An Official Publication of the United States Distance Learning Association

Volume 10 Number 3 2013 DESCRIPTION OF THE OF THE

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- ▲ A Comparative Study of Emerging Technologies for Online Courses
- ▲ Utilizing Technology to Enhance Communication and Collaboration
- ▲ A Review of Considerations for BYOD mLearning Design
- ▲ Keeping Online Classes Interesting and Interactive
- ▲ Learning Communities and Academic Services Program (CASA) of the University of Guadalajara
- ▲ Transactional Distance Theory: Is it Here to Stay?
- ▲ ALEKS: An Artificial Intelligent-Based Distance Learning System
- Overcoming Student Barriers for Successful Educators

COLUMNS

- Ends and Means
- ▲ Try This
- ▲ Ask Errol!
- ▲ And Finally ...



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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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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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A Comparative Study of Emerging Technologies for Online Courses

Jay Liebowitz

EMERGING TECHNOLOGIES IN ONLINE COURSES: RESULTS FROM 2010

n order to get a sense for the current and expected usage for online instructional technologies for college and university courses, a survey was conducted during April 2010 by Jay Liebowitz, John Aje, and Steve Knode in the Graduate School at the University of Maryland University College. The focus of the survey was to better understand which emerging tech-



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nologies are being used or will be used in the next 2-3 years for online teaching. Most of the 90 responses were from the Maryland Distance Learning Association listserv, Penn State-DEOS listserv, and through the authors' personal contacts in the e-learning world. The sample size is rather small (90 different universities and training organizations), but perhaps these survey results may provide some clarity on these issues.

Based on Figures 1 through 3, the respondents were from a variety of teaching disciplines. Education (32%) was the leader, followed by humanities, other (e.g., nursing, counseling, etc.), sciences, management, technology, and arts.

The technologies that were most familiar to the respondents, in order, were: Web 2.0 tools, e-books, virtual worlds, mobile computing, and cloud computing. Those technologies least familiar to the respondents were, in order of familiarity: visual data analysis, intelligent agents, software as a service (SaaS), and Semantic Web.

Of those technologies that one currently uses in their online teaching, Web 2.0 tools (e.g., blogs, wikis, social networking sites, podcasts, vodcasts, etc.) and e-books were the favorites, with Web 2.0 tools taking the largest usage share (77%). Cloud computing (28%) and mobile computing (24%) were also being used, but to a much lesser degree. The other technologies were hardly being used currently in the respondent's online courses. However, there were other technologies than those listed that were actively being used now in the online courses. The most recurring ones were: Skype, learning objects/course management systems, and YouTube.

With respect to future usage of some of the emerging technologies in the coming 2-3 years, those cited in order were: Web 2.0 tools (81%), e-books (78%), virtual worlds (50%), mobile computing (50%), and cloud computing (47%). Intelligent agents, visual data analysis, SaaS, and Semantic Web, in decreasing order, were cited as those not expected to be used much in online teaching in the next 2-3 years. Simulations were indicated by the respondents as another possible favorite for usage in the next 2-3 years in online teaching.

In determining the top educational technologies that the respondents found to be the most effective for online use, as measured by student learning outcomes, those frequently cited were: Web 2.0 technologies, learning objects, videoconferencing/vodcasts/podcasts, synchronous chat and asynchronous discussion treads, wikis, blogs, screencasts, virtual worlds, and simulations.

In terms of how these educational technologies were best used in online teaching, the frequent responses were: making lectures more interactive; collaboration (such as the use of wikis); reflective learning journals; RSS feeds to allow students to stay abreast of research in their fields; and allow student interaction and student review of content material.

In terms of the top lessons learned in applying these educational technologies in online teaching, the frequent responses were: students are more willing to participate whey they are comfortable/familiar with certain types of technology; students still have to take time to "learn"; the technologies shouldn't get in the way of the learning process; prepare well in advance of implementation; it's essential to maintain an online presence; social presence is increased with videoconferencing and social media; need institutional support for questions dealing with technologies; and technologies have to be simple and enjoyable for students to use.

With respect to the educational technologies being cost-effective to the institution in terms of online course usage, 84% indicated "yes," and 16% "no." Of those who replied "no," a major reason cited was not having a serviceable platform to incorporate these technologies.

In terms of whether the current online courseware will be used in one's online courses in the next 3 years, 71% replied "yes" and 29% said "no." Part of the reason for those replying "no" was due to not having the ability to have links or hooks to incorporate some of these technologies into the existing courseware.

EMERGING TECHNOLOGIES IN ONLINE COURSES: RESULTS FROM 2012 SURVEY

In November 2012, the same survey as used in 2010 was sent to the Maryland Distance Learning Association members, International Conference on E-Learning in the Workplace list, PSU-DEOS listserv, and personal contacts in the e-learning area. There were 94 responses from different universities and other organizations. About 30% of the respondents were from education, with the next largest being technology (22%) and management (21%). Figures 4 through 8 show the Survey Monkey screen shots of some of the compiled results.

In terms of the most familiar technologies, Web 2.0 tools (e.g., blogs, wikis, social networking sites, podcasts, vodcasts, etc.) were the highest ranked (90.4%), followed by e-books (89.4%), cloud computing (74.5%), and mobile computing (73.4%).

With respect to those technologies that one is currently using in one's online teaching, the top choices followed a similar

Emerging Technologies for Online Courses - Zoomerang Online Survey Results - Windows In	iternet Explorer	
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Zoomerang Fasiest Way to Ask, Fastest Way to Know*		
member ioqin — sena my own surveys — Quick tour		
Emerging Technologies for Online Courses Survey Results		View Individual Responses
1. What is the main discipline of your teaching? (Please select one option only.)		
Engineering	0	0%
Management	8	9%
Technology	8	9%
Humanities	20	22%
Arts 💭	1	1%
Sciences	10	11%
Education	29	32%
Other, Please Specify View Responses	17	19%
2. Kindly check the technologies below that are familiar to you:		
Cloud computing	58	64%
Saas (Software as a Service—shared services)	25	28%
Mobile computing	58	54%
Web 2.0 lools (e.g., blogs, whis, social networking sites, podcasts, vodcasts, elc.)	83	92%
Semantic web	23	20%
Intelligent agents	32	36%
Virtual worlds	63	70%
E-Dooks	02	91%

Figure 1. 2010 Emerging Technologies for Online Courses Survey screen shots.

pattern as above: (1) Web 2.0 tools (73.4%), (2) e-books (56.4%), (3) mobile computing (40.4%), and (4) cloud computing (39.4%). In terms of other technologies being currently used in one's online teaching, the most frequent responses were: mind mapping tools, online simulations, and Flash objects/videos. When asked about the technologies that they expect to use in their online teaching in the next 2-3 years, the ranked responses were: mobile computing (77.7%); Web 2.0 tools (69.1%); cloud computing (68.1%); e-books (61.7%); virtual worlds (42.6%); Semantic Web (29.8%); visual data analysis (28.7%); SaaS (27.7%);

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3. Which of these technologies do yo	u CURRENTLY use in your online feaching?		
Cloud computing		25	28%
SaaS (Software as a Service—shared services)		12	13%
Mobile computing		22	24%
Web 2.0 tools (e.g., blogs, wikis, social networking sites, podcasts, vodcasts, etc.)		69	77%
Semantic web		5	6%
Intelligent agents		10	11%
Virtual worlds		16	18%
E-Books		41	46%
Visual data analysis		13	14%
Visual data analysis None of the above 4. What other technologies are you (ZURRENTLY using in your online teaching? Please list below:	13 11	14% 12%
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Visual data analysis None of the above 4. What other technologies are you C 5. Which of these technologies do you Cloud computing SaaS (Software as a Service—shared services) Mobile computing Web 20 tools (e.g., blogs, wikis, social networking sites, podcasts, vodcasts, etc.)	URRENTLY using in your online teaching? Please list below: View 90 Responses u expect to use in your online teaching in the NEXT 2-3 YEARS? Image: Comparison of the teaching in the NEXT 2-3 YEARS?	13 11 42 15 45 73	14% 12% 47% 17% 50% 81%
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Visual data analysis None of the above 4. What other technologies are you (5. Which of these technologies do yo Cloud computing SaaS (Software as a Senice—shared services) Mobile computing Web 2.0 tools (e.g., blogs, wikis, social networking sites, podcasts, vodcasts, etc.) Semantic web Intelligent agents Virtual worlds E-Books Visual data analysis	XURRENTLY using in your online leaching? Please list below: View 90 Responses Use use in your online leaching in the NEXT 2-3 YEAR8?	13 11 42 15 45 73 12 26 45 70 19	14% 12% 47% 17% 50% 81% 13% 29% 50% 78% 21%

Figure 2. 2010 Emerging Technologies for Online Courses Survey screen shots (cont.).

and intelligent agents (23.4%). For other technologies that they envision using in their online teaching in the next 2-3 years, some of the recurring ones mentioned were: dynamic simulations, game technol-

ogies, and more videoconferencing through mobile programs such as TANGO.

For the top two educational technologies that they have found to be the most

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6. What other fechnologies do you envision using in your online feaching in the NEXT 2-3 YEARS?				
View 90 Responses				
7 What are the ton 9 educational technologies that we have found the meet effective for notice use as measured by student learning automas?				
7. What are the top 2 educational reclinicitigies that you have round the most energies of vinite use as interasting of your real model of the second term of term of terms o				
8. Describe below how you best used the educational technologies in the previous question:				
View 90 Responses				
9, What are the top 2 lessons learned that you experienced in applying these educational technologies in your online teaching?				
10. Have these educational technologies been cost-effective to your institution in terms of online course usage?				
Yes	76		84%	
No Constant No	14		16%	
Total	90		100%	
View 20 Responses				
11. Do you feel that your current online courseware will be in use in your online courses in the next 3 years?				
Yes	64		71%	
No	26		29%	
Total	90		100%	
12. If you are interested in the survey results, kindly indicate your email address:				
View 65 Responses				
Convict And Antice Surveys Sign Up For FREE View Our Features Copyright © 1999-2009 MarketTools Inc. All Rights Reserved. Privacy Policy Terms Of Use Help				
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Figure 3. 2010 Emerging Technologies for Online Courses Survey screen shots (cont.).

effective for online use as measured by student learning outcomes, the most frequent responses were: discussion boards and web-conferencing sessions; Skype or Google Plus; online mind mapping; Web 2.0 tools and e-books; collaboration tools;

Response Summary

PAGE: 1

1. What is the main discipline o	f your teaching? (Please select one question only).	Create Chart	Download
		Response	Response
		Percent	Count
Engineering	-	11.1%	9
Management		21.0%	17
Technology		22.2%	18
Humanities	-	7.4%	6
Arts		0.0%	0
Sciences	-	8.6%	7
Education		29.6%	24
	Other (p Sho	lease specify) w Responses	17
	answe	red question	81
	skip	ped question	13

Figure 4. 2012 Emerging Technologies for Online Courses Survey screen shots.

and mobile learning. For the top two lessons learned in applying these educational technologies in their online teaching, the most frequent responses dealt with faculty-student engagement being essential, tech support and advance testing being vital, having proper backup plans, keeping it simple and understandable for the user, careful planning, coaching and guiding students as important elements, and providing effective collaboration among students and instant feedback to students.

In terms of whether these educational technologies have been cost-effective to their institution via online course usage, 76.4% replied "yes" and 23.6% said "no."

COMPARATIVE ANALYSIS BETWEEN THE 2012 AND 2010 SURVEY RESULTS: FINDINGS, IMPLICATIONS, AND FUTURE TRENDS

In comparing the results of the two surveys, there were about the same number of universities and training organizations who participated in each survey (90 in 2010; 94 in 2012). Both survey results showed education as the major discipline of one's teaching; however, in 2010, more of the respondents had a humanities background and less of an engineering and management background than those surveyed in 2012. In terms of familiar technologies, there were not many dramatic changes in the surveyed responses over

2. Kindly check the technologies below that are familiar to you:		Create Chart	Download	
		Response	Response	
		Percent	Count	
Cloud computing		74.5%	70	
SaaS (Software as a Service-shared services)		39.4%	37	
Mobile computing		73.4%	69	
Web 2.0 tools (e.g. blogs, wikis, social networking sites, podcasts, vodcasts, etc.)		90.4%	85	
Semantic web		42.6%	40	
Intelligent agents		30.9%	29	
Virtual worlds		64.9%	61	
E-Books		89.4%	84	
Visual data analysis		33.0%	31	
		answered question	94	
		skipped question	0	

Figure 5. 2012 Emerging Technologies for Online Courses Survey screen shots (cont.).

the past 2.5 years. Most of the survey respondents were very familiar with Web 2.0 tools, e-books, and virtual worlds, and there was a slight change in familiarity with cloud computing, SaaS, and mobile computing from 2010 to 2012. The most dramatic change was in familiarity with the Semantic Web (from 25.6% in 2010 to 42.6% in 2012)—signaling the onset of perhaps Web 3.0 tools and techniques.

For current technologies being used in the classroom, the most evident changes were in increased use in 2012 of mobile computing, cloud computing, e-books, and the Semantic Web. Interestingly, the more advanced technologies (namely, intelligent agents and visual data analysis) were less used in 2012 than in 2010.

For those technologies expected to be used in their online teaching in 2-3 years,

the 2010 results suggested that, in order, Web 2.0 tools, e-books, mobile computing, and cloud computing would be the key technologies being used in 2012. In comparing the 2010 forecasted results with the 2012 "current" technologies being used, there was general agreement in predicting that Web 2.0 tools, e-books, mobile computing, and cloud computing would be the major technologies applied, with the key difference being that virtual worlds had dramatically dropped in expected usage from 50% in 2010 to 24.5% in 2012. We also noticed a difference in 2010 and 2012 in terms of blended learning and online simulations playing perhaps a greater role in 2012. In looking at the 2012 survey results, mobile computing, Web 2.0 tools, cloud computing, and e-books were, in order, the

3. Which of these technologies do you CURRENTLY use in your online teaching?		Create Chart	Download
		Response	Response
		Percent	Count
Cloud computing		39.4%	37
SAS (Software as a Service-shared services)	-	17.0%	16
Mobile computing		40.4%	38
Web 2.0 tools (e.g., blogs, wikis, social networking sites, podcasts, vodcasts, etc.)		73.4%	69
Semantic web	-	14.9%	14
Intelligent agents		5.3%	5
Virtual worlds		24.5%	23
E-Books		56.4%	53
Visual data analysis	-	10.6%	10
None of the above	-	8.5%	8
		answered question	94
		skipped question	0

Figure 6. 2012 Emerging Technologies for Online Courses Survey screen shots (cont.).

technologies expected to be used in their online teaching in 2-3 years.

For cost-effectiveness to the institution in terms of online course usage, 84.4% indicated "yes" in 2010 and 76.4% said "yes" in 2012. Generally speaking, the survey respondents felt that their educational technologies being used have been costeffective to their institution.

GROWTH AREAS FOR E-LEARNING TECHNOLOGIES AND RESEARCH

From the survey results and reviewing the literature, the following areas will continue to grow in the near future in terms of e-learning technologies and research: social web technologies, adaptive/mobile learning, Semantic Web, analytics, knowledge management and e-learning, and massive open online courses (MOOCs).

In reviewing the literature, Martin et al. (2011) performed a bibliometric analysis on which educational technologies have been successful and which have failed, based upon annual predictions in the Horizon Reports (www.nmc.org/horizon) and EDUCAUSE Learning Initiative (www.educase.edu) as compared with published articles. They found that social web and mobile devices are the most important current technologies for the near future in education, and augmented reality and learning objects do not have enough maturity in education according to their publication impact (Martin et al., 2011). The impact of semantic applications in education is increasing every year, and

5. Which of these technologies do you expect to use in your online teaching in the Create Chart V Download NEXT 2-3 YEARS?

		Response	Response
		Percent	Count
Cloud Computing		68.1%	64
Saas (Software as a Service-shared services)		27.7%	26
Mobile computing		77.7%	73
Web 2.0 tools (e.g. blogs, wikis, social networking sites, podcasts, vodcasts, etc.)		69.1%	65
Semantic web		29.8%	28
Intelligent agents		23.4%	22
Virtual worlds	-	42.6%	40
E-Books		61.7%	58
Visual data analysis		28.7%	27
None of the above	1	3.2%	3
		answered question	94
		skipped question	0

Figure 7. 2012 Emerging Technologies for Online Courses Survey screen shots (cont.).

9. Have these educational technologies been cost-effecterms of online course usage?	ctive to your institution in Create Cl	nart 🔶 Download
	Respo	nse Response nt Count
YES	76	.4% 68
NO	23	.6% 21
	answered quest	tion 89
	skipped quest	tion 5

Figure 8. 2012 Emerging Technologies for Online Courses Survey screen shots (cont.).

games and virtual worlds have an impact on publications (games more than virtual worlds). Other predictions were successful, such as grassroots videos and collaborative Web, but their impact was delayed 1 or 2 years (Martin et al., 2011).

