides faculty access to a social network and social tools that are much more “focused” on the curricular topic.

Like other social networking applications, faculty must be judicious if they elect to use Ning in their classes. For example, uploading private student information, such as grades, should be avoided. While useful as a community resource, it should never be used as a replacement for a campus course management system. A popular Ning application for academia is <http://bioarchaeology.ning.com/>

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“BOYD AND ELLISON (2007) DEFINE SOCIAL NETWORKS AS ‘WEB-BASED SERVICES THAT ALLOW INDIVIDUALS TO 1) CONSTRUCT A PUBLIC OR SEMIPUBLIC PROFILE WITHIN A BOUNDED SYSTEM, 2) ARTICULATE A LIST OF OTHER USERS WITH WHOM THEY SHARE A CONNECTION, AND 3) VIEW AND TRAVERSE THEIR LIST OF CONNECTIONS AND THOSE MADE BY OTHERS WITHIN THE SYSTEM. THE NATURE AND NOMENCLATURE OF THESE CONNECTIONS MAY VARY FROM SITE TO SITE’ (P. 2.)”

Ensuring Higher Order Thinking Skills Development in Distance Learning

Teresa Nichols

Knowledge, the first level of cognitive learning, is a no-brainer for distance learning curriculum development. In fact, direct, explicit teaching of knowledge is a no-brainer for any curriculum development. It gets a little more difficult as the learning scales the hierarchy of Bloom's taxonomy (Bloom, 1956) to comprehension, analysis, application, synthesis, and evaluation skills. Distance learning experiences should ensure higher order thinking skills development.

Any course syllabus should include a course description/introduction, course objectives (knowledge and skills), texts, course assignments, and grading procedures. These basic tenets are expected and appropriate; however, the course assignments component is the place course writers and curriculum developers can ensure higher order thinking skills by developing learning opportunities for distance learning students.



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WHAT SHOULD KNOWLEDGE LEVEL THINKING SKILLS LEARNING EXPERIENCES LOOK LIKE?

Knowledge level thinking skills typically include the lower level thinking skills of Bloom's taxonomy: knowledge and comprehension. These lower level thinking skills are pretty forthright in learning activity development. They involve learning activities that require students to know and to comprehend content information. Table 1 provides examples.

WHAT SHOULD HIGHER ORDER THINKING SKILLS ACTIVITIES LOOK LIKE?

Lower level thinking processes and subsequent activities are usually part of coursework. This ensures a transfer of

Table 1.

Thinking Skills	Thinking Skill Activities	Thinking Skill Products
Knowledge	Describe, identify, list, define, label, name, match	<ul style="list-style-type: none"> • Describe the process of ... • Identify the components of ... • List the major reasons for ... • Define the following terms ... • Label the parts of ... • Name the patriarchs of ... • Match the theorist to ...
Comprehension	Interpret, predict, summarize, order, paraphrase, trace	<ul style="list-style-type: none"> • Interpret the results of ... • Predict the outcomes of ... • Summarize the steps in ... • Order the stages of ... • Paraphrase the theory of ... • Trace the lineage of ...

Table 2.

Higher Order Thinking Skills	Higher Order Thinking Skill Activities	Higher Order Thinking Skill Products
Application	Demonstrate, chart, change, illustrate	<ul style="list-style-type: none"> • Demonstrate the effect of ... • Chart the instances of ... • Change the variables of ... • Illustrate the theory of ...
Analysis	Classify, compare and contrast, diagram, outline	<ul style="list-style-type: none"> • Classify the following herbs ... • Compare and contrast the theories of ... • Diagram the process of ... • Outline the steps in ...
Synthesis	Combine, formulate, rearrange, compile, reorganize	<ul style="list-style-type: none"> • Combine the concepts of ... • Formulate a model using ... • Rearrange a presentation using ... • Compile the events that ... • Reorganize the steps ...
Evaluation	Assess, measure, rank, test, appraise	<ul style="list-style-type: none"> • Assess the effectiveness of ... • Measure the daily incidents ... • Rank the occurrences of ... • Test the effects of ... • Appraise the benefits of ...

knowledge from the teacher to the learner, but to aspire to provide higher order thinking skills development activities, course writers/developers must go further. Table 2 presents a simple ways to do that.

Including the activities outlined above will ensure that students are interacting with the knowledge they are gaining from reading assignments. This interaction will

expand their learning experiences to become more meaningful and intrinsic.

Students in traditional face-to-face classrooms that involve assigned readings then “listening” to lectures will fare no better than distance learners who read and “answer questions.” It is good teaching in any setting to include student opportunities to interact and process knowledge that is being imparted.

Table 3.

Learning Outcomes	Excellent	Good	Not Evident
Knowledge (Student defined ...)	Highly developed definition is evident.	Correct definition is evident.	No definition evident.
Comprehension (Student summarized ...)	Highly developed summary is evident.	Correct summary is evident.	No summary evident.
Analysis (Student charted ...)	Highly developed chart is evident.	Correct chart is evident.	No chart evident.
Application (Student compared and contrasted ...)	Highly developed compare/contrast is evident.	Correct compare/contrast is evident.	No compare/contrast evident.
Synthesis (Student compiled ...)	Highly developed compilation is evident.	Correct compilation is evident.	No compilation evident.
Evaluation (Student measured ...)	Highly developed measurement process is evident.	Correct measurement process is evident.	No measurement process evident.