Hung (2012) analyzed e-learning research using text mining techniques from 2000 to 2008. Hung (2012) found that topics related to systems, models and technologies are still popular, as well as studies on educational studies and e-learning applications in medical education and training.

Learning and academic analytics in higher education will also continue to grow as applied to the e-learning area. Mattingly, Rice, and Berge (2012) discuss how these analytics can be used to predict student success by examining how and what students learn and how success is supported by academic programs and institutions. For example, at the University of Maryland University College, a Kresge Foundation grant is being used to predict student success, via data mining methods, in their online education. Liebowitz (2013) also discusses the importance of big data and analytics in his research.

Knowledge management (KM) and elearning will also develop strong synergies over the years, as discussed by Liebowitz and Frank (2011), Liebowitz (2011), and Liebowitz (2012). For example, the K4H (Knowledge For Health) initiative by Johns Hopkins University is utilizing e-learning, online communities, and knowledge management toolkits to improve the knowledge and skills of targeted local audiences worldwide. In this manner, health systems can be strengthened and knowledge can be shared for improving global health education (Mwaikambo, Avila, Mazursky, & Nallathambi, 2012). Research by Islam, Kunifuji, Miura, and Hayama (2011) involved a Delphi survey with 17 KM and e-learning research scholars from all over the world and found that e-learning professionals should adopt KM and apply the KM techniques to enhance the e-learning process.

One other major trend for e-learning is the new development of MOOCs (massive open online courses). Already, Coursera, edX, Udacity, and other companies/organizations have been created to offer online courses free to the open public worldwide. We are even seeing the merging of mLearning (mobile learning) with MOOCs, as shown by the work of DeWaard et al. (2011) at Athabasca University in Canada. As DeWaard et al. (2011) highlight, future research is needed to determine whether MOOCs are attracting a specific learner profile not linked to age, gender, or cultural background, but rather to intrinsic and extrinsic motivations.

SUMMARY

E-learning and associated educational technologies have an interesting future. With the onset of MOOCs, the discussion about online learning and outcome measures will be propelled. The use of mobile and adaptive computing, social web technologies, analytics, knowledge management, and semantic web technologies will augment the role of online learning in education, as well as the workplace and society. The landscape will certainly change in the coming years with MOOCs and the use of new technologies not yet even imagined.

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"... RESEARCH IS NEEDED TO DETERMINE WHETHER MOOCS ARE ATTRACTING A SPECIFIC LEARNER PROFILE NOT LINKED TO AGE, GENDER, OR CULTURAL BACKGROUND, BUT RATHER TO INTRINSIC AND EXTRINSIC MOTIVATIONS."

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Utilizing Technology to Enhance Communication and Collaboration

Angeli K. Chin

INTRODUCTION

ommunication is something I am quite passionate about. A problem I saw overwhelmingly in many organizations, educational and professional, was the lack of effective and efficient communication. I noticed that communication between team members and departments was substantially lacking. Projects have been delayed or halted due to lack of effective and precise communication. Individuals were reactionary to requests asked of them and there was no



Angeli K. Chin, Full Sail University, 5540-1 Woodrose Court, Fort Myers, FL 33907. Telephone: (239) 690-9840. E-mail: angeli0215@fullsail.edu substantial "buy-in" to an outlined goal or project. The purpose of my action research was to create better communication through team building, team development and formation utilizing technology. I began by asking what would happen if teams and organizations began to have clearer and more focused communication through the use of technological advancements, would their end goals and results be better achieved?

Research into current literature showed effective, precise, and open communication was shown to be essential in getting goals accomplished and cooperative team formation in virtual environments. The utilization of the available technology in 2012 was crucial in keeping up to date with the moral compass of organizations, particularly in the terms of ethical and professional development of staff (Coleman & Wilkins, 2009). As Marsick and Meyer (2003) stated, the world has become smaller due to globalization and advancements in technology and communications, trainers and executives needed to be proactive and effectively communicate professional standards in line with organizational values, ethics, and goals while effectively training individuals. The development and diversity of organizational work, created a need to train staff in a professional manner for greater knowledge and understanding (Marsick & Meyer, 2003).

As trainers and educators were more exposed to digital technology to effectively facilitate communication within a group, enhanced production, understanding, and collaboration took place. The use of technology in development and communication enhanced creativity, brainstorming, and collaboration regardless of time, space, or location. The use of technology, such as computers, Smart Boards, iPads, video screens, collaboration applications, interactive multimedia applications, and hardware, assisted in explaining and training in the code of ethics and morality, and spoke to the mission and vision of a company (Marsick & Meyer, 2003). Ethical behaviors, attitudes, and communication on ethical commitments enhanced corporate performance as participants embraced the corporate ethical identity that was established and incorporated into their training and professional development (Kleyn, Abratt, Chipp, & Goldman, 2012; Marsick & Meyer, 2003).

Nichols, Nichols, and Nichols (2007) questioned whether ethics could be learned and further discovered that as students attended school, and as their instructors took responsibility to provide a dedication to achieve a set of high ethical standards, students became more cognizant of what was expected of them (Marsick & Meyers, 2003).

Marsick and Meyer (2003) outlined examples in the development and training of organizations and individuals, which included learner centered training, reflective practice and joint learning, which were experiential learning in content. McArdle and Ackland (2007) added that these were influential in cross-cultural training to help individuals comprehend how diverse cultures were based on gestures, body language, personal space, and customs, which provided better understanding and collaboration. In addition, the use of this training helped forestall unintended offense and joined the lines between adult learning and organizational change (Marsick & Meyer, 2003). The use of one or more training mechanisms was recommended to help achieve this learning process and give success to those in cross-cultural organizations (McArdle & Ackland, 2007).

The professional development and training of professionals in an ever mobile and volatile world of business and education, technology was a crucial tool to help explain and exemplify expectations of the organization, team, or individual. (Davis, Preston, & Sahin, 2009). Based on an individual's cultural and religious background and their knowledge base, corporations then defined, created, and implemented training programs with an emphasis on the code of ethics for the corporation, and meeting the vision and goals of the organization (Burroughs, Dahl, Moreau, Chattopadhyay, & Gorn, 2011).

Effective, precise, and open communication was shown to be essential in getting goals accomplished and cooperative team formation (Armstrong, 2009; Robbins, 2012). To enhance interpersonal communication, the learning style of interpersonal communication was utilized to provide better collaboration and interactivity (Armstrong, 2009). According to Robbins (2012), effective communication has taken place when people realize they are all different in the way the world is perceived. In the utilization of this understanding, this guides enhanced communication with others (Robbins, 2012). People with interpersonal learning styles learned best when they were permitted to use their soft skills, the ability to socialize and interact with others, as part of their learning process (Jackson, 2009). Interpersonal learning styles enhanced stimulation by dialogue, with the use of intuition, in regards to another participant's opinions, feelings, and preferences that created a synergy of ideas and processes (Logsdon, 2012). Burns (2009) noted that interpersonal learners were adept at resolving issues and had the ability to read people from their personal

stance, in as such the learning theory of humanism facilitated the building of communication within organizations and groups (Schultz & Schultz, 2005).

Gardner (as cited by Logsdon, 2012) developed a theory of multiple intelligences, which includes interpersonal intelligence as one of the eight intelligences discussed. According to Armstrong (2009) interpersonal intelligence people are primarily social, able to observe and note the differences in the moods, motivations, intentions, and feelings of others within their group, which leads them to be effective communicators. People who hold this as a prominent intelligence also have leadership tendencies and are often adept at motivating others and keeping projects on task and organized and commonly are referred to as "people people" (Armstrong, 2009). Similarly, Tonarely (2012) stated traits often seen with these individuals are viewed as skilled in understanding and interacting with people and able to effect change. Individuals displaying these traits create positive relationships and are reasonable in resolving conflicts within a dynamic (Tonarely, 2012). Personality traits have an impact on learning as well.

Humanism is a personality theory developed by Maslow that embraces and focuses on human interests and values (Schultz & Schultz, 2005). This learning process is a more holistic approach that uses foundational learning skills and attitudes to achieve success in all areas of study, and the students find their confidence and abilities increased (Villares, 2011).

Organized in the areas of goal setting, sharing success, and progress monitoring, as well as creation of a nonthreatening, caring environment with support and encouragement, while managing anxiety under pressure; memory and a healthy optimism help these students progress through the stages of development such as physiological, safety, and belongingness outlined in Maslow's theories (Villares, 2011). Working through these stages of physiological, safety, and belongingness, students start to emerge into the higher stages of esteem and self-actualization (Schultz & Schultz, 2005). The use of humanistic learning theory embraces the need of students to achieve their potential; and in turn it creates and enhances the desire to learn and achieve more (Jackson, 2009). In team development and communication building, the humanistic approach has been shown to be appropriate in creating and developing team development, formation, and communication (Jackson, 2009; Schultz & Shultz, 2005).

With the use of social media, individuals facilitate different environments and it helps to give voice to those participants who may not have engaged otherwise, providing a more collaborative effort and better communication (Burroughs et al., 2011; Marsick & Meyer, 2003). Social media also provides a sounding board for discussion for learners to build better camaraderie and collaboration in projects and goals (Meyer & Marsick, 2003). As Kelm (2011) noted, many organizations have a presence on social media outlets in which they are actively engaged with their followers to elicit communication, thoughts, and ideas on how the organization has performed and it has enhanced policies or created new products (Dyrud, 2011; Kelm, 2011).

Built on the individual and collective progress, the blending of social media and business communication for greater understanding in the development process creates more effective communication and teamwork (Kelm, 2011). Burroughs et al. (2011) noted that, in a creative role, brainstorming within a team can produce innovative ideas: however. with the incorporation of social media outlets, the availability and collaborative environment multiplies and performs in a way that would not be possible in face-to-face interaction. The facilitation of social media creates an environment open and accessible

to all team members regardless of time, space, or location (Burroughs et al., 2011).

Professional development and business communication is enhanced through the use of technology. As trainers and educators are more exposed to digital technology in which there are effective ways to facilitate communication within a group, enhance production, understand, and collaborate. Helping in this track is the use of interpersonal skills and learning styles, which enhance the group or organizations communication and facilitation of needs. In addition, social media, used in communication, helps individuals and groups stay adhered to the mission, goals, values, and ethics of an organization. The use of technology in professional development and business communication enhances creativitv, brainstorming, and collaboration regardless of time, space, or location. In developing my action research, I utilized the aforementioned theories and ideas with the use of digital collaboration.

My target audience was an eighth-grade advisory class in Nampa, Idaho. I reside in Fort Myers, Florida. There were 21 students in the class. There were ten males and eleven females. Sixteen students were somewhat active participants in the action research project, which broke down evenly to eight males and eight females.

Upon the planning of my action research project, it became apparent the target audience I originally intended to use in Fort Myers was not large enough for this project. Upon discussion with a classmate, Jennifer Tuttle, and guidance from our instructor, Roxanne DeLeon, we embarked on a truly digital collaboration with me utilizing Jennifer Tuttle's 8th grade advisory class in Nampa, ID. Jennifer Tuttle became an assistant in helping to set up technology in Nampa, ID and arranged times for me to teach her class.

Implementation began by developing a group on Google Hangouts under the name "Digital Collaborators," in which I was able to communicate online in realtime with the students utilizing the internet, smart boards, and webcams. An Edmodo account was created under "Digital Collaborators" in order to give the preand postassessments. Invitations were sent to each student's e-mail account to have them join me in Cacoo, Asana, Edmodo, and Google Hangouts.

I then began assigning tasks, assignments, and quizzes through Edmodo. Groups were created in Edmodo with a leader who had been randomly assigned by Jennifer Tuttle. The assignments initially given for Cycle One were an Audio/Video Release Form, to read the rubric, join Edmodo, and join Digital Collaborators on Cacoo and Google Hangouts. The students were then asked to take their Cacoo pretest (created in Edmodo) and presurvey (created in Google Docs). They were to also watch a video tutorial of Cacoo after taking their pretest and presurvey.

Upon completion of those tasks, we then met in a Google Hangout and began to discuss expectations and collaborate together as facilitator and students within their groups.

Evaluation and assessment tools included field notes, video, pre- and posttest in Cacoo, presurvey, and reflection/ progress notes from the students.

On the pretest, an average score of 89% was submitted with all 21 participants.

In the presurvey, most students indicated they were proficient in MS Word, MS Excel, Edmodo, Google Hangouts and MS PowerPoint. However 70% felt they were proficient in Cacoo and 0% in Asana.

Based on the data collected in the presurvey, participants felt that working in groups was beneficial to team development because they were able to help one another and generate new ideas. Most liked working in groups although they preferred to work alone under self-guided direction. Some of the comments made during an interview were: I like working in a group because everyone can share their ideas but then it can lead to an arguement [sic].

I think that working in groups increases your social skills.

I love working in groups because it gives everyone a chance to share their ideas and their [sic] is not as much work.

If I work alone I know the task will get done no matter what.

I think working in groups is fine. but I would rather work alone because I think I work better alone.

Sometimes working in a group can get difficult and its easier to work alone.

I like working in groups because it gives everyone a chance to put in there [sic] ideas, and your able to work with your friends.

On the posttest, 16 participants submitted a quiz on Edmodo, which garnered an average of 86%. The test results proved that while not all participants engaged in the posttest, those who did retained the knowledge they had in working within the application and in groups.

During implementation participants were scattered and a delay in the initial setup for collaboration delayed the implementation of Cycle 1. Students were suspended from school and could not participate. A pleasant surprise with the students who did participate was their familiarity in using Cacoo and Google Hangouts. Their enthusiasm and surprise on how the software helped them was a blessing.

Some of the comments made were:

I love working in groups because it gives everyone a chance to share their ideas and their [sic] is not as much work.

Sometimes working in a group can get difficult and its easier to work alone.

I am used to working alone and I work more efficiantly [sic] alone without interuptions [sic] from other members of a group, but, I can work well in a group.

I like working in a group because everyone can share their ideas but then it can lead to an arguement [sic].

I like working in groups because when someone needs help you could help them and if you need help they will help you.

Having most of the technology issues resolved, we moved forward with Cycle Two. Students took their pretest and reviewed the tutorial on Asana. As spring break falls differently in Idaho than in Florida, we adjusted the time schedule to allow time to collect data and finish Cycle Two.

This cycle was relevant as it began the process for digital collaboration in a distance environment. Many obstacles encountered were addressed and made it easier to transition through the second cycle.

Cycle Two began with a teacher-led video discussion through Google Hangouts on our next steps in our project. I explained how we were going to continue with the teams we developed in Cycle One. The students had to watch the Asana Tutorial and take the prequiz on Asana. Students broke into their four teams and began to use Asana to create tasks and goals. The students were not as willing to participate and utilize Asana as they were in Cycle One with Cacoo. I then posted on Edmodo for the students to reflect what they were experiencing with Asana. When students posed a question, there was a video answer posted to Edmodo to help them along.

The groups met and brainstormed what tasks each student would take on to create the web pages as their final project. Tasks assigned to students included what they would need to do in order to create the digital citizen website in Google Sites. These included writing the copy, naming their website, and finding images.

They then began to work on the web pages and checking off completed tasks in Asana. Students were then given a posttest and postsurvey to see if their mindsets had changed or remained the same on working collaboratively in a digital environment since the implementation of Cycle One. Students were also given an informal survey to check for levels of participation and overall opinion of the project.

The main collection method for Cycle Two's data was through tests, surveys, and reflection posts with the students through Edmodo.

A comparison of the pre- and postsurvey encompassing Cacoo and Asana showed there was a 3% increase in the number of students who preferred face-toface interaction in having collaboration. Upon further comparison, there was an 8% decrease in students who said they would prefer a written agenda. Furthermore, there was a 9% increase that a student would prefer to work alone on projects. There also was a 27% decrease in students who felt that working in Asana helped them work more efficiently. Upon further investigation, students reflected they found Asana difficult to work in and hard to keep others on task.

The data gathered during this cycle has indicated that, while directly teaching lessons about digital communication and collaboration can help foster team building and effective communication, more time and teacher-student interaction needs to take place in order to facilitate a team environment.

The pre- and posttests showed where learning had been achieved through the use of Asana. Many students felt that the program confused them, which led me to reevaluate whether the program was too advanced for this group. Evaluation is needed in any future use of the program to help facilitate learning. Distance learning in this age group proved to be trying. Understanding the student body and having the time to answer the questions needed is crucial in an immediate response situation.

We ran into several unexpected technical errors during Cycle Two. Asana was not allowing the students into the program. Not knowing if it was an Asana issue or a local network issue, I had to rely on communication with Jennifer Tuttle, the teacher onsite in Nampa, ID. I re-sent the link to the students and they finally were able to sign back in.