HOW SHOULD HIGHER ORDER THINKING SKILLS LEARNING EXPERIENCES BE ASSESSED?

Higher order thinking skills learning products can be assessed through most traditional assessment means, including objective tests, but lend themselves more to performance tasks that use rubrics for assessment. Traditional objective tests can include assessments that require analysis, synthesis, and evaluation through the use of carefully crafted multiple choice, multiple answer, ordering, matching, and fill in the blank test items.

Performance tasks that include rubrics for assessment typically include essays, reports, or projects. Rubrics can be easily developed to assess the content and skill levels of students and should be a regular part of student distance learning experi-

ences. Rubrics allow students to conceptualize up front the depth and breadth of the learning outcomes expected. These standards serve as motivators for student interaction with presented learning activities. Table 3 presents a simple rubric format that outlines expectations.

The rubric offers examples of evaluating thinking skills learning products/outcomes. The educator committed to going past a simple transfer of basic knowledge to students can easily include activities to spur student thinking and can develop simple, manageable ways to assess their learning outcomes.

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USDLA Award Winners

The United States Distance Learning Association (USDLA) presented its 2010 International Distance Learning Awards in conjunction with the 2010 National Conference in St. Louis, Missouri. USDLA is a 501(c) 3 nonprofit association, founded in 1987, as the nation's leading distance learning organization. The association reaches 20,000 people globally with sponsors and members operating in and influencing 46% of the \$913 billion U.S. education and training market.

These prestigious International Awards are presented annually to organizations and individuals engaged in the development and delivery of distance learning programs. Included in the recognition ceremony were awards for 21st Century Best Practice, Best Practice for Distance Learning Programming, Excellence in Distance Learning Teaching, Outstanding Leadership by an Individual, Hall of Fame and Eagle Awards.

The USDLA International Awards are closely followed by the distance learning industry. "As a premier organization for the entire distance learning profession, we enjoy honoring some of the leaders in the industry," said Dr. John G. Flores, CEO of USDLA. "Each year these winners raise the bar and exceed best practice expectations for the industry as a whole and we are truly honored by their contributions to the distance learning industry."

The USDLA Awards were created to acknowledge major accomplishments in distance learning and to highlight those distance learning instructors, programs, and professionals who have achieved and demonstrated extraordinary results through the use of online, videoconferencing, satellite and blended learning delivery technologies.

"USDLA takes great pride and responsibility in recognizing excellence and quality that benefit the entire industry. Through distance learning, education, and training we can provide access to the world's best award winning opportunities for school children, connect higher education students globally and transform the lives and careers of working adults. We are truly on the edge of something great and these winners clearly demonstrate and confirm the transformative powers of distance learning globally," said Reggie Smith III, president of USDLA.

For the 2010 International Awards program, USDLA focused upon several major areas that exemplify the dynamic nature of distance learning. Please join us in honoring the following 2010 USDLA Award Winners, which include the following:

BEST PRACTICES AWARDS FOR DISTANCE LEARNING PROGRAMMING

PLATINUM

AOPA Air Safety Foundation
Online Technology ~ Institutional

President Lincoln's Cottage at the Soldiers'
Home—A National Trust Historic Site
Online Technology ~ Institutional

GOLD

Office of Distance Education—
Department of Foreign Languages
Videoconferencing ~ PreK-12

Thinking Accelerator Featuring
HBDIinteractive
Online Technology ~ Corporate

Florida Virtual School (FLVS) and
University of Central Florida (UCF)
Online Technology ~ Pre K-12/
Higher Education

SILVER

Boston University – Master of Science in Health
Communication (MSHC) Program
Online Technology ~ Higher Education

Rosettastone Classroom
Online Technology ~ Pre K-12

BRONZE

Centrax Corporation & the Center for Health
Behavior Research at the University of
Pennsylvania: NEMS – Nutrition Environment
Measures Survey Online Training
Online Technology ~ Corporate/Higher
Education

K¹² Inc. / Honors Earth Science
Online Technology ~ Pre K-12

Tobacco Interventions Project, Professional
Development Program, Rockefeller College,
University at Albany
Online Technology ~ Higher Education

E⁴TN
Online Technology ~ Pre K-12

**BEST PRACTICES AWARDS FOR
EXCELLENCE IN
DISTANCE LEARNING TEACHING**

PLATINUM

Teresa Sheree Crites, English and
Language Arts
Videoconferencing ~ Pre K-12

Erin Radke
Online Technology ~ Pre K-12

GOLD

Cristine Clarke, EdD
Online Technology ~ Pre K-12

Janae Cardel, Commonwealth
Connections Academy
Online Technology ~ Pre K-12

Dr. Michael K. Moore
Online Technology ~ Higher Education

Dr. Theresa Pesl Murphrey
Online Technology ~ Higher Education

SILVER

Barbara Hallums, Wilson County School System
Online Technology ~ Pre K-12

NASA Digital Learning Network
Online Technology ~ Government

BRONZE

Harry Starn, Jr., MS, CFA, CFP, California
Institute of Finance
Online Technology ~ Higher Education