Additional surprises were the unexpected delays caused by the school district in closing the school, adding out-of-classroom activities, and the numerous suspensions and absences from the student body.

The overall reaction of the students was interesting. For Cycle Two I had them complete a survey about how meaningful they felt their overall experience was from Cycle One to Cycle Two and 56% agreed or strongly agreed it was a meaningful experience while 17% felt neutral and only 12% disagreed or strongly disagreed that it was meaningful. I did not find the students as actively engaged in Cycle Two as they were in Cycle One, so this greatly surprised me.

However, when the students were asked how well they thought they participated in their teams 0% felt they did not participate, 17% were neutral about their participation, 44% said they participated and 39% felt they strongly participated. Through surveys and reflections it was determined the students did learn about being a digital collaborator.

The data gathered during these cycles indicated that while directly teaching lessons about digital communication and collaboration can help foster team building and effective communication, more time is needed and more and teacher-student interaction needs to take place in order to facilitate a team environment. Evaluation is needed in any future use of the program to help facilitate learning. Distance learning in this age group proved to be trying. Understanding the student body and having the time to answer the questions needed is crucial in an immediate response situation.

As Marsick and Meyer (2003) suggested, the use of technology, such as computers, smart Boards, iPads, video screens, collaboration applications, interactive multimedia applications, and hardware, assisted in explaining and training. Armstrong (2009) and Robbins (2012) noted that effective, precise and open communication is essential in getting goals accomplished and cooperative team formation. I believe through my cycles, this was shown to be true. By utilizing Edmodo, Cacoo, Asana and Google Hangouts, as well as e-mail and video responses, students felt their collaboration and communication improved and increased in a way to meet their goals.

In the future, I would like to take my findings and this project into a local school where I could have some physical and "face-to-face" interaction with the students or perhaps use this project to an older set of students, high school and beyond, in a truly online, distant environment. I found that students of this age needed more direction and guidance than I could give in an only online format without the use of telephone or instant messaging. The time difference was also an issue. The eighthgrade advisory class in Nampa, ID was a "nongraded" class so motivation was low. As a nonprotected academic time, any disruption that could possibly have happened, did. It was hard to maintain continuity with the multiple disruptions that occurred. I feel the action research project was a success and a jumping board for creating other distance, online collaborations.

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"... EFFECTIVE, PRECISE, AND OPEN COMMUNICATION WAS SHOWN TO BE ESSENTIAL IN GET-TING GOALS ACCOMPLISHED AND COOPERATIVE TEAM FORMATION...."

A Review of Considerations for BYOD M-learning Design

Michelle Estable

INTRODUCTION

se of mobile phones worldwide is on the rise. The International Telecommunication Union reported that in 2012 \pm 86% of the world's population had a mobile phone subscription, with a large part of that growth being driven by developing countries (International Telecommunication Union, 2012). One review of mobile learning literature noted that mobile phones and personal digital assistants made up 75% of the devices used in education (Wu et al., 2012). The ubiquity of



Michelle Estable, Ed Tech Specialist & Team Lead, Higher Colleges of Technology (ADMC), PO Box 25023, Abu Dhabi, United Arab Emirates. Telephone: +971 2 404 8270. E-mail: michelle.estable@hct.ac.ae mobile phones, personal digital assistants, and portable tablets all offer a great opportunity to expand access to learning through mobile learning (mLearning).

The Association of Educational Communications and Technology defines electronic learning (e-learning) as the use of electronic media and devices through networks or interactive telecommunications systems to connect learners, resources, and instructors. This encompasses any delivery format, and would encompass mobile learning through wireless connectivity allowing learning anytime, anywhere. This characteristic of m-learning is essential since it transcends fixed location learning and static models of communication (El-Hussein & Cronje, 2010; Nyiri, 2002). Traxler (2005) defined mobile learning as "any educational provision where the sole or dominant technologies are handheld or palmtop devices" (p. 262), and this included mobile phones, smartphones, personal digital assistants, and tablet personal computers or portable laptops, but not desktop computers. Like Nyir, Traxler has noted that personalized connectivity and freedom of time and space constraints for learning separate e-learning from mlearning, and that modern ideas of mobile learning encompass society's changing vision about when, where and how one learns (2007). For this paper, the definition of a mobile device will include any portable and handheld device that has 3G or WiFi access, including devices such as the iPad or Samsung Tab.

Many institutions are starting to implement a "bring your own device" (BYOD) policy, in which students and teachers are given minimum specifications for the electronic devices they must choose, but are otherwise allowed to purchase their own personal devices (Edudemic, 2012). There are both advantages and disadvantages to a BYOD initiative. Some of the advantages are that the school saves money on providing devices, as well as allows students a choice in the kind of device they will use. Some disadvantages, however, are that mlearning design must consider that learners will be accessing the content from a variety of different devices (Faas, 2012). This means that fewer native apps can be used, and there may also be some disparity and inequality in student access since not all devices are created equal when it comes to usability. It is recommended to have a list of not only minimum specifications for student-bought devices, but to have a list of recommended devices as well to help ensure that all students could access the learning content from their device types.

DESIGN CONSIDERATIONS FOR BYOD M-LEARNING

Mobile learning affords many benefits to learners. Some of the benefits of m-learning are increased access, convenience, anytime learning, anywhere learning, as needed learning, quick reference and troubleshooting, personalized learning, autonlearning, omous and social media integration (Kukulska-Hulme & Traxler 2007; Parsons & Ryu, 2006; Stone, 2012). The most important m-learning benefit is autonomy, as it supports the success of the other benefits; with autonomy the student is able to take advantage of the anywhere, anytime, when needed, convenience of personalized learning. The best student autonomy comes from good instructional design that offers clear self-guided access

to the learning content on a variety of devices.

Poor m-learning design leads to confusion, and can interfere with student learning. It is important to note that while mlearning is created to be autonomous, it still requires human intelligence and critical analysis in the initial design to make it successful. The design and organization thus becomes the keystone to successful learning, and integral to the overall direction of learning content that is focused on clear learning objectives and goals (Allen & Sites, 2012; Dick, Carey, & Carey, 2005; Wiggins & McTighe, 1998). Poor design will hallmark poor student autonomy, which in turn can lead to poor student achievement. Important design considerations or potential barriers for a BYOD situation include file type, organization, length of learning content, culture and language, connectivity, motivation, and assessment. Each of these will be reviewed in turn with examples of ways to address the consideration when designing mobile learning for a BYOD learning context:

FILE TYPE

Careful consideration should be taken in designing any files to be opened. For example, PDF files do not open well on most mobile devices, and even on an iPad they have limitations. There are other file types that are more ubiquitous across devices, and these would better suit a BYOD context, such as ePUB, which has reflow and resize text thus making it suitable to all screen sizes. Standardized file formats such as ePUB will afford greater usability and access to the learning content across different devices. For files hosted online and not downloaded, choose cloudbased hosts that resize, compress, and publish a file type that will be easily opened on most mobile devices, such as using You-Tube for video files. Test all file types on the most commonly used mobile devices before implementing it.

ORGANIZATION

In many m-learning situations the instructor is not present to guide the student. The organization of the content should thus be clear, succinct, and facilitate easy discovery of the necessary information through self guidance (Allen & Sites, 2012; Stone, 2012). The better the organization of the learning content then the higher the student autonomy. Start by analyzing the learning goals, and then mapping that back to the main topics that will support those goals, and then break those main topics further into supporting subtopics that can be ordered and arranged to guide the learner, step by step.

LEARNING NUGGETS

Due to the small screen size of mobile phones, the limited downloading capabilities, and differences in content access across different devices, it is essential to design m-learning content as simple and succinct as possible. Break the learning up into small, chunked, lessons of 3-5 minutes, called learning nuggets. Order the learning nuggets logically to allow selfguidance and autonomy. Avoid unnecessary text and explanations. Keep it succinct and to the most important content. Always remember the adage: people will use about 20% of what they learn for about 80% of what they do. Does the content offer that necessary 20%? If not, cut it down to the key information.

LANGUAGE AND CULTURE

Different contexts and regions of the world will have to consider different cultural norms and language constraints. In a paper on recommendations for m-learning in Latin America, Kim, Miranda, and Olaciregui (2008) noted that any mobile learning model must consider the "population of learners, their learning conditions and needs, and must factor in relevant environmental, cultural, and political dimensions" (p. 4).

I work in the United Arab Emirates, where design of online learning requires special design approaches through the use of learning examples and videos relevant to the global region, as well as language and vocabulary used that is simplified for the English as a second language speaker to more easily follow and understand. For example, where possible, closed captioning should be used on videos to ease the comprehension of English as a second language students that may not have the instructor present to answer questions. Or, a second example is that in utilizing a case study it should be about a company that students are familiar with and covers ethical considerations relevant to their cultural perspectives. Cultural and language considerations will be applied differently in each country or region, but should always be analyzed in conjunction with the intended audience for the learning content.

CONNECTIVITY

Survey students about connectivity outside of the WiFi enabled school zone. If some have low or no Internet connectivity outside of the school grounds, then consider learning nuggets and materials that can be downloaded to the phone for offline learning. Keep the files sizes small, such as not putting in too many high-resolution images or uncompressed large videos.

MOTIVATION

Adults want to know the reason why they need to learn something, or else they resist taking time for busy schedules to apply time to it (Knowles, Holton, & Swanson, 2005). The goals, needs, and objectives should be clear and focused such that the learner sees the purpose and value of the learning. This is acquired in part through good content organization and creating high quality learning nuggets. Motivation could also be affected by the lack of social interactions with the instructor and peers. One way avoid this would be to integrate groups and discussion forums from other popular social web tools, such as Facebook or LinkedIn. These types of Web 2.0 tools manage their own applications that work well on most mobile devices, thus saving the headache of technical support. In doing so, then the designer lowers the transactional distance through high social interactivity while maintaining student autonomy and learning-place flexibility (Moore, 1997, 2007; Park, 2011).

Assessment

One drawback to not only BYOD learning but also m-learning is the ability to assess the learning. Submission of assignments, feedback, and testing for content knowledge and mastery are more difficult to do in this delivery format. Some possible solutions would be face-to-face or proctored exams and presentations of projects scheduled around the mLearning. Some may feel that having face-to-face requirements defeats the entire purpose of self-directed m-learning. In this case, groups may brainstorm virtual and self-directed assessment methods that continue to attend to the selfdirected nature of m-learning. For example, one solution would be to ask the student to exhibit their learning via video as proof of skill mastery or content mastery, then uploading that to YouTube, and submitting the link to the professor for grading. A third solution could be that the student creates a full website about a project they are completing, including the outline, an essay, a video of project steps or related events, and perhaps interviews with experts in the field or with stakeholders in the project. A third solution is an online exam (multiple choice, ordering, matching, etc.) for autonomous testing that is proctored by a trusted community member. There are many online cloud-based document storage tools that can also be used for assignment submission, such as Google Drive, Box, or DropBox. Overall, a reliable and trustworthy form of assessment is required to test student achievement, and ultimately to analyze the success of the m-learning curriculum design.

CONCLUSIONS

Analysis of the learning goals, topics, and outcomes will help focus the content. Then choose tools, file types, and technologies that will enhance (not detract) from the learning content. Then evaluate the overall design, and break it down into small, chunked learning nuggets—small snippets of learning that added up lead to the overall learning goals.

A good way to understand what design considerations are required for a BYOD mlearning course is to test it as a student. For example, create an account at the Carnegie Mellon University Open Learning Initiative (OLI), where there are open courses on many topics, all with interactive and high quality learning content integrated with a variety of technology tools to enhance student learning. If all the participants have a computer and good connectivity then they will have equal access to a great open course. However, I participated in a recent implementation of the OLI course in conjunction with The University of the People, where many of the students came from rural developing regions of the world, many students were unable to access the OLI site due to limited access to the Internet, slower connectivity, large files they could not access, and some complained of the lack of mobile-ready content at the OLI open courses that did not work on iPhones and iPads (due to flash-based modules rather than HTML5). Access to any learning content is affected by the quality of the mobile device, and not all mobile devices are created equal. The best way to consider the quality of the design is to test it out on a variety of devices as a student, and to evaluate the connectivity and devices the students will use.

Barriers should be examined in full during the initial analysis of goals, prior to the design stages. In understanding the barriers, possible pitfalls and interferences with learning can be avoided. Through understanding what the goals, considerations, barriers, and context will be, the best design and content can be implemented more successfully. Test, test, and test again. Try the content out in a variety of situations, with variable connectivity, and on multiple devices. This way any limitations in access to the learning content can be identified and solved prior to implementation. Through a thorough analysis of both the design and possible barriers, a high quality and fully accessible learning plan can be designed and implemented.

WEB RESOURCES

- Pinterest: Mobile Learning/BYOD/COD: http://pinterest.com/INelearn/mobilelearning-byod-cod/
- Scoopt.It: BYOD and Mobile Learning: http://www.scoop.it/t/byod-andmobile-learning
- UpSide Learning: Mobile Learning and the BYOD Movement: http://tinyurl.com/upside-byodmLearning
- Higher Colleges of Technology GED4 mobile learning design and delivery guide: http://elearning.hct.ac.ae/mlearn
- JISC Mobile Learning infoKit: http://www.jiscinfonet.ac.uk/infokits/ mobile-learning/

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The day and one-half of on-site sessions will be held in the board room of the Fischler School of Education in North Miami Beach. Online sessions will be conducted for six weeks after face-to face sessions and will utilize the Blackboard course management system. Attendees will receive reference books, learning materials, and access to the DLLCP web site.

The Distance Learning Leader Certificate Program will be led by Dr. Michael Simonson, professor of Instructional Technology and Distance Education. Dr. Simonson has over 35 years of experience in distance education. Other leaders will join sessions using telecommunications systems.

For more information, contact Dr. Karen Bowser, Executive Director, Professional Development <u>bowserk@nova.edu</u> and 954-262-8513 <u>http://www.fischlerschool.nova.edu/dll</u>

Keeping an Online Class Interesting and Interactive

Keith Farwell

INTRODUCTION

oday's technology allows for a vast variety of interactive techniques and content delivery methods to be used in course design and instruction. Whether the courses are in a traditional brick and mortar classroom or delivered via a learning management system in a distance education setting, instructors have more tools and options to interact and keep the class interesting than they used to. For the purpose of this paper, the focus will be on distance education and the technologies used to improve the online experience. Baehr (2012) states, "E-Learners



Keith Farwell, Washburn University, 1700 SW College Ave., Topeka, KS 66621. Telephone: (785) 670-2293. E-mail: keith.farwell@washburn.edu have become multimodal learners, with the ability to adapt to multiple media forms, environment types, and tools. As a result, developing effective online training requires a complex understanding of how technology, media, and users interact" (p. 175). How is this done? With budget restraints, instructor pushback, and the lack of time given for professional development, it can be difficult for instructors to learn how to use modern content delivery options. For faculty wanting to utilize new methods, the time restriction itself can be quite prohibitive. Baehr (2012) points out that "with regard to preparation time for an online course, instructors may spend as much as 20% more time preparing online courses than they do for the same face-toface class" (p. 182). This does not take into account that the instructor may have to learn how to use any new technology in course development.

With the increasing use of smartphones, tablets, and other hand held devices, it is important to keep pace with the students' preferred method of content delivery. Simonson, Smaldino, Albright, and Zvacek (2012) state, "The key to success in an online classroom is not which technologies are used, but how they are used and what information is communicated using the technologies" (p. 115). Keeping this in mind, the instructor must wisely choose the technologies he or she wants to utilize in the class.

The course content needs to be delivered in an interesting and interactive way for the students for both learning considerations and to establish an interaction between faculty and students. Tunks (2012) states the challenge of "finding ways to demonstrate instructor presence and subsequently establish a classroom community" (p. 1). This interaction should lead to increased class collaboration and an enhanced learning environment. This paper will discuss three challenges that online instructors face when developing an online course and attempting to keep the course interesting and interactive for the student.

THE INSTRUCTOR

Have you ever taken an online course and asked yourself the question "I wonder if my instructor or professor has ever taken an online course" or "I wonder if my instructor or professor has ever had any training to teach an online course"? How well a student likes any class is largely dependent on the instructor for that class. In a traditional classroom it may be easier for an instructor to have interactive course materials and exercises built into the class lecture for collaboration. It is also easier for the instructor to communicate his or her desires to the class personally, in front of everyone, ensuring that they understand what is being said.

In an online class setting, there can be more challenges. Three examples of challenges that online instructors face in the online classroom include, but are not limited to: technology knowledge, course material creation, and class communication/interaction. So how can an instructor solve these issues while improving the course for a student? Is there a way to improve the effectiveness and quality of the online class while keeping the content presentation interesting and interactive? By addressing the three areas listed above, there should be an opportunity for an instructor to provide a quality course with an interactive atmosphere.

CHALLENGE 1: TECHNOLOGY KNOWLEDGE

The first challenge for online instructors is to know how to use different tools to create content—and that there are many tools at instructors' disposal. Some of these tools are free and some have a significant cost. Instructors can easily be overwhelmed with the different options and have a hard time knowing where to start and which tools will be most effective in their class. If your institution instructional designers, they may be able to help with some suggestions or knowledge on which tools would.

Some of these tools are commonly termed or known as Web 2.0 tools or applications. Smaldino, Lowther, and Russell (2012) define Web 2.0 tools as "available online resources that provide students with many types of learning opportunities bevond simple information access" (p. 315). To further explain Web 2.0 applications, Simonson et al. (2012) note that these are "tools that are highly participatory and promote collaboration, networking, and sharing" (p. 129). Some examples of Web 2.0 technologies noted by Simonson et al. (2012) include: blogging, wikis, podcasting, social bookmarking, social networking, and virtual worlds. If instructors are unsure of the Web 2.0 tools at their disposal, they can easily do an Internet search for Web 2.0 tools. They could also contact the institutions IT department to see if they have any resources available. The next step would be learning how to use this technology. Oftentimes there are great videos on YouTube or other locations that can give enough information to get started.

CHALLENGE 2: CONTENT CREATION METHODS

Content creation, in some degree, works in conjunction with technology knowledge. You have to know or learn how to use that specific technology to start creating the lessons using it. Content creation can easily take a large quantity of time to plan, edit, and produce a single concept of a lesson. However, creating fun and exciting delivery methods for the course content will help promote that same excitement in the learning process for the student. Some examples of creative content delivery methods include Power Point presentations with voiceover, Prezi presentations, Adobe Captivate, Adobe Connect, Audio/ Visual productions, Podcasting, and Sermonettes.

PRESENTATION/SLIDE SHOW OPTIONS

This allows an instructor to give a slide lecture with some voice inflection and meaning. Something similar to a Power Point is a Prezi presentation. It gives more options for navigation. Instead of a slideby-slide presentation, a Prezi presentation allows the developer to put the "slides" in various positions and places so it appears that you are moving to different areas as you progress through the material. It provides a nice way to "break up" a presentation. Adobe Captivate allows you to import a Power Point and add other components like quizzing within the presentation.

AUDIO/VISUAL OPTIONS

Another way to get a much more interactive course is to use Adobe Connect. Adobe Connect allows you to have a live lecture with the students logged in to "attend" the lecture. This allows for more interaction if you utilize the live polling options. It also allows for immediate response by the instructor for student questions. These sessions can also be recorded and posted as a link so if any student missed the lecture, he or she could view it later. Adobe Connect does come with a hefty price tag though. Depending on the institution, there may be an alternative product available that can achieve similar results.

Audiovisual production is a very important area in helping a class be more interactive and interesting. Developing good audiovisual material can be very time consuming. Using free programs such as Microsoft Movie Maker, Apple iMovie, Picasa, Audacity, and other programs, you can create and edit audio and video files guickly and pretty easily. Video production does increase the time commitment but also increases the quality of your delivery, if done right. While only a microphone is needed to record the audio, video production requires more of an investment in equipment. A common way to deliver audio/visual productions is via podcasting. Simonson et al. (2012) defines podcasting as "the process of recording and storing audio and/or video content on the Internet for downloading and playback using iPods, MP3 players, computers, and other electronic gear that plays back audio and/ or video files" (p. 130).

Another way to incorporate some audio/visual components is a sermonette. Doug Jones, an instructor at Washburn University for 13 years, creates sermonettes by utilizing the universities audio/visual team. He is able to give a lecture utilizing a green screen while superimposing a sonography case in the background. This enables him to point to and describe what he is looking at thus enabling a student to see both him and what he is teaching. Jones notes, "students really like the sermonettes. They leave multiple positive feedbacks in the student evaluations and the sermonettes tend to lead to great discussions on the discussion board assignments" (D. Jones, personal communication, April 4, 2013).

CHALLENGE 3: CLASS COMMUNICATION/INTERACTION

Great communication is needed in an online course. In a study done by Katherine Hayden (2009) she states: In responding to questions about effective strategies for online learning, respondents emphasized the importance of community that is created in online courses, with 52% rating community as extremely important. They indicated that community is effectively built through instructor-student relationships as well as student-student relationships. (p. 2)

Timely e-mails are nice, but an online class can offer more. Connecting students to students and instructors to students can be done through a variety of ways. Becky Dodge, radiation therapy program director, stated:

Connecting theory with clinical practice also helps in improving student engagement. They are very responsive to discussions that incorporate real-world examples, issues, cases, etc. Students also actively share their own clinical experiences with classmates, which broaden each student's awareness of various treatment techniques and technological advancements. (B. Dodge, personal communication, April 4, 2013)

The following communication methods, if implemented correctly, can help add a personal touch to an online course.

GRADING WITH AUDIO

At a recent iTRAC conference Larry Carver spoke on "Five Easy Pieces that will Make You the Toast of Your Online Class." One suggestion that he made was grading assignments with audio feedback. A lot of instructors will grade using the review function in Microsoft Word. However, Carver has the students submit an Adobe PDF document. Within the Adobe functions is the ability to record and attach an audio clip. This audio allows an instructor to give a "personal" touch to the grading because voice inflection and tone is utilized and it gives the student a sense of connection to his or her instructor rather than some typed words or just a grade with no comment. Carver (2013) said that "his student evaluation scores improved a great deal after he implemented this form of feedback for the students."

DISCUSSION BOARD ASSIGNMENTS

Discussion assignments have an opportunity to be rich and full of great content pulling from the whole classes experience and knowledge base. However, they can also fall into a mundane world of being assigned and graded without much actual interaction from students or the instructor. In a recent presentation, Cathy Heffernan (2013) noted, "One of the most important factors of a good discussion board assignment is to make sure you have a good question." Keeping the question at a level of understanding in regards to the level of education of the student is very important.

One way to spruce up the discussion board is requiring a video or image of what is being discussed. I have found that having students upload an image or short video of pathology that they are studying or have experienced in a clinical setting, has led to increased class participation. The students are more eager to share what they have witnessed in the clinical setting by having a little freedom on what they talk about. Additionally, by not limiting the "topic" to be the same for every student, there is more variety in the student posts thus leading to a great pleasure of grading due to the variety.

Another way to have interactive discussions is to use audio and/or video posts versus typed posts. The learning management system Desire 2 Learn has a video recording option on the discussion boards. Students who are using a device with a webcam or camera can simply answer the discussion board question by recording themselves. This short video allows the class to see their peers, which for an online class, can be a rarity. If a video option is not available, an audio reply or post at least gives another option to complete the assignment in a different way.

WEEKLY E-MAILS WITH AUDIO/VIDEO

Michael Simonson of Nova Southeastern University utilizes a "Monday Morning Memo" process in which an e-mail is sent every Monday reviewing what is to be expected with the upcoming week. Another Nova Southeastern University professor utilized a similar communication method but along with the text, it also included an audio clip. These methods could also be done via a short video. The main point however, remains that it is a consistent method of communication to ensure a component of class interaction between the instructor and the student ensuring the "presence" of the instructor.

INTERACTIVE RESPONSE SYSTEMS

In a traditional program, interactive response systems can be easily utilized since students are present for the class. So how could you use a system such as this in distance education? Turning Technologies is a company that has developed the technology to do so. Their program is called Response Ware and can be used on webenabled mobile devices. This system can be used solely for distance education or if it is a blended course, it works in conjunction with the Response Card clickers that are utilized in a traditional program.

Zachary Frank primarily uses the Turning Technologies system in his physical therapy assistant classes, which is face to face. However, Frank (2013) stated, "they now have the technology to use this polling technology for distance education." For Frank (2013), the greatest benefit of utilizing this system is:

It allows for students who are shy or not as outgoing to participate in class. Many times, a student may know the answer, but are intimidated by the thought of being wrong. By being able to answer a question without the pressure of being wrong in front to the class, it enables me to determine if everyone in the class understands what is being taught or not.

Frank thought that he would use this technology in an online class if it were available.

WIKIS

Wikis are another Web 2.0 tool that can be used for group collaboration. Simonson et al. (2012) define a Wiki as: "an excellent tool for collaborative online writing assignments and group activities compiling information in a single online resource" (p. 129). A wiki can utilize digital materials such as graphics and if any part is accidently erased, it can be reverted back to a prior state. There are many sites where you can start a wiki for free as well.

CONCLUSION

There are many options to keep an online class both interesting and interactive for a student. The three main areas discussed were technology knowledge, content creation methods, and class communication/ interaction. The first two topics mainly deal with the instructor and his or her ability to know what technology is available, how to use that technology, and how to create content using that technology. While the end product can be very exciting, the time required to learn and develop that content may be quite extensive. The third topic of class communication/interaction is a combination of student-to-student and student-to-instructor communication and interaction. This is vital for the "livelihood" of the class. Interaction between all parties allows for a richer learning environment where everyone feels more involved and invested in the class.

There are several methods to get the class involved. Web 2.0 options to help with communication and also with content delivery to help facilitate interaction
between students. Some common Web 2.0 tools include wikis, podcasts, and blogging. Other ways to collaborate included using Adobe Connect and interactive response systems. To give a more personalized touch to a class, try grading using some audio attachments, video discussion boards, and sermonette type presentations.

The biggest roadblock to all the discussed material may be the lack of knowledge and time restrictions to develop the necessary components for the classroom. However, with a little work and commitment to improving your online course, many of these tools are easily doable and most likely will improve your distance education class. Remember, keep it interesting and interactive and the students and instructors will both have a more positive experience with a rich and fulfilling class.

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"... KEEP IT INTERESTING AND INTERACTIVE AND THE STUDENTS AND INSTRUCTORS WILL BOTH HAVE A MORE POSITIVE EXPERIENCE WITH A RICH AND FULFILLING CLASS."

Learning Communities and Academic Services Program (CASA) of the University of Guadalajara

Manuel Pío Rosales Almendra and Bertha Leticia González Becerra

INTRODUCTION

he Universidad of Guadalajara (UdeG, for its acronym in Spanish) is the second largest public University in Mexico. It has among its purposes form and update technicians, professionals, graduates and other human resources required for the economic development of the state of Jalisco (Universidad de Guadalajara, 2010). It has among its aim to organize, encourage and disseminate scientific, technical, and humanistic investigation; rescue, maintain, and spread culture; and of course to promote the orientation of middle and higher education with the state education authorities.

In order to fulfill its goals, the UdeG is structured through a university network



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comprising 14 university centers (see Figure 1). Six thematic university centers, which are: the University Center for Economic Management Sciences, University Center of Arts, Architecture and Design; University Center of Health Sciences; University Center for Science and Engineering; University Center for Biological and Agricultural Sciences; and the University Center of Social Sciences and Humanities, all of which are located in the metropolitan area of Guadalajaraa, and eight regional University Centers, the Northern University Center; University Center of Los Altos; University Centers of Lagos, University Center of Cienega; University Center of Valles; the Coast University Center; the South Coast University Center; and the Southern University Center. The Regional University centers are strategically distributed in all the State of Jalisco (Universidad de Guadalajara, n.d.). Systems of High School Education that bring together this network of metropolitan and regional high schools, and the Virtual University System are integrated to this university network.

BACKGROUND

Higher education institutions, especially the public ones, face challenges of coverage, equity, and quality of their academic programs. Some alternatives have been developed to address the social requirements and labor market. Thus higher education institutions regardless of educational modality, should be understood as entities that promote opportunities for reflection and critical analysis, producing scientific and technological knowledge; it is imperative that these institutions have the infrastructure, human resources, and projects enabling them to incorporate advances in information and communication technology.

The UdeG has created conditions to introduce innovations in the teaching work that has benefited the teachinglearning process, promoting new values in the university community. Two distinctive features can be mentioned; the first refers to the receptive atmosphere towards generating new learning environments based on information and communication technology. The second feature has to do with the region of influence of the University Centers Network, which covers the total of the municipalities in the State, and they have been receptive to technological innovations and the use of media that encourage them.

The state of Jalisco is comprised of 126 municipalities. More than 80% of students are concentrated in five municipalities in the metropolitan area of Guadalajara; this phenomenon promotes a lack of equity in the top-level education system. Some University Centers maintain permanent interaction with their environment through research activities and liaison with the localities.

One problem most reiterated by mayors of the municipal councils in the region of influence of the Universities Centers is the lack of opportunities for secondary and higher education in rural and indigenous communities. Many young high school students truncate their wishes to access a higher education program because of lack of financial resources. Even though there are scholarship programs to support students from indigenous communities, these have not been sufficient.

The UdeG has made efforts to expand its education coverage in the State of Jalisco through strategies of diversification and flexibility that allow access to university education services to communities that because of their living conditions, or geographical location, need nontraditional education modalities (Universidad de Guadalajara, 2010). This vision has efficiently impacted the opportunity to enable professional education that considers the living conditions of the communities.

THE VIRTUAL UNIVERSITY SYSTEM

The Virtual University System (SUV, for its acronym in Spanish) is a unit of the UdeG that has the responsibility to manage and develop educational programs for school and higher education levels in nonconventional education modalities (Sistema de Universidad Virtual, 2005). Some of the arguments that led to the creation of the SUV were strengthening open education and distance learning, expanding education coverage so as to reach communities that for various reasons do not have access to higher education programs.

The current student population attending the SUV is 4,954, distributed as follows: 363 students in higher middle education and 4,546 in higher education; 17 in master's programs and 28 in doctoral programs (Moreno, 2011). The academic model of the SUV since its creation, is centered on the person and his or her way of being and learning; is innovative and responds to the requirements of the new learning society; it also promotes selflearning, collaborative, meaningful, creative, and anticipatory learning (Universidad de Guadalajara, 2006).

The SUV has the Institute of Knowledge Management and Learning in Virtual Environments (IGCAAV for its acronym in Spanish) responsible for establishing the organizational forms of academic work, considering the special elements of the nonconventional modes (not in school), the search for efficient ways of academic organization that will strengthen the generation of knowledge applicable to the education processes of the system. The UdeG in its educational task recovers fundamental experiences of diverse social, geographical, and theoretical origins, always from an educational management process point of view that comes from or arises from the community.

THE CASA UNIVERSITARIA PROGRAM

Within the extension of services offered by the SUV the Learning Communities and Academic Services (CASA Universitaria,) program stands out for its importance. This program is a key strategy in maintain-







Figure 2. Distribution of CASA Universitaria in the state of Jalisco, Mexico.

ing a closer social relationship between communities and the UdeG. This program is carried out in facilities equipped to access educational services that provide the SUV, established in spaces provided by the community. There are currently 47 CASA Universitarias operating in different communities in the municipalities of Jalisco (see Figure 1). CASA Universitaria has a small library, as well as the virtual services that are offered as a virtual library with access to the databases of the University, which includes links to sites of interest, and on academic journals (E. Moreno, personal communication, November 22, 2011).

The SUV permanently organizes chairs of Educational Innovation and annually organizes the International Meeting on Distance Education, which has become a forum in the exchange of experiences, ideas, and research results in the area of distance education.

The UdeG has been a major operator in the development of telecommunications in support of social programs on education. The desire to offer higher education to indigenous communities who are unable to access the traditional educational system has been materialized through the CASA Universitaria program system. The University CASA program is aware of the learning communities as a group of people who choose to learn in a collaborative environment, where they take responsibility of their own learning process (Moreno, 2011). Figure 1 shows the distribution of the CASA Universitaria implemented by the SUV in the State of Jalisco.

The CASA Universitaria program provides telecommunication services through Internet link providers or through microwave systems in communities where access to these services is not available. They include education services through virtual and face-to-face media offered in physical spaces in the communities. Its purpose is to share their proposals with persons or organizations with common interests and integrate better designed and fairer educational strategies supported in telematic networks and the technological infrastructure of the participating bodies. Figures 3 and 4 show two CASA Universitaria in two indigenous locations in the State of Jalisco.

Unfortunately, the UdeG has not been able to satisfy the needs of the society in the strict sense of education coverage due to the lack of resources, which lead to design new educational strategies that can be adapted to the conditions and demands of our society. For this reason, the UdeG has assumed its social responsibility with the strong conviction to expand its educational coverage in the State of Jalisco (Universidad de Guadalajara, 2010), through flexibility and diversification strategies that facilitate access to the university education services, sectors that because of their living conditions or geographical location require nontraditional educational modalities that take into account their social, economic and cultural conditions. It is here where the CASA Universitaria comes in to fulfill its goal.



Figure 3. CASA Universitaria La Gloria, state of Jalisco, Mexico.



Figure 4. CASA Universitaria Ayotitlán, state of Jalisco, Mexico.

How Does CASA Universitaria Work?