TEACH TEC

Online Technology ~ Higher Education

**OUTSTANDING LEADERSHIP BY AN
INDIVIDUAL IN THE FIELD OF
DISTANCE LEARNING**

Barbara Dreyer, Cofounder, President and CEO,
Connections Academy, LLC.
Online Technology ~ Pre K-12

Beverly Knox-Pipes, Assistant Superintendent,
Genesee Intermediate School District
Online Technology ~ Pre K-12

Ron Packard, CEO, K¹² INC.
Online Technology ~ Pre K-12

Alan D. Greenberg, Wainhouse Research
Online Technology ~ Corporate

Dr. Robert W. Mendenhall, President,
Western Governors University
Online Technology ~ Higher Education

Somnath Basu, PhD
Online Technology ~ Higher Education

Dr. Michael Behrmann
Online Technology ~ Higher Education

Dr. Timothy K. Webb, Tennessee
Commissioner of Education
Online Technology ~ Pre K-12

Ian Tebbett, PhD, Founder and Director, Forensic Science Program, University of Florida
Online Technology ~ Higher Education

21ST CENTURY AWARDS FOR BEST PRACTICES IN DISTANCE LEARNING

AEC Global Teamwork, PBL Lab, Department of Civil and Environmental Engineering, Stanford University
Online Technology ~ Higher Education

Genesee Network for Educational Telecommunications (GenNET), Genesee Intermediate School District
Online Distance Learning Design ~ Pre K-12

Joint Knowledge Development and Distribution Capability, Joint Knowledge Online
Online Technology ~ Government/Military

Stevens Institute of Technology—Webcampus Division
Online Technology ~ Higher Education

K¹² Inc.
Online Technology ~ Pre K-12

Project Echo, University of New Mexico, Health Sciences Center
Videoconferencing ~ Higher Education

The Colonial Williamsburg Foundation
Other Distance Learning Design ~ Pre K-12

USDLA 2010 Hall of Fame

Dr. Ellen Wagner, executive director, Western Cooperative for Educational Telecommunications (WCET) and partner/principal analyst for Sage Road Solutions. Over her 25-year career, Dr. Wagner has built a strong reputation in learning-technology circles. A former Colorado educator, she served as a tenured professor and administrator at the University of Northern Colorado for 11 years. For the past 15 years, she has held executive positions

with companies such as Macromedia and Adobe Systems, managing their worldwide higher education and e-learning business and developing learning strategies and business solutions.

Dr. Farhad (Fred) Saba, CEO, Distance-Educator.com and professor of educational technology, San Diego State University. Dr. Saba has been involved in the field of distance education since 1971 as a manager, researcher, and professor. He has managed large scale distance education organizations and programs, conducted research for verifying key constructs in the theory of distance education, taught courses on distance education at San Diego State University using advanced technologies, and contributed to building the theory of the field.

USDLA 2010 Eagle Award

The Eagle Award is presented to a nationally recognized public official that has demonstrated unique leadership in the public policy arena and has a long-standing record of educational technology support as well as the support of the USDLA mission, which includes serving the needs of the distance learning community by providing advocacy, information, networking and opportunity. This year USDLA recognized Alabama Governor Bob Riley for his commitment to providing greater educational opportunities within his state.

Julie Young, chair of USDLA Board of Directors and president/CEO of Florida Virtual School (FLVS), noted that, "Once again this year's award winners represent many of the most innovative leaders in the field of distance learning." She continued, "I also look forward to seeing these leaders again during our 2010 USDLA Public Policy Forum in Washington, D.C., September 22, 2010 and during National Distance Learning Week (<http://www.ndlw.org>), November 8-12, 2010."

ABOUT UNITED STATES DISTANCE LEARNING ASSOCIATION (USDLA)

The United States Distance Learning Association (USDLA) is a nonprofit association formed in 1987 and is located in Boston, Massachusetts. The association reaches 20,000 people globally with sponsors and members operating in and influencing 46% of the \$913 billion U.S. education and training market. USDLA promotes the development and application of distance learning for education and training and

serves the needs of the distance learning community by providing advocacy, information, networking and opportunity. Distance learning and training constituencies served include pre K-12 education, higher and continuing education, home schooling as well as business, corporate, military, government and telehealth markets. The USDLA trademarked logo is the recognized worldwide symbol of dedicated professionals committed to the distance learning industry. <http://www.usdla.org>

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Three Approaches for Developing Digital Portfolios

Natalie B. Milman

As interest continues to grow for marketing oneself online, I am often asked for advice about the best approaches and tools for creating digital portfolios (DP) since different approaches and numerous tools are available for creating them. When asked, I first

share my definition of DPs: DPs are goal-driven, organized, collections of materials published on the World Wide Web sharing one's expertise and professionalism based on one's reflection about them (Kilbane & Milman, 2003, 2005). Reflection is a key component, as Barrett (2000) explains, "A portfolio without reflections is just a multimedia presentation, or a fancy electronic résumé, or a digital scrapbook" (para. 35). After I share this definition, I explain that creating a DP depends on a lot of factors such as:

- one's technical skill set for creating the DP using the chosen approach,
- amount of time one plans to invest on the creation of a DP,
- the technical support provided or available for using the selected approach,
- the hardware and software required to create the DP using a particular approach,
- the cost of the tool(s) required for using a given approach,
- the degree of skill and type of hardware and software required for the audience to view materials created with the chosen approach.



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Of course there are other issues to consider, but an important one is determining the approach for creating a DP. There are several approaches for developing DPs. In this article, I describe the integrative, turnkey, and Web 2.0 approaches.

WHAT ARE THREE MAJOR APPROACHES FOR DEVELOPING DIGITAL PORTFOLIOS?

When I created my first web-based DP in 1998, there was only one approach (the integrative approach) for creating DPs and two options, applied separately or together, for producing them which involved: (1) creating HTML files using a basic word processing program such as Notepad or SimpleText or (2) using a website editor software program such as the now defunct Claris HomePage.

Today, however, there are several tools available for creating DPs, some of which require little time and technical know-how compared to tools typically used in the integrative approach. Each approach, however, has benefits and challenges, depending on the individual. For instance, in one approach, one needs to have more technical skill—for one person this might seem like an opportunity to learn new skills, whereas for another it might mean the approach is simply out of reach because the individual has no spare time to learn it. Therefore, it is useful to become familiar with these approaches to determine for oneself the best route to take for embarking on the DP creation journey.

WHAT IS THE INTEGRATIVE APPROACH?

The integrative approach to creating a Web-based DP involves using a number of software programs or tools to create, organize, upload, and display materials. Knowledge of how to use these tools is necessary (or a willingness to learn them). I

recommend the integrative approach to individuals who want the most control over the design of their DPs and who have the requisite resources (i.e., hardware, software), time, and skills for applying such an approach. Examples of software one might use when using this approach are:

- Website editors (Adobe Dreamweaver, Microsoft Expression)
- Audio recording and editing (Audacity, GarageBand)
- Graphic creation and editing (Adobe Photoshop, Corel Painter)
- File transfer (CuteFTP, Fetch, WS_FTP)

WHAT IS THE TURNKEY SOLUTION APPROACH?

The turnkey solution, or web-based application approach, is an approach developed for individuals who wish to create DPs quickly and easily without having to know the mechanics (HTML) behind the scenes of the World Wide Web. Turnkey solutions are web-based, database-driven tools often available through paid subscription for the ability to create DPs using templates developed by the turnkey solution. They vary in their cost, ease of use, creative flexibility, storage space, technical support, and other features. I recommend the turnkey approach to DP authors whose employers or schools require a particular turnkey solution for the creation of DPs, those who do not mind the expense to develop a DP quickly and seamlessly, and/or those who simply do not have the time or skills for developing a DP. Examples of turnkey tools are:

- Chalk and Wire (<http://www.chalkandwire.com/index.php>)
- Digication E-portfolios (<http://www.digication.com/>)
- Folio by ePortaro (<http://www.eportaro.com/>)
- Epsilen (<http://www.epsilen.com/LandingSite/index.aspx>)

- iWebfolio (<http://www.iwebfolio.com/>)
- LiveText (<https://www.livetext.com/>)
- Taskstream (<https://www.taskstream.com/pub/>)

WHAT IS THE WEB 2.0 APPROACH?

The Web 2.0 approach consists of using Web 2.0 tools such as blogs and wikis freely available on the Web for creating a DP. Of all these approaches described, this one requires the least technological skill although it necessitates learning the particular tool. I recommend Web 2.0 tools for those who do not want to invest the time and effort with HTML, but want to have a nice, polished-looking DP that does not require the time, cost, or effort involved in creating one using the integrative or turn-key solution approaches. Most of the tools available are free in this category, which makes them very attractive. Examples of tools that fall under the Web 2.0 approach are:

- Blogs
 - Blogger (<https://www.blogger.com/start>)
 - Wordpress (<http://wordpress.org>)
- Wikis
 - PB Works (<http://pbworks.com/>)
 - WikiSpaces (<http://www.wikispaces.com/>)
- Point and click website development
 - Google (<https://sites.google.com/>)
 - Weebly (<http://www.weebly.com/>)

WHICH APPROACH IS BEST FOR YOU?

Determining the best approach for creating a DP depends on many different factors and goals. Unless an approach has already been determined for you, it is important to explore the approaches for creating DPs and the tools associated with them. Also, be sure to examine examples of DPs created with them. Simply conduct a search of your favorite tools within an approach and use the term “portfolio.” Chances are, you will find many examples. Whether or not you do, an excellent resource for examining a DP created with different tools is Barrett’s (2010) *My “Online Portfolio” Adventure*. This site shares many of the tools available for creating DPs. For more on DPs in general, read Milman (2007).