The CASA Universitaria program is tripartite: the municipalities, communities, and the UdeG participate. The municipalities provide the physical space where furniture and technological equipment will be housed. Meanwhile, UdeG through SUV handles the technologic connectivity services of the CASA Universitaria. The UdeG is responsible for the equipment (computers, video library classroom, and multipurpose training room), of personnel responsible for equipment management, academic counseling, and the accreditation of studies.

Facilities and equipment are used for educational purposes; the surroundings and the learning process that will take place here, and for this reason enough equipment and the necessary connectivity is made available. The CASA Universitaria are spaces that include, on average, 10 PC computers, plus educational television, a multipurpose room, a small newspaper library, and interactive videoconferencing and audioconferencing equipment. The media is carefully made available in the CASA Universitaria and are carefully selected so that they foster and enhance the creation of learning environments based on collaboration; facilitate access to information and university services. Figures 5 and 6 show pictures of students Huicholes in State of Jalisco

Educational Services. Different regions in which the CASA Universitaria are established have different problems. These problems or needs are evaluated by SUV researchers, and are transformed into educational proposals where a multidisciplinary group of professionals are involved, that include instructional designers and experts in educational content, to design educational proposals according to the main activities in the region.



Figure 5. Student Huichol indigenous community in the state of Jalisco, Mexico.



Figure 6. Student Huichol indigenous community, in the state of Jalisco.

Educational services offered by the UdeG through CASA Universitaria are: Middle and Higher Education, Distance Learning, Diploma, Professional Leveling, Graduate Programs, Continued Education, Open Studies, Audiconferences, Academic Guidance, Workshops, Extension Programs, Educational Material Holdings, and administrative management for educational purposes (Sistema de Universidad Virtual, n.d.-a). Overall education is made available to communities in all levels of education.

Academic Program Options. The academic programs are wide; they offer degrees in Organizational Management (distance modality), Library Science (nonschool mode), Education (open and distance learning), cultural management (nonschool mode), undergraduate in public safety and information technologies (non-school mode), an online high school program, two master's programs, and a doctoral program.

The CASA Universitaria are designed as educational spaces for the development of training activities in open and distance learning, technical assistance, continuing education, and academic tutoring (Sistema de Universidad Virtual, n.d.-b). The purpose of the CASA Universitaria program is to provide educational opportunities to marginalized sectors through the use of technological tools to develop and enhance their activities (Moreno, 2011).

The learning model of the CASA Universitaria program is based on the needs of the student; considers each individual as an integral part of a community and of course the educational model it operates under is the distance modality. This is how The UdeG contributes to building equality due to multiple existing inequalities in our communities.

On the other hand, innovation strategies ranging from marginalized groups of educational services, to professionals with specific needs to update knowledge either through refresher courses, graduate or postgraduate programs that through the support of information and communication technology—promote new training scenarios.

THE IMPACT OF CASA UNIVERSITARIA PROGRAM IN THE COMMUNITIES

The communities where CASA Universitarias are established are due to an observed tendency to the economic activities of the primary sector. Hence the relevance of the spaces of the CASA Universitaria is measured primarily by the impact these have on community the development.

During the nine years of the program, 47 CASA Universitarias have been implemented in different parts in the state of Jalisco. The average number of program users is 5,160, of which 1,660 are students of different regional University Centers, regional high schools, and SUVs, and 3520 users correspond to different communities (Moreno, 2011). The CASA Universitaria program has linked institutions like the Department of Communications and Transportation, the National Commission for Indigenous Development, the State Institute for Adult Education, the Food Bank, some People's Savings Banks, and City Halls (M. Moreno, personal communication, November 23, 2011).

The CASA program builds an inclusive university that supports sustainable productive projects in communities. The specialized professional advice for the development of a business plan is an essential process to access funding sources. On the other hand, the program also includes services such as supply chain counseling and marketing of community products through agreements with government agencies. University authorities have made a n assessment of the impact of CASA Universitaria and it has been considered successful as an educational strategy for social inclusion and development of change agents that offer rural communities access to high school and higher education.

Fortunately there are many successful experiences that are gestated in our continent and that have self-management as the main core in the educational processes in the communities. Some programs that share similar characteristics to the CASA program is the program of learning without borders (UNESCO, n.d.), and global development learning (Global Development Learning Network, n.d.), the latter created by the World Bank; it incorporates over 70 affiliated institutions to the learning network that make use of advanced information and communication systems to connect people who share the vision of integrating socially in order to learn and to learn how to community study, with the inclusion of culture and life projects of those involved.

THE CHALLENGES OF THE UNIVERSITY CASA PROGRAM

The challenge facing the University CASA program is to maintain its academic services in the communities where they are installed. Municipalities in the state of Jalisco and the area of influence of CASA Universitaria mostly do not have comprehensive projects using the Internet as technology to support local and regional development. By 2020 the program is expected to reach 80 CASA Universitaria in the state of Jalisco.

In rural areas, the introduction of technology is slow, and the skills required for the management and operation of the media has made it difficult to extend services of the CASA Universitaria. Thus UdeG has undertaken management policies together with municipalities to promote the empowerment of broadband services in the rural communities of the state.

CONCLUSIONS

The CASA Universitaria program is in a way a form of response to the university authorities of the UdeG, towards the educational needs of rural communities in the state of Jalisco. The relevance of the CASA program has been its contribution towards improving the conditions of equality. The active participation of the actors responsible for the project is highly desirable, as it requires an increase in these areas in the region, which implies a management process for equipping and setting up, personnel management is very important, scheduling activities and the implementation of a common working methodology.

It is necessary to spread the work being done by the CASA Universitaria in order to motivate and attract new users. Program short- and medium term strategies with the objective of energizing and making CASA Universitarias sustainable; these are just some of the elements that have affected the work proposal until now.

The success of CASA Universitaria is the implementation of a work plan according to the needs of the area. The program promoters should have the skills to act on current needs and anticipate short term ones. CASA Universitaria is socially fulfilling their program, it is effective; participants are being integrated to the call of the information society and are facilitating the process of lifelong learning in the communities.

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The Distance Learning Leader Certificate Program will be held in North Miami Beach, FL with face to face sessions scheduled for February 7-8, 2014 followed by six weeks of online sessions.

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The *Distance Learning Leader Certificate Program* is sponsored by the Fischler School of Education at Nova Southeastern University, the Florida Distance Learning Association, and the U.S. Distance Learning Association. This executive-level program is designed for managers, directors, and leaders who are moving into distance education, e'learning, and virtual schooling.

The day and one-half of on-site sessions will be held in the board room of the Fischler School of Education in North Miami Beach. Online sessions will be conducted for six weeks after face-to face sessions and will utilize the Blackboard course management system. Attendees will receive reference books, learning materials, and access to the DLLCP web site.

The *Distance Learning Leader Certificate Program* will be led by Dr. Michael Simonson, professor of Instructional Technology and Distance Education. Dr. Simonson has over 35 years of experience in distance education. Other leaders will join sessions using telecommunications systems.

For more information, contact Dr. Karen Bowser, Executive Director, Professional Development bowserk@nova.edu and 954-262-8513 http://www.fischlerschool.nova.edu/dll

Transactional Distance Theory Is It Here to Stay?

Jacqueleen A. Reyes

INTRODUCTION

heory-building and rigor are undoubtedly a concern for the field of distance education research, especially as online learning becomes more pervasive (Simonson, 2006). In a review of the research studies and articles related to distance education published in *The American Journal of Distance Education* and *Distance Education*, Anglin and Morrison (2000) stated much of the research examined was not theory-based. They concluded there was a significant need for



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theories specific to the field for successful development of the knowledge base in distance education. Tallent-Runnells et al. (2006) also noted that research should be driven by the development of theoretical foundations appropriate to the field of online teaching and learning. They suggested distance education theories focus on communication, social interaction, and student motivation and learning. It has been argued that despite the existence of certain theories developed for the field of distance education, there is still no comprehensive theory to guide conductors of research, instructional designers, and the like, thereby presenting a "critical weakness of the field" (Simonson, 2009, p. vii).

The first American theory developed as an all-encompassing theory to define the field of distance education in terms of pedagogy was the theory of transactional distance, as it came to be known in 1980 (Moore, 2007). Since its inception, the theory has been both accepted and disputed by scholars—and never fully adopted. In order to obtain a current assessment of transactional distance theory, this article will explore the theory's components, importance of testing the theory, scholars' perceptions, and new directions in research.

BACKGROUND

A theoretical framework that encompassed all aspects of distance education, transactional distance theory was developed by

Michael G. Moore, a professor at The Pennsylvania State University and the founder of The American Journal for Distance Education, ("Michael G. Moore," 2012; Moore, 2007). Moore claimed the significance of his theory was that it met the needs of teaching and learning that went on outside of the traditional classroom setting (Moore, 2007). Instead of considering the distance between teachers and learners only in terms of geography, Moore described the distance as a psychological separation influenced by three pedagogical components: structure, dialogue, and autonomy. Moore claimed his theory was flexible in that it supported all programs that have separation as a distinctive characteristic, no matter what the degree of structure, dialogue, and autonomy. He asserted his theory of transactional distance allowed "the generation of an almost infinite number of hypotheses for research into the interactions between course structures, dialogue between teachers and learners, and the student's propensity to exercise control of the learning process" (Moore, 2007, p. 101).

THEORY COMPONENTS

Five major concepts and terms are related to the theory of transactional distance and have been defined as follows. Distance education is "all planned learning that normally occurs in a different place from teaching, requiring special techniques of course design and instruction, communication through various technologies, and special organization and administrative arrangements" (Moore & Kearsley, 2005, p. 2). As defined by Moore and Kearsley (2005), in the sphere of distance education, transactional distance is "the gap of understanding and communication between the teachers and learners caused by geographic distance that must be bridged through distinctive procedures in instructional design and the facilitation of interaction" (p. 223). Moore (1993) defined the three components of transactional distance theory in this way:

- Dialogue is developed by teachers and learners in the course of [positive] interactions that occur when one gives instruction and the others respond.... Each party in a dialogue is a respectful and active listener; each is a contributor, and builds on the contributions of the other party or parties (p. 24).
- 2. *Structure* expresses the rigidity or flexibility of the programme's educational objectives, teaching strategies, and evaluation methods. It describes the extent to which an educational programme can accommodate or be responsive to each learner's individual needs (p. 26).
- 3. *Learner autonomy* is the extent to which in the teaching/learning relationship, it is the learner rather than the teacher who determines the goals, the learning experiences, and the evaluation decisions of the learning program (p. 31).

STRUCTURE AND DIALOGUE

In course and program design, structuring the content according to teaching strategies, objectives, methods of assessment, and learners' needs all require a level of communication between the instructor and the learners (Moore, 2007). Therefore, dialogue is necessary in determining that structure. Conversely, dialogue may also be determined by the structure of the course. The amount or degree of structure and dialogue varies for different courses when factors such as technology, teaching philosophy, abilities of the learners, and subject matter come into play. Thus, transactional distance becomes a function of the interaction between dialogue and structure: "as dialogue increases, transactional distance decreases [and] as structure transactional increases. distance also increases" (Moore, 2007, p. 94).

DIALOGUE AND AUTONOMY

Dialogue is affected by degrees of autonomy (Moore, 2007). Learners who are more autonomous are able to handle any degree of dialogue, while learners who are not as skilled in self-regulation need a higher degree of dialogue to be successful. Moore (2007) stated "the level of autonomy required of the learner increases as the transactional distance decreases" (p. 96). He hypothesized that students with more autonomy would be comfortable in courses with greater transactional distance (Anderson, 2007). Furthermore, learners who preferred less self-regulation would experience а decreased level of transactional distance in courses that combined structure and dialogue.

WHY RESEARCH THE THEORY?

Gorsky and Caspi (2005) are arguably the most noted critics of transactional distance theory. In their landmark analysis, they identified three reasons to explain the importance of testing and exploring the theory. The first was that researchers saw the theory as the framework for analyzing systems of distance education. The authors quoted two researchers of transactional distance theory: Garrison (2000), who stated theories were important in directing the practice of distance education, and Jung (as cited by Gorsky & Capsi, 2005), who claimed theories provided a guiding framework for producing operational definitions and conducting quality research. The second reason Gorsky and Caspi (2005) argued transactional distance theory should be researched and tested was that researchers had cited the need for a reduction in transactional distance in distance education programs. The third reason was the theory, perceived as a valid one by some researchers, was already being taught in higher education courses.

SCHOLARS' PERCEPTIONS OF THE THEORY

Moore (2007) stated that early support for his theory of transactional distance came from Keegan (1980), a founder of the journal Distance Education, and Rumble (1986), a specialist in the administration of institutions of distance education. Keegan cited Moore's theory as a defining concept of distance education, while Rumble promoted the use of the phrase "transactional distance" as a representation of the distance occurring between teachers and learners in distance education. In 2003, Tait (2003), the Dean of Education at The Open University (UK), claimed the theory remained valid and upheld its use as a tool to evaluate distance education programs. Additionally, Saba (2005), widely-known for his research in the expansion of transactional distance theory, argued that a preunderstanding transactional cise of distance is necessary for the field of distance education to grow into the future and Moore's theory aids in that understanding.

The most recent support for transactional distance theory came from Peters (2007) in his description of distance education theory as "the most industrialized form of teaching and learning" (p. 57). Peters defended Moore's theory as a mainly descriptive one, which did not advocate a particular model of instructing or learning at a distance. Peters noted that the stress on the three components as necessary elements of distance education solidified the intent of the theory to improve traditional and newer forms of distance education to eliminate deficiencies in dialogue and autonomy. Peters thus argued the theory also appeared as prescriptive with the ability to advance the work of those involved in the field. Peters ultimately supported the theory for its original approach and relatability to all aspects of distance education.

In his research on critical challenges for distance education, Garrison (2000)

claimed that theory was scarce in current research of the practice. He particularly criticized Moore's theory of transactional distance, stating:

the exact nature of the interrelationships among structure, dialog and autonomy is not clear. There is confusion around whether structure and dialogue are variables, clusters or dimensions. Unfortunately, Moore has used different terms (i.e., variables, clusters, dimensions) at various times. (Garrison, 2000, p. 9)

While Garrison agreed that Moore's theory was most well-known and appealing in the field of distance education, the author argued more theoretical work at the macro level was needed. This work might include a focus on the association among dialogue, structure, and autonomy and the development of a visual model to clearly underthe relationship among the stand components. Despite Garrison's criticism, however, it should be noted that Moore (2007) appeared to clarify this association among the constructs with added, descriptive explanations of the interactions and two visual representations that showed: (a) the relationship of dialogue, structure, and transactional distance and (b) the relationship of autonomy and transactional distance.

Gorsky and Caspi (2005), in research aimed at assessing transactional distance theory based on empirical evidence, found fault with Moore's theory after their review of six studies that tested the key constructs of the theory for validity and correlations among them; they came to two unexpected conclusions. The first finding was that data derived from three of the studies (Bischoff, Bisconer, Kooker, & Woods, 1996; Bunker, Gayol, Nti, & Reidell, 1996; Saba & Shearer, 1994) supported the theory but lacked construct validity.

The other three studies (Chen, 2001a, 2001b; Chen & Willits, 1998) examined by Gorsky and Caspi (2005) offered only limited support for transactional distance the-

ory. One of these studies, by Chen and Willits (1998), is worth noting as it was also a review of the first studies to use transactional distance as a theoretical framework (Bischoff et al., 1996; Bunker et al., 1996; Saba & Shearer, 1994). Prior to the discussion of results of their study on videoconferencing, Chen and Willits (1998) found support for the existence of associations among the theory's three elements, therefore substantiating Moore's assertion that dialogue and structure worked together to affect transactional distance. However, all three of the studies reviewed by Chen and Willits (1998) failed to identify learner autonomy's effect on transactional distance. In addition, they found two of the studies did not contain information on dialogue as it related to asynchronous communication as a form of interaction. The studies also did not examine the effects of teacher-learner characteristics on transactional distance nor did they assess how student learning was affected by transactional distance, dialogue, and structure.

Gorsky and Caspi (2005) were critical of Chen and Willits' (1998) research, claiming the perceptions learners had of learning outcomes and transactional distance were measured only once and were not compared with real values. As Chen and Willits' support was limited for the theory, Gorsky and Caspi (2005) suggested further research be conducted in applying the revised path model to broaden analysis and test other distance learning environments.

Overall, in the six studies examined in their review, Gorsky and Caspi (2005) claimed construct validity was compromised in that Moore did not develop operational definitions for the theory's concepts and, as a consequence, researchers used varied, rather than formal, definitions. The authors also concluded that transactional distance theory could be reduced to a single proposition which may be interpreted as a tautology. They claimed the independent variables of structure, dialogue, and autonomy are hierarchical, in which one variable determined the extent of the other. Ultimately, the authors claimed that transactional distance theory was not a valid, scientific theory, but merely a prescriptive, philosophical approach, particularly because of its definition of dialogue. The authors argued that Moore's theory explains what dialogue should look like, but fails to show how real dialogues work.

Despite Gorsky and Caspi's (2005) extensive criticism of Moore's theory, it should be stressed that their evaluation of transactional distance theory was based on only six studies ranging from 1993-2001. Three of those studies were conducted by the same researcher: Chen. Therefore, it can be stated that Gorsky and Caspi's (2005) research represented the views of only 12 authors in the field of distance education. Further review may be necessary to obtain a reliable assessment of transactional distance theory.

NEW DIRECTIONS IN RESEARCH

RECONSIDERING DIALOGUE

In an examination of the effect of group size on asynchronous, nonmandatory discussion, Caspi, Gorsky, and Chajut (2003) presented a restructured model of transactional distance that focused on interactions. This model included three of Moore's (1989) definitions of types of dialogue and a fourth type attributed to Fulford and Zhang (1993). Altogether, the model recognized the following kinds of dialogue: instructor-learner, learnerlearner, learner-subject matter, and vicarious interaction (Caspi et al., 2003). Among the discoveries in the study, the authors stated "that as group size increased, the proportion of learner-instructor interaction decreased while the portion of learnerlearner interaction increased" (Caspi et al., 2003, p. 237). The authors claimed this particular finding supported the new model.

In a dissertation on facilitation and community in asynchronous online education courses, Kuskis (2006) claimed it has not been demonstrated that learner-learner dialogue reduces transactional distance. Kuskis argued that the effects of learnerlearner dialogue should be further considered in the theory of transactional distance, in addition to instructor-learner dialogue, especially where adult learners are concerned. The author proposed that because both types of interactions may reduce transactional distance, the role of learner-learner interaction needs to be taken into account in future research.

New and **Revised Models**

In a study in the United Kingdom in which the engagement of doctoral students as part of an academic community was examined, Wikeley and Muschamp (2004) used transactional distance theory to create a model to deliver education to students at a distance that involved tutoring, which they claimed enabled students to develop a sense of community that assisted in the process of academic writing. They observed a problem when tutors and students saw themselves in separate roles rather than as fellow researchers. Consequently, the new model involved strategies to improve the relationship between tutors and doctoral students where tutors viewed students as newcomers to professional practice whom they should assist in developing the skills to become part of the academic community. Wikeley and Muschamp argued that although their model was not innovative in the context of e-learning, it utilized traditional pedagogical practices in an online environment, making it possible for students to develop relationships with those already involved in the research community of which students would soon be a part. In this sense, students gained different perspectives and a shared understanding of the professional community that resulted in a decrease in transactional distance.

Andrade and Bunker (2009) argued, in a study on course design of distance language learning, that there is not a comprehensive model to act as a theoretical framework to assess self-regulated learning and autonomy. They proposed a new model that included six areas of learning not included in Moore's theory. They claimed the six dimensions-method, motive, physical environment, time, social environment, and performance-demonstrate learners' interaction with structure and dialogue in the development of autonomous learning skills in distance language learning. The authors concluded that this model could improve success in distance education and provide a new framework for future research that would enable educators, designers, and researchers to measure how self-regulation affects learning thereby leading to higher levels of autonomy and success.

Falloon (2011) used Moore's theory of transactional distance to examine the use of virtual classroom software to explore how synchronous communication affected learner autonomy and dialogue in the course. The author claimed that while Moore's theory was useful in analyzing online learning, it needed revision in order to match the move toward synchronous communication as a tool in distance education. Falloon found that students working in a synchronous environment felt they did not have sufficient time to engage in meaningful dialogue and therefore became reluctant to participate. The author argued that the definition of the theory and the way structural elements are viewed, as well as the effect of synchronicity on learner autonomy, should all be revisited.

A GLOBAL THEORY

Garrison (2000) stated "the ultimate theoretical challenge ... is to achieve a synthesis of perspectives and theories (i.e., global

theory) that reflects the complete continuum and is inclusive of a full range of practices" (p. 12). Gokool-Ramdoo (2008) had a similar opinion with the proposed extension of the applications of transactional distance theory in order for the theory to be accepted as a global one to further advances in the field of distance education. These extensions go beyond structure and dialogue to include policy making and quality assurance. Gokool-Ramdoo argued that not much has been done to expand upon distance education theory since Saba and Shearer's (1994) work, but many theorists of distance education are converging toward a new synthesis which validates transactional distance theory as a global synthesis theory. This combines Deschênes' (2006) strands of student persistence with transactional distance theory. These strands are cognitive, affective, and meta-cognitive. Gokool-Ramdoo claimed that when these strands are braided with Moore's theory, it will help researchers organize the understanding of student persistence and will ultimately lead to complete, learner autonomy. The author argued further research is necessary to assess and validate the new synergy of transactional distance theory as it applies to informing policy development and quality assurance in the field of distance education.

SUMMARY

Moore's theory has been supported and criticized as the defining theory of distance education. In the literature, relationships among the constructs of the theory are both defined and disputed. New models and instruments have been adapted from the theory and innovative directions and approaches in research related to the theory have been explored. While some researchers have argued for a more comprehensive theory of distance education, others stated Moore's theory of transactional distance could be adapted to the future challenges of distance education faced by instructional technologists, course designers, researchers, and educators by revising the theory components based on emerging technologies and types of communication.

Several researchers made a case for a global theory to guide future research in distance education. Such a theory would include a fusion of perspectives and learning theories (Garrison, 2000) and extensions such as quality assurance and policy making (Gokool-Ramdoo, 2008). Whether transactional distance theory is accepted, modified, or applied as part of a global theory, the literature suggests there is still work to be done. Therefore, the conclusion can be made that transactional distance theory is here to stay.

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"... TRANSACTIONAL DISTANCE THEORY IS HERE TO STAY."

ALEKS An Artificial Intelligence-Based Distance Learning System

Deborah Smith

INTRODUCTION

he educational arena is one of the many areas that have reaped numerous benefits as a result of technological advancements. The Internet has provided a plethora of learning possibilities for today's learners (Web-Based Education Commission, 2000). In the past, students had very limited educational opportunities. Learners were able to acquire an education only in the traditional manner—by attending a brick-and-mortar institution. Today, however, learners have a vast number of educational choices.



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Distance education is one of the most popular choices students have embraced today to pursue their educational endeavors. It affords students the opportunity to receive instruction 24 hours a day, 7 days a week, from any locale. Seminole State College (SSC) is one of many higher education learning institutions that have incorporated distance learning in their instructional practices. They offer two types of distance education formats for their classes. Learners can complete all of their coursework in an online environment or they can take classes in a blended setting. This article will focus on how SSC utilizes a web-based artificial intelligence learning system called ALEKS, the acronym for Assessment and Learning Knowledge Spaces. The ALEKS system employs a student-centered approach and provides individualized instruction in their blended learning courses.

DISTANCE EDUCATION

Distance education has evolved tremendously since its inception. It has come a long way from using radio broadcasts, correspondence courses, and television as a means of providing instruction distantly. The development of fiber optics, as well as the ability to connect computers together over sizable geographical locations, has been very beneficial in the promotion of distance education. As technology continues to progress, it is expected that the field of distance education will also continue to grow.

Many students are turning to distance education as a means to fulfill their educational aspirations. As such, distance education has become a major topic in the academic environment. Schlosser and Simonson (2009) describe distance education as "institution-based, formal education where the learning group is separated, and where interactive telecommunications systems are used to connect learners, resources, and instructors" (p.1). There are a variety of reasons why distance education is so appealing to learners. Some believe that online learning is a means to cater to students with diverse scheduling demands (Cushall, 2002). Others believe that traditional classrooms are a thing of the past; that they are becoming archaic (EdTech Magazine, 2012). Regardless of the reason, we are experiencing an astronomical increase in enrollment of distance learners in schools of higher learning.

There is a great deal of data available that focuses on enrollment in online college courses. In 2011 the Pew Research Center conducted a study that involved about 1,055 college presidents from two and four year public and private institutions, as well as college presidents from for-profit learning establishments (Parker, Lenhart, & Moore, 2011). The study results indicate that 77% of those that participated offer online courses at their learning establishments. In addition, about 51% of the participants believe that there was no difference in value between online classes and traditional classes. The study also suggests that nearly 25% of college graduates take at least one online course while studying for their associate's degree and 17% take an online class while completing their bachelor's degree coursework.

Community colleges are experiencing enormous growth in enrollment in online courses. A recent report by the Sloan Consortium suggests that enrollment of online courses have surpassed those of traditional face-to-face courses (Learning on Demand: Online learning in the United States, 2009). According to the report, in 2008 over 4.5 million students were enrolled in at least one online class. This reflects a 17% increase in enrollment from 2007. Similarly, a study by the Instructional Technology Council (2012) indicated that there was a 22% increase in online enrollment from 2007-8 to 2008-9. Seminole State College (SSC) is among the many educational institutions that are experiencing a huge increase in enrollment of their distance education courses. Students are able to take classes fully online or they can enroll in blended, also referred to as hybrid, classes.

BLENDED LEARNING

Blended classes afford students the opportunity to receive instruction both face-toface and online (Graham, 2004; and Young, 2002). Regarding blended learning, Young quoted the then-president of Pennsylvania State University Graham B. Spanier, as saying "hybrid education may be the singlegreatest unrecognized trend in higher education today" (p. A33). Young also mentions an astounding projection made by John Bourne, an editor for The Journal of Asynchronous Learning Networks. According to Young, Bourne estimates that within the next few years over 75% of classes offered on college campuses will be blended classes.

ARTIFICIAL INTELLIGENCE IN EDUCATION

Artificial intelligence is gaining considerable attention in the field of education. Hall (2002) described artificial intelligence as "a computer-based analytical process that exhibits what we view as intelligent behavior or actions" (p. 38). He proposed that artificial intelligence attempts to imitate human thought processes through reasoning. Hall indicated that artificial intelligent-based distance instruction is particularly effective for students who juggle school, work, and home. He surmised that artificial learning systems hold considerable promise for enhancing learning and cites artificial intelligence's ability to automate online testing, diagnostics, and feedback as major benefits.

Bitter and Legacy also discussed the impact of artificial intelligent on the field of education (2007). They postulated that artificial intelligence will have a significant influence on student learning in the future. They stated, "because artificial intelligence computers function as intelligent aids to their users ... computers will become more effective teachers, listening to the students, responding according to the information stored in memory, and then storing information away for later use" (p. 98). ALEKS is one of the programs that have been designed to carry out most of the functions Bitter and Legacy alluded to.

ALEKS

Out of a desire to increase the passing rate of her Basic Algebra courses, Professor Eden Donahou of Seminole State College piloted the ALEKS system in 2010. At that time, the passing rate was around 42%. She implemented ALEKS in two sections of her hybrid classes involving around 80 students. According to her, passing rates increased dramatically from 51% to 78%. Likewise, Donahou attributes a 17% increase in student attendance and a 12% increase in retention rates as a result of the implementation of ALEKS during the pilot. In fact, the average student-learning rate for those using ALEKS is about 90% (ALEKS, 2013c). SSC now offers 94 ALEKS classes in their math department.

ALEKS is an artificial intelligence learning and assessment system based on the mathematical cognitive science called "Knowledge Space Theory" (ALEKS, 2013d). The ALEKS website (www.aleks .com) describes the knowledge space theory as "the mathematical language ... used to form distinct knowledge states" (Knowledge State Theory, 2013). A knowledge space contains all of the topics of a particular subject (Johnson, 2006). A knowledge state indicates topics a student has mastered in that subject. The knowledge state theory is based on computer algorithms used in the development and design of content for each subject.

Simonson, Smaldino, Albright, and Zvacek stress the importance of interaction in a distance education program (2012). The ALEKS system is a personalized learning system with a host of interactive activities beneficial to the learning process. It has the ability to evaluate each student independently and endlessly throughout the learning experience. Student interaction is paramount. ALEKS determines exactly what a student knows, what material they are ready to learn, and monitors their progress as they move towards becoming proficient in the subject matter. It is based on active learning. ALEKS provides oneon-one instruction to virtual learners and acts as a personalized instructor and tutor for each learner. Student results are stored in a database and updated instantaneously to reflect student progress.

Rodrigues, João, and Vaidya (2010) stress the importance of having systems in place in the online learning environment that monitor the learning progress of individual students. Simonson, Smaldino, Albright, and Zvacek share their viewpoint. They contend that two factors essential in a virtual learning environment are the evaluation of student progress and being able to determine the degree students acquire learning gains. ALEKS encompasses both of these features.

ALEKS has been used by a vast amount of students in hundreds of math, science, and business courses in K-12 and higher education learning institutions (ALEKS, 2013a). It is the product of a multi-million dollar grant from the National Science Foundation, which was comprised of a team of software engineers, mathematicians, and cognitive scientists from New York University and the University of California, Irvine. Jean-Claude Faimagne, a renowned international mathematician, is founder and chairman of the ALEKS Corporation. Experts with advance degrees in respective fields of study develop ALEKS. They also have extensive experience in the education and teaching field.

The ALEKS system is comprised of two modules: one for the student and one for the teacher. Students enter the ALEKS website with a username and password provided by the instructor. Regarding the student module, when a student logs into ALEKS for the first time, he or she is presented with an assessment (ALEKS, 2013b). The assessment gauges a student's knowledge state for a subject. This identifies which topic the student is proficient in and which one he is not.

Simonson, Smaldino, Albright, and Zvacek imply that one of the features that enhance the blended learning experience is quick feedback. ALEKS offers instantaneous feedback. Upon completion of the assessment, a graphical report illustrating the student's results are displayed in the form of a color-coded pie chart. Each slice of the pie corresponds to a particular topic of the course. The degree of mastery is depicted by the amount the slice is filled in or shaded (Tempelaar et al., 2006). A slice completely filled in indicates that the student has mastered that topic; if the slice is half filled in, then the student has mastered one half of the course content.

The report outlines the learner's current knowledge of the subject and proposes a path of study. Double-clicking a slice of the pie opens up the Learning Mode. Learning Mode contains a list of concepts for the student to work on. This mode offers practice problems, explanation of concepts, stepby-step procedures for each problem, and immediate feedback and suggestions. ALEKS also includes an Explain button that provides an explanation for a specific problem. Usually the explanation is a stepby-step solution for a specific problem.

ALEKS utilizes an adaptive learning practice. It follows the student's progress during each learning sequence and offers suggestions to improve the student's progress. Although most assessments, espestandardized testing, cially utilizes multiple-choice questions ALEKS applies thought provoking open-ended questions. Hence, students cannot play the guessing game by just selecting a response from a group of answers. To ensure that students retain the knowledge previously learned while working through the learning system, ALEKS refers back to the prior knowledge they have mastered by way of assessments provided throughout the learning sessions. ALEKS also employs input tools that simulate what would be done on paper and pencil. A Homework Center, a message center for communicating with the instructor, a dictionary, and a calculator are also available in the Learning Mode.

The Instructor Module provides many resources to monitor student mastery. Instructors can view when a student logged in, how they worked through a slice of the pie, what content they worked on, and their mastery level. They can also make audio recordings available, as well as PowerPoint presentations to aid the students in learning. Attendance and other administrative tasks (i.e. grades) can be carried out via the Instructor Mode.

CONCLUSION

Technological innovations have changed how students learn, as well as where they learn. Students have the ability to learn 24 hours a day from anywhere in the world, and institutions of higher learning are experiencing a surge in the number of students desiring to pursue their education in an online learning environment. Seminole State College is one of the many the educational establishments that are facing a growth in their distance education program. Students can take advantage of enrollment in a totally online or a blended learning format.

SSC adopted ALEKS in an effort to provide a student-centered learning experience that would boost their completion rates. Consequently, many of their professors boast of their high passing rates since they have implemented ALEKS in their courses. Some research has been done in the area of artificial intelligence and distance education (Alexakos, Beligiannis, Giotopoulos, & Stefani, 2010; Sari, Sellami, & Seridi-Bouchelaghem, 2005; Taylor, 2008). Further research is needed in the area of utilizing ALEKS in both higher education and K-12 learning environments. There is also a need for research in the area of student achievement, completion rates, and student and teacher efficacy, as it relates to the ALEKS learning and assessment system.

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ALEKS = ARTIFICIAL INTELLIGENCE-BASED DISTANCE LEARNING SYSTEM

Overcoming Student Barriers for Successful Educators

Renee Rawe

an Brown's *Open Letter to Educators* video (2009) features a student who is disgusted with "institutionalized education." Brown suggests that education be free and individualized as institutionalized education is outdated due to the abundance of free information on the Internet. He also states that our educational system is not preparing students to be successful in the future as it takes more than plain facts to expand creativity, generate new ideas and empower others to change the world. This



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philosophy is held by many people today. In order for our education system to continue to reach students and empower them with knowledge and ability to change the world we need to make some radical changes. Students today are not different than they were in previous generations; their tools for engagement are different (Milman, 2009). Due to their regular use of new tools, their brain signals are double the amounts of people who do not use technology regularly (Small, 2008). Although it has been proposed adult students learn best utilizing a constructivist approach, the constructivist theory of education was proposed decades ago, before technology had the opportunity of upgrading our brain patterns and firings between synapses (Sonwalker, 2005). The purpose of this paper is to discuss neoconstructivist theory and some instructional tools to promote it in an effort to help educators better serve students.