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Reality-Based Education

Teaching Your Course Beyond the Course

Errol Craig Sull

We teach our courses because we have expertise and an interest in our subject, know how the use of our subject relates to our professional lives beyond teaching, and are cognizant of the subject's general global importance. All of this, of course, makes it somewhat easy to give our students mis-sives on how best to incorporate this subject matter into their lives. Yet it is one

thing to offer course material and have students use it as they choose, quite another for us to put in more time and effort so our courses are vibrant examples of real-world knowledge that students need or will need in their daily lives beyond the course.

This reality-based approach to teaching is what can make our courses so much more important than mere vessels holding grades and degree requirements for students. Rather, it upgrades all components of the course into solid peeks at and examples how the course contents is important in their lives beyond school; by doing this your teaching efforts have a far greater reach than X weeks—and can help students become stronger and more adept in their professional and personal lives.

The bottom line: infusing a reality-based teaching approach in your courses is boffo—here's how to do it:

YOUR COURSE IS A MEANS TO AN END—NOT AN END

When we begin our course we usually don't know if students understand the importance of the course beyond a grade they will receive, beyond a requirement they need for a degree. Yet as the course winds through Week 1 and into Week 2 we begin to know the students who embrace our subject for the benefit it offers after



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that final grade and degree requirement—and we also get a strong sense of those students who see our course as but a notch on their academic belts. What is crucial for us who teach online is to never view our course as but simply that: a course; if we do, those students who seek it out for its help in their professional lives will not get that sense of the information’s importance, crucial in keeping our teaching alive beyond the course. And for those students who see the course as but something to show on their transcripts they will leave with no understanding of the subject matter as being important in their lives and the lives of others. Always remind students how the course and its subject can permeate their lives.

ALWAYS TEACH WITH A GLOBAL PERSPECTIVE IN MIND

There is so much required of us when we teach online—school admin responsibilities, course postings and individual student replies, assignment editing and grading, course readings, and so on—that it can sometimes become easy to simply teach what is required, day to day, with students fending for themselves to discover the where and how of the course’s relation to the real world in which they currently and will continue to exist. We can never let this happen, for it defeats the most important elements of any course taught: to enhance students’ cognitive abilities and rote knowledge in helping them effect positive changes in our society. The more we remind our students of the global importance of our course—personally and professionally—the more the students benefit from what they are taught.

POPULATE YOUR COURSE WITH REAL-WORLD SNIPPETS THAT TIE TO YOUR SUBJECT

We begin our courses with textbooks and/or assigned readings for the students; the

school may include other resources that relate to the subject of the course; and we might offer related info of our own choosing that focuses on the course subject. Yet if this subject-related material goes no further than these initial postings the class can become very stagnant, as nothing new has been added to generate student interest in the subject. Too, by injecting real world material—videos, articles, essays, audio—that relate to the subject you are continually demonstrating to the class how the subject is very much alive and in need throughout the world. Last, by doing this the course becomes an ongoing portal to the lives of your students, to be used now or later ... beyond the course.

USE YOUR STUDENTS’ BACKGROUNDS TO MAKE YOUR COURSE MORE MEANINGFUL

Most online courses begin by having the students introduce themselves to the class; each student who participates not only shares school-related info but more importantly—for your efforts in teaching with a reality-based approach—details of their professional and personal lives. Also, if an online course features discussions students often use this bully pulpit to expand on their professional lives as the topic discussed warrants. Both of these offer the online educator invaluable info, for they tell you what a student needs to make the course more valuable, more pertinent to him or her. Based on this you can post more specific info for the whole class or send “Hey, XXXX—I came across this and thought you might find it interesting” individual postings. By doing this you are tailoring the course to your students’ needs, which not only demonstrates the subject matter’s importance far beyond the course but also makes for a more exciting, enticing course.

HINT: Set up a file with each student’s name, then jot down the particular focus of your subject you believe the student

might especially need. As you come across material relating to a student's needs and/or when you have a few minutes to search out new material that would be pertinent to a student's subject interest post the URL and/or location of file for this info under the student's name. During the course you can then send these, one or two at a time, to each student. It shows you really care as an instructor, it strengthens student-faculty rapport, and it gives added weight and richness to what the students are learning in your course.

DEVELOP DISCUSSION QUESTIONS THAT INCORPORATE REALITY-BASED TEACHING

Whether you initiate the first discussion questions or they are set by the school, these can only carry the students' interest in posting so far; additional questions must be posted by the instructor to keep the postings going strong and substantive. Reality-based questions are ideal, for they offer three benefits to the class: (1) These are the types of questions that "hit closest to home" for the students, thus they are more wont to respond (and often with interesting stories about their professional lives that tie into the course subject); (2) The more postings by students in discussions the deeper a topic is explored; this results in new ideas, suggestions, and questions, which only broadens students' understanding of the core subject; (3) Your constant presence, by posting new questions, tells the students of your enthusiasm and interest in the course, always very important in maintaining student engagement and instructor-student rapport.