Shifting the focus of education to the student's needs involves creativity and new ideas in order to empower our students to change the world. Milman labels today's students as having "neomillenial learning styles" (2009). Neomillenial learning styles are based on:

- Fluency in multiple media and in simulation-based virtual settings;
- · Communal learning;

- Balance among experiential learning, guided mentoring and collective reflection;
- Expression through nonlinear, associational webs of representations; and
- Co-design of learning experiences personalized to individual needs and preferences (Dede, 2005, para. 2).

Many adult students have competing priorities with education. They have to work, provide for their family, and commute to school. This make the educator's job of engaging the student even more challenging (McClenney, 2008a). Emerging media foster psychological immersion through the use of the computer to provide access to distant experts for students, offering students multiuser virtual environment (MUVE) interfaces and mobile wireless technologies. The use of these media shapes a person's learning styles and has multiple implications and uses for education (Dede, 2005)

Sonwalker (2001) has identified millennial students as having five fundamental learning styles. They are apprenticeship, incidental, inductive, deductive, and discovery. Apprenticeship learners utilize a building block approach for learning that could be approached with the step-by-step method of procedural learning. The incidental learners are event based for concept introduction and questioning thoughts. Inductive learners are first introduced to a concept using specific examples that pertain to a broader topic. Deductive learners learn best by simulating trends and presentation of graphs or other data. Discoverv learners are doing and testing their knowledge with practice (Sonwalker, 2001).

Instructors should facilitate the learning process by actively involving the student





Figure 1.

and creating an environment where the student is responsible for their own successful learning. Instructors give the student the tools for success and guide them toward the learning outcome. This teaching guidance is direct instruction, not minimal direction. This offers the student the opportunity to discover and learn through inquiry and experiential learning with the support and guidance of the instructor and media (Kirschner, Sweller, & Clark 2006). Students who are engaged in their learning utilizing both in-class and out-of-class activities demonstrate the most success in achieving their higher education goals. In a Community College Survey of Student Engagement study completed by the Survey of Entering Student Engagement (McClenney, 2008a) results showed the most successful students were engaged in and out of the classroom on projects.

McClenney's (2008a) Essential Elements of Engagement High Expectations High Support Report was a field test survey that was administered to 89 community colleges and utilizes responses from 57,547 students within the United States.

Be willing to consider everything. The mistake we make so often is thinking we can improve a largely dysfunctional process by making small, incremental changes.... If you're not willing to rethink everything, you end up simply rearranging the deck chairs on the Titanic, and there's no way we're going to bring about significant change doing that (Steven Murray, president, Phillips Community College of the University of Arkansas). (McClenney, 2008a, p. 3)

Today people "expect to be able to work, learn and study whenever and wherever they want to" (Johnson, 2010, p. 4). The role of the way we prepare students for their future lives is changing. Society has new forms of authoring, publishing and researching due to new technologies. Students often view traditional published texts as outdated because it takes longer to

publish in hardcopy than it takes to publish on the Internet. Due to larger capacity of bandwidth, storage devices, and high speed wireless technologies it is quicker and less costly to download books to a laptop or mobile device. Today's students prefer e-books, as they offer more portability and versatility than the traditional texts (Johnson, p. 6). Many instructors utilize open source texts (Hood, 2010) or allow students to download materials from their websites for instructional purposes for the course. More people all over the world are utilizing mobile technologies for their education as a common tool. Wireless technologies allow access to augmented realities, social networks, distance learning, and a wealth of other media for learning and communicating (Johnson).

"The American Association of Colleges and Universities has launched a program called Liberal Education and America's Promise (LEAP) to pinpoint the knowledge and skills necessary to prepare students for future careers, ensuring that all students receive the same high-quality liberal education, and revising and improving the pedagogy and curricula" (Cohen, 2009, p. 14). LEAP recommends that educators help students become "intentional learners." We can foster intentional learning by following their recommended Principles of Excellence:

- Principle One—Make essential learning outcomes a framework for the entire educational experience: connecting school, work, and life.
- Principle Two—Focus each student's plan of study on achieving the essential learning outcomes and assess progress.
- Principle Three—Immerse all students in analysis, discovery, problem solving, and communication, beginning in K-12 and advancing through college.
- Principle Four—Teach through the curriculum to far-reaching issues (contemporary and enduring) in science and society, cultures and values, global inter-

dependence, the changing economy, and human dignity and freedom.

- Principle Five—Prepare students for citizenship and work through engaged and guided learning on "real-world" problems.
- Principle Six—Emphasize personal and social responsibility in every field of study.
- Principle Seven—Use assessment to deepen learning and to establish a culture of shared purpose and continuous improvement (Promise, 2007, p. 40).

Colleges and universities have a moral, ethical, and societal obligation to focus on increasing student achievement and goals (McClenney, 2008b). America has a crisis in human capital that shows an unmet need for highly skilled and educated workforce. Our country pays dearly each time an American student slips through our collective educational grasp (Florida Council of 100, 2009). Constructing learning needs to use technology to support teaching for understanding in today's society (Sherman, 2005). "Consistancy between theoretical conceptions of learning and teaching practice has shown to support effective applications of technologies to increase achievement" (Sherman, 2005, p. 11). Teaching our neomillenial students can utilize an updated constructivist theory of education even in distance education. The traditional constructivist principles are learner-centered, interesting, real-life, social, active, timely, and offers feedback and support (Hirumi, 2002). "It is evident that new ways of teaching and learning must be devised if our students are to be prepared for the 21st century" (Hirumi, 2002, p. 500).

Funk (2003) offered an example of the newly revised constructivist theory. In her story the instructor does not give the students the formula for Pi and then problems to practice as traditional instructors would do. Instead, the instructor gives the students a blank tablet of paper and tells

them to write down all they would like to learn about math. He then told them they would need to know the difference between a sphere and a circle, showing them physical examples of each. For homework, students are told to find as many circular objects as they can find at home and list them on their tablet with the distance across the circle in inches and the distance around the circle in inches. The instructor gave them further instructions on charting this information for organization and readability. After successful gathering and organizing of the information the instructor gave them the definitions of the measurements: circumference and radius, while asking the students if they noticed any type of relationship between the two numbers. Then the instructor had the students draw a third column next to the circumference and radius columns for each of the circular objects they had listed in their notepads and told them to divide the numbers in the first two columns. By doing so, the students found what Pi is on their own. After so many of the same answers, the students would never forget that Pi is 3.14 (Funk, 2003). The students in this example taught themselves with the instructor's guidance: a constructivist perspective.

Students today learn from a variety of methods and media. "Social media is the use of today's technology to distribute information and encourage people to connect with others who share a common interest" (SocialMediaToday, 2010). Social media can include classmates online in a distance education course, webpages on Facebook, e-mail encounters, Twitter, LinkedIn, and many other sources. Distance educators have an opportunity to maximize utilization of these channels of communication to help teach their students. Learning in virtual worlds builds communities of practice and teach people to learn from play (Oliver, 2009). If the online activity is to be considered as a legitimate peripheral participation activity lesson it must:

- have genuine relevance to the learning community,
- less risky, less intense, and supports more participation than is normally the case, and
- involves interaction with classmates (Oliver, pp. 447-448).

There are rules of engagement the instructor must lay as groundwork for these online activities to be successful learning modules. Cooperative learning takes greater effort by instructors to achieve but also produces higher results from the students. It creates more positive relationships and promotes greater psychological health and social competence (Johnson, 2007)

Numerous studies have shown that society needs to upgrade the education of its citizens. Many colleges and universities offer their faculty staff development to develop their technology knowledge and skills. Most universities offer for-credit classes and degree programs in instructional technology and distance for the instructor (or potential instructor) to learn effective uses of new educational theories and technologies. Our nation owes its citizens the benefit of a marketable education so we may continue to be productive members of society.

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The Distance Learning Leader Certificate Program will be held in North Miami Beach, FL with face to face sessions scheduled for February 7 - 8, 2014 followed by six weeks of online sessions.

The *Distance Learning Leader Certificate Program* is sponsored by the Fischler School of Education at Nova Southeastern University, the Florida Distance Learning Association, and the U.S. Distance Learning Association. This executive-level program is designed for managers, directors, and leaders who are moving into distance education, e'learning, and virtual schooling.

The day and one-half of on-site sessions will be held in the board room of the Fischler School of Education in North Miami Beach. Online sessions will be conducted for six weeks after face-to face sessions and will utilize the Blackboard course management system. Attendees will receive reference books, learning materials, and access to the DLLCP web site.

The *Distance Learning Leader Certificate Program* will be led by Dr. Michael Simonson, professor of Instructional Technology and Distance Education. Dr. Simonson has over 35 years of experience in distance education. Other leaders will join sessions using telecommunications systems.

For more information, contact Dr. Karen Bowser, Executive Director, Professional Development bowserk@nova.edu and 954-262-8513 http://www.fischlerschool.nova.edu/dll

Increasing Student Success in Online Courses Examining Existing Research— And the Need for Even More!

Natalie B. Milman



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s the director of and instructor in a graduate master's online program, keeping abreast of the latest research about how to support online learners is of great interest, not only to determine how we might improve our program, but also how we might better support our students so they will flourish and persist. Although our faculty and staff have a great deal of experience and knowledge about how best to design and support our students, we know we can do better. This is one reason why examining current research—even at the community college level and other professional programs such as nursing—is important to do. This paper summarizes some key findings that may be helpful to other programs, as well as those designing online professional development as they consider how they might foster success in all students.

Although many of the findings are not surprising, they validate many of the anecdotal conclusions that we have developed through experience about struggling or unsuccessful students in our own program.

EXAMINING UNSUCCESSFUL ONLINE STUDENTS

One study by Fetzner (2013) examined the survey responses of 438 "unsuccessful students" at Monroe Community College in Rochester, New York. Unsuccessful students "were defined as those students who received a grade of F or W" (p. 13). The telephone survey was administered 2000-2001, 2005-2006, and 2009-2010. The top three reasons for students' lack of success were: 1) 19.7%-I got behind and it was too hard to catch up; 2) 14.2%-I had personal problems (health, job, child care); and 3) 13.7%—I couldn't handle combined study plus work or family responsibilities (p. 15). Similarly, a literature review of online course dropouts in postsecondary education conducted by Lee and Choi (2010) found three major categories of factors influencing online dropout rates; they were: (1) student factors, (2) course/program factors, and (3) environmental factors. Although these are not areas instructors or support staff can control, early alert systems such as those that are embedded in most course management systems, as well as third-party products like Starfish Retention Solutions (see: http:/ /www.starfishsolutions.com/) utilized by Britto and Rush (2013), might be worthwhile using, particularly in courses/programs where the instructor-student ratio is high. Such systems can help instructors and support staff identify strategies and/or services to foster student success and, in many cases, just let them know someone cares.

One other key finding in Fetzner's study is "The best chance of an online student getting a grade of C or better occurs

when they register five or more weeks before the start of the semester" (p. 17). This is important because in our program, we too have found that students who enroll late seem to get off on the 'wrong foot' and have a hard time catching up. To help allay this problem, we work to enroll students early, as well as offer an orientation to all students. Orientation has also shown positive results, as demonstrated in studies by Jones (2013) and Pintz and Posey (2013). However, we have also wondered if there might be other factors at play too, such as it may be that late registrants tend to be less organized or committed to graduate study, among many other possible factors. More research might help shed light on this.

Although the pace of growth of online education seems to have leveled off in institutions of higher education, there have been significant increases (and interest) in enrollments in massive open online courses (MOOCs) (Watters, 2012) and K12 virtual schools (Watson, Murin, Vashaw, Gemin, & Rapp, 2012). In fact, five states within the United States now require high school students to complete at least one online course to graduate (Watson et al., 2012) and "the proportion of students taking at least one online course is at an alltime high" (Allen & Seaman, 2013, p. 4). Moreover, online courses are increasingly becoming the only educational option for many students in various educational settings and levels, whether or not they are prepared—or want—to enroll in an online course. Therefore, it is important to keep abreast of research that examines the supports necessary for success, as well as the factors that promote persistence. As Moore and Fetzner (2009) have noted, a key factor to student retention is establishment of an institutional culture that focuses on student success. This article only scratches the surface of some key findings—but it points to a need in research at other educational levels.

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"... A KEY FACTOR TO STUDENT RETENTION IS ESTABLISHMENT OF AN INSTITUTIONAL CULTURE THAT FOCUSES ON STUDENT SUCCESS."



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Small Things Can Make the Difference Between a Good or Great Distance Educator

The basics of how to be a solid distance educator are well known: constant presence in the classroom, quick turnaround of student e-mails and assignments, ongoing involvement in discussion, an upbeat and enthusiastic personality, et cetera. Doing these will result—



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usually—in a course that is well taught and with students learning. But there are additional items, often not well known or overlooked, that can be considered the finer points of online teaching—they can take one's teaching quality to new heights and give students an exceptional learning experience that makes the class especially exciting, keeps students actively engaged in all course functions, and have students leave with long-lasting info and thankful for having taken the course. Implanting one, some, or all of these small things can definitely result in a good distance educator becoming a great one. Try them out.

Always Include Positive Messages In E-Mails, Announcements, and Assignment Feedback

In writing to students, no matter the purpose, it can be easy to overlook the importance of positive and motivating words. There is, after all, information and assignment feedback to relay, and this is nearly always the primary focus of the online instructor when writing such items. But the connection between instructor and student in the asynchronous environment can be a fragile one, and it takes 100% focus
on the course to keep students engaged and motivated. So, be sure to leave a positive or uplifting line or two in all e-mails, announcements, and assignment feedback; it lets students know it's worth their time to keep on plugging along, and that their instructor sees something of value in each student, in all the class.

PROOFREAD EVERYTHING BEFORE IT IS POSTED OR SENT OUT

As online educators we are held to a higher standard by our students and thus we want to be as close to perfect as possible in our writing quality. Certainly, not everyone who teaches has a college background as an English major, yet we must strive for the best possible writing. But when it comes to proofreading one does not need know the rules of English, for typos have everything to do with rushing through the writing and nothing to do with knowing how to write. To give our students quality and error-free writing before we post or send a missive first read through each one. And in this read always check for the tone and message being written: Is it what you want them to receive? Does it read with too much emotion? Is there a positive message somewhere? It's better to take the extra time to do this than to have an "uh-oh!" posted for one or more students to read.

Read Every Message Your School Sends Out

Schools are constantly tossing out emails, often to the entire faculty, sometimes pertaining to a specific department, and occasionally only to you. It can be easy to skip over many of these that don't seem like they pertain to you (e.g., you are in the English department, and an e-mail is sent out to those who teach Math ... a notice is sent out about the school's late policy, something you've previously read umpteen times): don't. Not only can you learn more about the inner workings of your school but you may also pick up interesting info, new contacts, and school policies that can be of help. And anytime this happens copy the material, then paste it into a file (possibly labeled "Misc School Info)—but be sure to check the file once per week to see if any of the info might be of current use.

CHECK FOR STUDENT QUESTIONS, CONCERNS, AND FEEDBACK SEVERAL TIMES EACH DAY

It can be easy to get it out of the way: check early in the morning for students' emails, postings, and other feedback, then not worry about it until the next day. On the surface this sounds great-but it's a dangerous strategy. First, students in an online class can be in any time zone around the world, thus they can post at any time. Second, students with no questions or concerns in the morn might have them later in the day. Third, there might be a tech problem with the course of which you need be made aware immediately. And students may need additional info for assignments they are posting later in the day. Checking but once a day is a minimalist approach that can miss important student items and have students feeling you are not actively involved in the course.

Use Quirkiness and Humor in the Subject Lines of Discussion Main Postings, Class E-Mails, and Course Announcements

We post information for students because it is important; it is never to simply take up space. Yet students are bombarded by this info from us during a course, as well as other texts, messages, and tweets from friends, family, and others. If students see a heading for a main posting, e-mail, or class announcement that reads "ho-hum" it can a red flag to not read the contained information, especially with some students looking only to get a grade and get out. But the use of quirkiness or humor in the subject line can serve as bait to entice, resulting in a higher percentage of students reading what you sent. An example: a reminder about following all directions of an assignment could have "Ohhhnooo!!!!!" or "Question: what happens if a car forgets one of its tires?" This approach works ... guaranteed.

CALL STUDENTS

It is an online course, so silence of the distance instructor is what students expect. And there is no doubt: the art of knowing how, when, and what to write in a class and to individual students can result in great connections, clear explanations, and a motivated and engaged class. Yet the phone call has its place in the online course: there will be times when that live one-on-one connection is needed with a student for further explanation of an item or to better understand-and thus helpthe student who has not been active or continues to have problems in the course. Also, calls for no particular reason other than to talk about students' progress in class can have significant plusses in further exciting them about the course and strengthening the instructor-student bond. It can take some time to make all these calls, but for the benefit students and instructor get out of them it is worth every minute.

Get Involved in School Activities and Committees

Nearly every school offering online courses has a plethora of school activities, committees, and courses in which the online instructor can get involved. None of these are required, and many who teach online simply skip over them, not wanting to take the extra time. But doing so sure has benefits. It's a great way for others in the school to know you ... it demonstrates you are a fully committed educator beyond merely teaching a course ... professional development is always a good thing ... you may learn of new software, programs, policies, and strategies the school plans to offer prior to the items being announced. And one other plus to being involved: it allows for a sense of community, of togetherness, something very common and easy to establish with colleagues in teaching face-to-face, but much more difficult in the online environment.

OFFER ADDITIONAL RESOURCES THROUGHOUT THE COURSE

Courses usually come stocked with a variety of readings and other materials for the students; it's part of the course syllabus - whether the school or you provide them. But beyond these there is the opportunity-beginning with Day One-to offer info that gives further info on course topics, helps out with various assignments, makes all-important connections between the course subject and its use in "the real world," and gives students info on tech issues, contacts (for items over which you have no control), and succeeding in the online class. Not only are these of great benefit to the students but they also show you as an online educator who is actively involved in the course and very interested in the students' learning, they cut down on e-mails and postings to the instructor (asking for assistance or further explanation of X, Y, or Z), and they contribute to keeping the course alive and interesting.

Use Your Professional Mishaps and Errors for Teachable Moments

We are listed as "professor" or "instructor" or the like in the syllabus, and students know they must please us—through their work—to earn good grades. Yet there can also be a disconnect where the instructor comes across as being on a plateau far above the students, and this can result in a class that fears the instructor, is less forthcoming to the instructor and/or involved in the course, and is not as motivated in the course. But with the online teacher sharing with the class his or her own foibles, mistakes, and difficulties in the course subject there is an immediate "real" connection made with the students: you become human, not simply bits and bytes; students know that everyone can have difficulties with this, that, or the other thing of the course subject; and it's a great way to have students open up about their own challenges with the course subject, in and out of the course.

HAVE STUDENTS CONTRIBUTE RESOURCES AND INFO TO THE COURSE

A great way to get students more actively engaged in the course is to set up discussion threads where they can contribute beyond the standard course topics. Two excellent activities: (1) Ask them to post websites and other info contributions that relate to the course subject or a topic of the subject. (2) Have the students contribute examples from their lives in the work world where something related to the course turned out to be a help or did not work out so well-and why. For the websites and info there will be much contributed from which all can gain, including the instructor, and students will eagerly comment on their classmates' postings. As for the examples from their lives this will pull in students like flies to honey, as they always enjoy peeking into others' livesand this thread also strongly emphasizes the connection between the course subject and its need on the job.

Use Your Face and Voice to Make Personal Connections to the Students

Pasting your pix inside your bio that greets students on Day 1 of a course has

long been a staple of many online courses in an attempt to humanize the distance educator. But technology now allows us to go much further (including a video greeting to the students in the bio). Yet more can be done to result in a stronger personal connection with the students. Begin each week with an .mp3 audio message or a video message that discusses the week ahead, comments on the previous week, and offers clarification information. Also, the use of so-called "live chats" are becoming much easier to hold with newer software; the instructor's voice, along with a live webcam of his or her face (optional), can additionally add to the face-to-face classroom feel of an online course. And audio messages/videos can also be made on various course topics, then posted throughout the course.

SAVE ALL KUDOS STUDENTS SEND YOU

Students send us "Thanks for the great teaching!"-type e-mails at various times, and it's important to save these. They are an affirmation of our efforts in the classroom and offer great motivational messages to keep strong our teaching enthusiasm. These "feel good" nuggets are also great to share with one's faculty manager or department chair, and can be used in applications for other teaching positions. There are also benefits to our teaching quality that most of these e-mails offer: students often detail what was so good about the course they took, and thus we gain insight into the strengths we offer the students. But we must also look at what students don't mention: is there one of more aspects of our teaching students do not compliment? This type of info can give us pause to revisit our efforts, perhaps resulting in improvements.

KEEP A "FOR NEXT CLASSES" FOLDER

We want to build upon our successes with each course we teach, and thus taking away info and suggestions students offer from our courses, as well as insights, info, and suggestions from our efforts (and supervisors' and students' evaluations), should be placed in a folder that can be labeled "For Next Classes." This folder can be further divided into subfolders, such as "Websites," "Connections to Employment," "Areas to Work On," "Ideas to Add," et cetera. Saving such items gives us a large bank from which to withdraw, resulting in stronger and more enjoyable future courses for the students and us.

Remember: There is the chocolate cake, and there is the chocolate frosting on the cake—but to present the cake with smoothed-out frosting, sprinkles of edible gold, and intricate lettering is a dessert where extra effort is obvious ... and the cake is truly enjoyed!

"THE BASICS OF HOW TO BE A SOLID DISTANCE EDUCATOR ARE WELL KNOWS: CONSTANT PRESENCE IN THE CLASSROOM, QUICK TURNAROUND OF STUDENT E-MAILS AND ASSIGNMENTS, ONGOING INVOLVEMENT IN DISCUSSION, AN UPBEAT AND ENTHUSIASTIC PERSONALITY, ET CETERA"



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Ask Errol!

nd so we have another compilation of questions on varied topics from distance learning instructors—as the profession grows so does the number of complexities and possibilities and opportunities that affix themselves to online education. Keep them coming, and I will continue to do my best in offering info that will help you enhance your efforts in the asynchronous classroom (I can be reached at erroldistancelearning@gmail .com).



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This edition's collection ...

You will probably think this a silly question, and I know there are tons of suggestions on the Internet (believe me, I've searched), but what do you think makes for an ideal office environment to teach online? I'm curious as to what yours looks like, as you must have it down to a science. For me, I have my computer on a desk in my bedroom, and I let my wife and kids know when I need some quiet time. Looking at my workspace, next to my computer you'd see a cup of coffee, a pad and pen, and some other notes and papers (not very much). Still, occasionally I find it hard to really focus on my classes, and there are times where I've made mistakes in my grading and my class announcement postings because I know my surrounding environment interrupted me at times. Please help!

There are readers of this column who will see this first subject, perhaps roll their eyes, think a soft "You gotta be kidding!" and move onto the next letter—such is how basic and obvious most folks view the concern you raise and the solution to it. Yet I publish your letter because just the opposite is true: most people teaching in a distance learning setting don't really know how to maximize their environment for optimal online teaching focus. It's taken for granted that everything is fine the way things look and sound, and the major area of concern is the classroom. While the latter is true, the better the environment surrounding the online instructor the better the course can be.

Of course, the ideal situation would be to have one's own study or office-but let's work with your situation. First, you mentioned telling your wife and children that you need, in essence, to be left alone while teaching. That's a good start: the fewer outside interruptions the better. This also extends to phones and TV (music, however, can help one's focus). As for what's on your desk it seems rather spartan—the organization is good, but you might want to add a picture of your family (as a motivational reminder to do the best possible teaching!), a saying or two to emphasize teaching's importance, a box of tissues, a small house plant (it does have a soothing effect), a good lamp to offer directed lighting on your computer, and something to drink (nonalcoholic, which you have). Together, this collection equals a more content and relaxed online teaching environment, resulting in better concentration, more effective teaching, and improvement in student learning satisfaction. (NOTE: There is a myriad of environments created when distance learning educators teaching—if you'd like some suggestions as to how yours can be maximized please drop me a note.) Oh, yes, you asked about mine: I do have the luxury of my own study, and I've stocked it with what helps me to relax and focus: a tank of fish, some plants, and many books and posters!

Your column has given me many good ideas in the past, and I hope it can again offer me assistance. I've been invited to teach a MOOC [massive open online course, usually offered for free and usually with many thousands of students in a course.], and while I presume that the same abilities and approaches I've used teaching online for 5 years will come in handy, I'm sure there are some new wrinkles I need to know. Can you offer a few pointers? An upcoming column will focus on what you ask—a miniguide to teaching MOOCs. And because it will take up a full column you can see I won't be able to give you here everything one needs to know to successfully teach—should I say "handle"? —a MOOC. But as your course will probably be starting before that column let me toss out a few items that are especially important.

First: understand the development of your content will take far longer than in a traditional online course. The reason: with so many students the idea of only lecturing and/or posting course readings will bore, and the students will quickly share these thoughts with one another. Thus, the use of video, slide decks, and audio, mixed with mini-lectures and course readings, is crucial, and this development takes time. Also: make a typo—or any major writing error for that matter-and thousands of students will immediately know it, so be über careful with any text offered to the class. Also, cheating is much more prevalent (why giving credit for taking a MOOC is very challenging), and the one or two wiseacres an online instructor can count on in a "regular" online class is multiplied in a MOOC. Too, be aware of your audience—as MOOCs are offered free with no (or limited) credit the mix of folks-educationally and reasons for taking the course-can differ quite a bit from the courses you now teach. And my final big suggestion: in addition to posting announcements in class, send them individually to students (in mass e-mailings) to be sure they receive all your info, and take an active role in forums/discussions so you can be seen as a MOOC instructor who is involved in the course, not merely one who teaches with a pointer.

I have read your columns where suggestions were given for group work among students; they have proved quite helpful in my classes. Thanks! But I have what can best be described as a touchy group project because

it involves creating and presenting a webinar to my department in collaboration with three colleagues. Some of the problems you mentioned and problems I've previously seen with my students are happening here: one person—me!—who is carrying the burden of the presentation; lack of communication from my colleagues on the project; and minimal contributions by two of my mates. Unlike students who are more apt to listen to me because they realize a grade is at stake, the only "reward" we get is a job well done and a thumbs up from our Faculty Manager. Added to this: our Faculty Manager has already indicated another project she wants us to create! Some advice on how to maneuver through this quagmire, please!

As more "cool" tools become available for giving online presentations-webinars-more distance learning educators are jumping into the fray of creating and presenting these programs, and often, as you point out, in a collaborative effort. All previously mentioned suggestions for good student group projects apply here, but a few with some tweaks: constant communication amongst group members; electing a group leader (no-one need be officially appointed as a group leader, but someone must take on the same responsibilities-amongst teaching colleagues the title "group leader" can result in an elitist ring to it); assignment of project components (this is better done by one person in a "Let me suggest ..." mode OR by simply stating, "I feel comfortable in doing XXXwhat about the rest of you?"); and setting and adhering to a timeline for completion of various parts of the project. (Again, this is best accomplished by someone merely reaching out with an email that states, "Let me suggest we have A competed by X, B set to go by, Y, etc.")

Now, the delicate part comes in when someone is not putting in the amount of effort expected and/or a team member offers material that needs substantial changes. You have to interact with these folks on a regular basis in other situations, and thus you don't want to come across as arrogant or bossy. Therefore, being positive with a suggestion for change works best (e.g., "Marv, thanks for the great info; if it's okay with you I'm going to smooth it out a bit for a better seamless fit into our project" OR "Great ideas, Shwana, but perhaps you can cut down on the text a bit so it more readily fits on one slide?") One other suggestion: whenever I'm involved in a collaborative project I make it a point to call my colleagues: it puts me in a leadership position without being appointed leader, and it helps establish a cordial, easy-going working relationship.

Tips, tips, and more tips, and suggestions, suggestions, and more suggestions: not only do you offer many in your columns (and I appreciate them) but there are thousands more to be found in a large number of books, websites, and online articles on distance learning. Is there one umbrella tip you have that is perhaps not so obvious but can be a huge help to anyone teaching an online course?

I've been teaching online for 20 years, and again and again I've found one item that is somewhat of a magic many-purpose elixir in helping one to teach in the asynchronous environment: posting resources that target working the online class, course content, and assignments (as text, audio, and video). I'll explain the specifics of these shortly, but implementing these results in fewer e-mails and calls to the faculty member, higher grades for students, more classroom engagement, less angst and anxiety from the class, and an overall heightened learning experience for the students. The only downside: offering these resources takes more upfront time from the instructor ... but it is so worth it!

As for details of the lists, they fall into the three areas mentioned: working the online class, course content, and assignments. For the first, post tips on how best to succeed in an online class; reminders of when assignments are due; school contact info for problems out of the teacher's control; the faculty member's expectations from students; reminders as to where materials and resources are located in the classroom; problems students might encounter in an online course—and how to overcome them; and instructions (text, audio, or video) on how to attach a file, submit an assignment, et cetera.

For course content, offer additional resources that highlight or underscore the importance of the course content, updated info on the course content, and materials that demonstrate the relationship of the course subject to the "real world" of employment and everyday life. Also included can be puzzles, cartoons, videos, etc. that add a bit of lightness and humor to the course while still emphasizing various aspects of the course subject. Finally, post information on what is expected—in general—for each assignment (including discussions); common mistakes students make in assignments, and how to overcome them; and tips on how to do well in all graded course components. Added to this I always include an Assignment X Checklist (to be sure students include all requirements of an assignment), an example of a good quality upcoming assignment, and samples of what constitute good discussion postings. Certainly, additions to all of these resources should be made as material relating to the course subject and student questions warrant it.

Remember: Einstein. Lincoln, Curie, Gandhi, Twain, Thatcher, King, and Child—they all were brilliant, but all had libraries—and used them.

"... THEY ALL WERE BRILLIANT, BUT ALL HAD LIBRARIES—AND USED THEM."





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- E-books can read aloud to you.
- E-books defeat attempts at censorship.

So, educators generally, and distance educators specifically, are now faced with a decision—the e-book or the printed book? And, if a favorite text is only available electronically or only in print form, should this influence the adoption decision? Interestingly, some publishers indicate they will make the choice for us—the electronic text will be the only option.

Is this an important issue? When one thinks about either/or decisions distance educators make, the medium used for the delivery of the printed word does not seem to rise to the level of some other controversial decisions, such choosing between virtual vs. brick and mortar schools, or the issue of open vs. proprietary CMSs.

But, perhaps this apparently simple issue—offering books in *only* an electronic format, a decision being made by several large publishers—is an issue that may have greater implications than one might expect. Certainly, the advantages of ebooks listed by Pastore are important, but why are some in our field left a little cold by the decision by publishers to only publish textbooks in an electronic format? What is lost compared to what is gained? Most teachers think textbook selection is an academic issue, as is the decision about content delivery, and that access to accurate information in books is fundamental.

Journal and book editors know that "content is king," and that journal articles and books are created by knowledgeable authors *who can write*. The control of content, which is routinely signed away by authors when they agree to have their ideas, scholarship, and creativity published, actually means that content is controlled by publishers. This is not news. Copyright release forms are a part of the publishing process.

But, books have always been relatively immune from exclusive ownership. When we buy a book it belongs to us. Public libraries have long offered near universal access, and our ever-diligent librarians and media specialists have long guaranteed access, often to the consternation of publishers.

Is there a problem if the contents of books are continuously controlled by publishers, with access made available, if at all, only for money? Hmm Somehow this seems wrong.

Distance Learning would like to publish articles dealing with the issue of e-books and their impact on teaching and learning.

And finally, as Thomas Jefferson said, "I cannot live without books."

REFERENCE

Pastore, M. (2010). 50 benefits of ebooks. Ithaca, NY: Zorba.

And Finally ...

E-Books The Future?

Michael Simonson

"We will no longer publish printed books in the field of education, we will only publish e-books." —Statement heard in the executive offices of a large international publisher.

"A house without books is like a room without windows."

—Horace Mann

"Many people, myself among them, feel better at the mere sight of a book." —Jane Smiley



Michael Simonson, Editor, Distance Learning, and Program Professor, Programs in Instructional Technology and Distance Education, Fischler School of Education, Nova Southeastern University, 1750 NE 167 St., North Miami Beach, FL 33162. Telephone: (954) 262-8563. E-mail: simsmich@nsu.nova.edu hat is trending in distance education? E-books!

E-books are being proclaimed by some as the next major consequence of the digital revolution. These "futurists" forecast that the printed book is destined to go the way of Super-8 film, VHS tapes, and floppy disks.

E-books, simply defined as electronic versions of printed books, offer the reader many advantages. Certainly, the electronic book, newspaper, journal, even comic book are here to stay. There are many obviously advantages of electronic publishing. Pastore (2010) listed the major advantages of e-books. Some of his more interesting claims are:

• E-books promote reading. People are spending more time in front of screens and less time in front of printed books.

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