SET UP A BLOG TO BRING IN STUDENTS' DAILY LIVES RELATING TO THE COURSE SUBJECT

Blogs in an online classroom were once unusual to find, but now are more common—and they can offer much in the way

of texture to an online course as their structure is more open, with emphasis on content and responses. Setting up a blog that revolves around your subject can allow students to post willy-nilly thoughts on any aspect of a topic you select, with input from all others in class that can take the blog into a long-running, unbroken chain of thises and thats related to your course—but always focusing on the real-world application of your course teachings. While discussions in a course typically last a week or two at the most the blog can last for the length of the course, giving the students more freedom to stay on a subject. For more specifics on effective use of a blog, including how to set up a blog, visit these sites:

- <http://www.wikihow.com/Start-a-Blog>
- <http://www.howtostartablog.org/>
- <https://www.blogger.com/start>

REMIND STUDENTS OF THE ASSIGNMENTS' IMPORTANCE TO EVERYDAY LIFE

Students know they will be receiving assignments throughout a course, and for the most part students complete assignments as steps toward a final grade, and—typically—with each assignment completed the students put it in the past and move on to the next. With this pattern, however, students miss out on how these assignments relate to life beyond the course—and while students must receive grades, and these are important, it is crucial that each assignment be tied in to students' lives outside the course, with a special focus on their careers and jobs. To do this effectively there are some easy steps you can take: (1) With each assignment give students a bullet list of how the assignment ties in to the global marketplace; (2) Ask students for a few lines following each assignment (and build this into their grade) as to how the assignment will benefit them outside of your course;

(3) When giving your final, overall comments on an assignment always remind the students how the assignment can benefit them in their professional and personal lives—and include a suggestion as to how any assignment errors can negatively impact them beyond your class.

INCORPORATE YOUR OWN LIFE EXPERIENCES AS THEY RELATE TO THE COURSE

The National Enquirer and *People* magazine sell well because they give folks a peek into the behind-the-scenes lives of personalities—and letting the students in on parts of your life as they tie into what you are teaching will do the same thing. You are the force that makes or breaks the course—never the course itself—and thus you carry great power in what you write to the students. By giving them “Hey, believe what I say because it’s what I’ve experienced” stories you not only offer real-world examples of how the course material is pertinent to the students’ lives but also allow yourself to be seen as a real flesh-and-bones person, not merely some bits and bytes amalgam of letters that appears on a computer—this always makes for a stronger instructor-student rapport and for more in-depth discussions on course topics.

TWITTER, FACEBOOK, AND OTHER SOCIAL NETWORKING OPTIONS: BONUSES TO USE

Social networking sites are the newest “wrinkle” to take up residency in online courses; some online instructors have them as mandatory components of a course while others use them as options. Whichever, they offer additional opportunities for both the online instructor and students to offer real-world input on how the course contents can be used or is being used beyond the course. As examples: some courses have set up Facebook accounts for specific daily reporting on

how something taught in a course has been implemented beyond the course, how it has been seen to impact society (e.g., through news or magazine reports), or where some of the course info might have been helpful. Twitter is being used the same way, although in an abbreviated (i.e., 140 character) manner. Also: instructors have begun incorporating texting into their courses so students and instructor alike can post daily examples of the course material brought to life.

SOLICIT IDEAS AND INPUT FROM STUDENTS TO INVIGORATE YOUR COURSE’S REALITY

No course should ever be one sided, that is, all material, suggestions, and so on, come from the online instructor and the school; this results in a narrow approach to education and a very wrong view that students can offer little while instructors and the school know better. Constantly asking for student suggestions to improve the reality-based approach of your course will result in many items that can improve the reality impact of your course—but that you had not considered. For we cannot be our students; they know their everyday lives so much better than we, and they can offer resources (including websites), on-the-job examples of the need for or use of your course content, and input on how the course can better effect the real-world lives of your future students.

CREATE A “BANK” OF REALITY FODDER FOR FUTURE COURSES

Ideally, each time you teach the same course it should be a richer, deeper, and more effective version of the previous one you taught. To accomplish this it is important you create a folder—a bank, as it were—of the anything and everything that added to your course you had not initially planned on. This includes all items—such as information, websites, student sug-

gestions, audio/visual clips, articles and essays, suggested readings—that can take your course from a two-dimensional depth to one of three-dimensional depth. When this happens your course has taken on a life that impacts students throughout their

lives—the real world impact we always want from our teaching.

REMEMBER: Pictures of dogs and campfires and cars and sunrises are nice—but petting a dog, building a campfire, driving a car, and viewing a sunrise allow us to truly understand them.

REALITY-BASED TEACHING—THE BIG 11!

1. YOUR COURSE IS A MEANS TO AN END—NOT AN END
2. TEACH WITH A GLOBAL PERSPECTIVE IN MIND
3. POPULATE YOUR COURSE WITH REAL-WORLD SNIPPETS
4. USE STUDENTS' BACKGROUND TO MAKE YOUR COURSE MEANINGFUL
5. DEVELOP DISCUSSION QUESTIONS THAT INCORPORATE REALITY-BASED TEACHING
6. SET UP A BLOG TO BRING IN STUDENTS' DAILY LIVES RELATING TO THE COURSE SUBJECT
7. REMIND STUDENTS OF THE ASSIGNMENTS' IMPORTANCE TO EVERYDAY LIFE
8. INCORPORATE YOUR OWN LIFE EXPERIENCES
9. SOCIAL NETWORKING—BONUSES TO USE
10. SOLICIT IDEAS AND INPUT FROM STUDENTS
11. CREATE A BANK OF REALITY FODDER FOR FUTURE COURSES

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Ask Errol!

Errol Craig Sull

Another column of questions—with suggested answers—to help improve your experience as a distance educator! Be sure to send your questions to me—erroldistancelearning@gmail.com so I can include them in our next issue.

This issue's selections ...

I sometimes get frustrated in teaching my distance learning courses as I feel constrained in teaching courses that others have



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developed and set up. The weekly syllabus must be followed, and this makes me feel I am no longer a true teacher but simply a facilitator to keep students on track each week. Is there anything I can do to change this?

Your question—and frustration—is one shared by many who teach distance learning classes, and this becomes especially confining to instructors who began teaching in face-to-face situations where more individual choices of texts, syllabi, and course makeup are often the norm. Yet there are a few items you can bring to online courses to give them more a feel of being your courses. First, don't sell short good ol' enthusiasm and dedication to your course: no school can dictate or create these in an online instructor, yet they can quickly help put your "stamp" upon the courses you teach. For when students feel your excitement for the course and constantly see you in the course they will react in kind, and this lifts any courses to a more energetic plateau. Second, bring in auxiliary material to enhance your teaching—but material that speaks more to what you'd bring if you created the course. Some suggestions for these include audio/visual clips, puzzles, cartoons, newspaper and journal clippings, and quotes—all, of course, in some way relating to the subject of your course. By including these you get students more excited about the course, the course has more of your flavor added

(without disrupting what's already there), and offers you more course autonomy in selecting what you'd like.

One of the reasons I "signed on" for teaching distance learning courses was for the freedom it allowed me, that is, I did not need to travel to a physical location and my hours were more flexible. Yet, I have also discovered a side to distance learning I had not previously considered: no matter where I travel and for how long I travel I must have my laptop and Internet connectivity. The problem is I enjoy camping—hiking, canoeing, and so on—and was used to doing this for up to two weeks at a time on an annual basis. It seems that I must either give up my camping trips or teaching online—any suggestions?

I know many distance educators who have changed their lifestyles because of the need to have daily online connectivity and access to their classes—and had you written me with this question a couple of years ago I'd say your options were limited. But this is one of those times to praise technology, as more wireless phone providers are offering plug-in modems for laptops that greatly expand the range of Internet access—including the woods, mountains, streams, and other areas that previously had limited or no access. Additionally, there are many websites online that list connectivity "hot spots"—airports, restaurants, hotels, coffee shops, and so on—that folks otherwise only learn of by accident (or not at all). But in a worst case scenario—that is, none of these apply to you—there are two adjustments you can make: (1) at least for a few days, arrange your course so student assignments and participation can somewhat run on autopilot, while your responsibilities can be minimal or none (and let students know—ahead of time—you will be absent a few days: you'll be amazed at how understanding they are); (2) Opt not to teach a course or see if it's acceptable to arrange for a sub to take over (some schools allow this). If

none of these work, well, you are right: adjust your getaway activities or time doing them ... or get out of online teaching!

I sometimes feel as if I am falling behind the learning curve in distance learning as so many new websites, software applications, and "things" (like Twitter and Facebook) keep coming along. One article will suggest using X, with much enthusiasm, and then I'll read a blog that says Y is great and should definitely be used ... and the list never seems to end. To be honest, this sometimes scares me, as I want to keep on top of all that is available to me, yet it seems impossible. Thoughts on this, please?

It almost feels as if you are being under constant attack by technology, doesn't it? And unless you are a major geek chances are that there will be new technology around of which you are not aware but could be used—and probably is being used—in distance learning situations. But not to panic—there are a few things you can do to help take control of the situation: (1) Subscribe to at least one distance learning listserv—you'll learn much about new technology and how it's being used in the classroom; (2) Sign up for Google Alerts—<http://www.google.com/alerts>—to give you daily info on new tech developments as they relate to distance learning; (3) Be sure to read your school's daily e-mail postings—any new technology adopted or suggested by the school will be announced, usually with detailed info and/or online workshops; (4) Be an avid reader of at least one computer magazine, newspaper or magazine technology columns, and our *Distance Learning* journal for the latest in "tech stuff" that can be or is being used in distance learning. Together, these four items will keep you on top of distance learning technology!

I'm pretty comfortable with what I'm doing with my online teaching; my students react very positively to me, and I get a nice

amount of student participation. Yet I feel there is something more I can inject into my classes to give them a major “oomph” to really excite the students. Right now I use the school’s syllabus, I offer detailed feedback on assignments, and I’m in the class on a fairly regular basis. I’ve been reading your columns since they started and you’ve offered some fresh ideas—got one for my situation?

First, thanks for the compliment—I do my best! Now, as for your question it is very timely, for in this issue of *Distance Learning* my entire “Try This” column focuses on something I think can really help—what I call *reality-based education*. Simply explained, it’s bringing in various parts of the everyday world that incorporate components of the subject you teach; this takes the class to that next level you seek as it shows the students how what they are learning is important and useful beyond the classroom, it shows you to be a distance learning instructor who really goes the extra mile for her class, and it results in more student involvement as they will begin sharing examples from their lives as to how the course subject is being used or can be used. And beyond these it also allows your teaching to live far beyond the ending of the course—the ultimate focus of any course!

Although I am well-versed and much published in my field of study I am shy and somewhat laid back; this shows in my writings, as they are all academic, and thus somewhat bland. This is okay as it seems my readers respond fine to this type of writing—but I’m beginning to think my personality is showing itself in my distance learning class, as my students don’t seem to get excited by what I write in class and don’t post much in response to my discus-

sion questions. Is this something that is going to make me dropout of online teaching? I don’t want to pretend to be somebody I’m not in my class—help!

Ah—like the Wizard of Oz you feel the curtain is being lifted, and you fear the students don’t like what they are discovering? Sure: for many folks the distance learning classroom can be a startling wakeup call when they realize the teaching approach—and this can include one’s personality—goes a long way in getting the class to be what they would label *successful*. Here are a few suggestions that others in your situation have tried, each with success by one or more distance learning instructors: (1) Develop an online persona—akin to become an actor in a play—that you present in all things related to your course (not only postings but also comments on assignments and e-mail postings to students); (2) Inject more effort into getting truly excited about your course and teaching your students—that can take your level of engagement and enthusiasm to increased levels; (3) Write out some practice discussion postings, assignment comments, and the like, then edit them—as if editing an article—so choice of words, tone, and structure are more enjoyable and interesting for students to read (and don’t hesitate to seek out others’—peers—opinions on these); (4) Offer students unusual and/or funny and/or enticing auxiliary materials to enhance your teaching—these will add *color* to your teaching style while adding important info to the class and keeping students more engaged in the course.

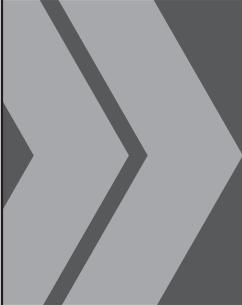
Remember: You will never find the Land of Distance Learning completely explored and mapped out—there will always be new pathways, crannies, alleys, nooks, and caves around the next corner.



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studying the topic of retention who are offering excellent ideas

11. Involve and support faculty—they are at the front lines of the retention issue

Certainly, not all students will be retained, and just as obviously, not all should. With that said, the advantages of distance education can also be drawbacks. The solitary learner can feel alone, and this often leads to isolation and drop outs.

And finally, the issue of retention is an area of contention—especially by those

who do not support teaching and learning at a distance. It is critical that distance educators face problems—real and mythical—and study them. Retention of the online learner is an issue that warrants close scrutiny, even research, by distance educators.

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“IT IS CRITICAL THAT DISTANCE EDUCATORS FACE PROBLEMS—REAL AND MYTHICAL—AND STUDY THEM. RETENTION OF THE ONLINE LEARNER IS AN ISSUE THAT WARRANTS CLOSE SCRUTINY, EVEN RESEARCH, BY DISTANCE EDUCATORS.”

Retention

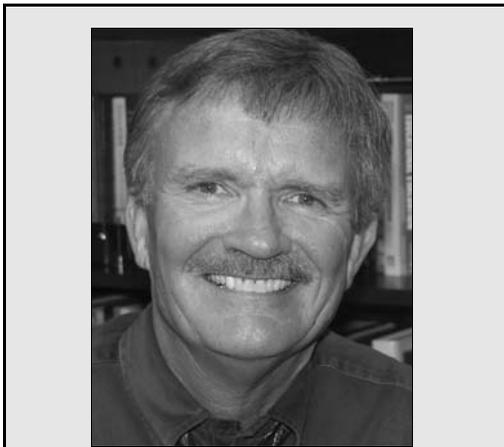
Michael Simonson

There is an assumption about distance education that many students drop out—do not complete a course or a program—and that this drop-out rate is significantly higher than what is reported for traditional instruction. Certainly, while it is possible to argue that assumptions about student drop outs in online education are really myths, it is more useful to talk about student retention—what distance educators can do to increase the likelihood that online students, learning at a distance, will

persevere and continue the course, certification, or degree program to completion.

Actually, the topic of student retention is a major one. Articles dealing with retention of online learners can be found throughout the literature of the field, and some of these papers offer important suggestions that can be readily used by instructors and leaders. Christopher Hill (2010) offered 11 tips for improving retention of online learners:

1. Establish an early alert program to identify students who are not participating
2. Offer, even require an online tutoring program
3. Continue to offer tutoring throughout the program
4. Develop a student success course that gives learners needed skills that help them become better online learners
5. Establish learning communities—real or virtual
6. Develop peer tutoring options
7. Clearly and succinctly orient learners to distance education
8. Measure what is happening—retention, successes, problems, barriers
9. Make the individual course the center of interest to promote retention
10. Read and apply the research and literature—there are many scientists



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ISSN: 1547-4712

Distance Learning

IAP–Information Age Publishing

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Charlotte, NC 28271-7047

www.infoagepub.com