In-Class Essay Exam

For this essay exam, you have been given a number of magazine and newspaper articles that discuss the issue of online learning. In class, you will prepare a researched position argument using these sources as your references while writing this essay. You must use at least three sources in your essay, and all work must be cited in proper MLA format with an attached Work Cited page.

You will have the full class period to prepare your argument, and this exam will be graded on a pass / no pass basis. Passing exams will contain an introduction, a clearly stated thesis with support with at least three reasons, use at least three sources responsibly within your argument (with correct in-text citation), and include a complete Work Cited page that includes only the sources you directly in your essay. You may use your personal computing device to write and submit this exam to Canvas, but your essay MUST BE WRITTEN IN THE CLASSROOM. You may also prepare your essay longhand if you desire, in which case you will turn in the essay to me at the end of the hour. I will have a sign-in sheet present in class to verify that you were present in class.

This assignment is a required component of this course—it must be completed in order to pass this class.

Remember the days in the old school yard: from lectures to online learning

P. A. Reynolds,[1] R. Mason[2] and K. A. Eaton[3]

VERIFIABLE CPD PAPER

IN BRIEF

- Gives an overview of the impact of e-learning on teaching practice and introduces themes which will be developed in the next five papers in the current series.
- Suggests that the impact of ICT systems and services has and will continue to transform teaching practice at all levels of education.
- Suggests that in some ways tertiary education has been slow to grasp the opportunities that e-learning offers.

Claims have been made that the traditional classroom/lecture-room mode of teaching is under threat with the future being purely online-based. There is no doubt that the impact of ICT systems and services have and will continue to transform teaching practice. From PowerPoint slides introduced to enliven lectures to virtual reality models accessed remotely, technology is bringing about new educational paradigms. The result is the emergence of new forms of distance learning with terms such as flexible learning, blended learning and full online instruction. All are making major contributions to the student experience, allowing access to more information and greater resources as well as opportunities for learning in a manner and timescale that is more attuned to their aims, abilities and lifestyles. In dental education the transition is providing undergraduates, postgraduates and CPD students with a greater variety of courses, access to more expertise and the opportunity for lifetime learning.

E-LEARNING IN DENTISTRY

Section A: Teaching and technology

1. A description of the new technologies used in transforming dental education
2. Seeing is believing: dental education benefits from developments in videoconferencing
3. Webcasting: casting the web more widely
4. Top of the pops – CD-ROM and DVDs in dental education

Section B: Informatics: better informed by systems and services

5. Better informed: an overview of health informatics
6. Better informed in clinical practice – a brief overview of dental informatics
7. Digital clinical records and practice administration in primary dental care

Section C: Impact of e-learning in dental education

8. Remember the days in the old school yard: from lectures to online learning
9. An intricate web – designing and authoring a web-based course
10. The many faces of interaction
11. Supporting the learner and teacher online
12. Making a mark – taking assessment to technology
13. Continuing professional development and ICT: target practice
14. Assuring quality

Section D: A connected future

15. Nine years of DentEd: a global perspective
16. A vision of dental education in the third millenium

Introduction

In recalling schooldays (and the pop songs), memories are of blackboard and chalk, together with a 'talking head' teacher standing in front of the class with material that had hardly changed, apparently, from Victorian times. It was a didactic method, learning by rote, and not very exciting, stimulating, enlightening or challenging. Nor was it designed for the student to assimilate whatever pearls of wisdom were emanating from the pedagogue. It hardly involved the student in the learning process, as it tended to be dry, unimaginative and text-book-based. It is a scenario that brings to mind the famous remark – *'Lectures are the process of transferring information from teacher's notes to students' notes without going through the minds of either.'*

Sadly too much teaching is still conducted on these lines, though this is now mainly at a Higher Education (HE) level, as schools have generally been ahead of tertiary education establishments in adopting e-learning. The most important catalyst for this has been the emergence of an evidence base supporting e-learning and the use of information communications technology (ICT).

This development in HE can initially be seen as transforming delivery from lectures to online. The current series of articles has revealed that the systems and services are in place to effect this transformation; now the question should be asked: 'How does it impact on those in education whether as students or teachers?'

There is, of course, the risk that educationalists will see this as a panacea and a word of warning is appropriate. Technology does not turn a poor teacher into a good one. Style, commitment, love and knowledge of the subject, content and creativity, and concern for the students will always remain prerequisites. However, a good teacher will be a good

[1]Professor of Dental Education, Centre of Flexible Learning in Dentistry, King's College London Dental Institute, Floor 3, Strand Bridge House, 138-142 Strand, London, WC2 1HH, [2]Professor of Educational Technology, Institute of Educational Technology, The Open University, Walton Hall, Milton Keynes, MK7 6AA; [3]Visiting Professor, UCL Eastman Dental Institute, 256 Gray's Inn Road, London, WC1X 8LD
*Correspondence to: Professor P. A. Reynolds
Email: P.A.Reynolds@ucl.ac.uk

Refereed Paper
DOI: 10.1038/sj.bdj.2008.299

EDUCATION

understanding of the needs of their students whatever the technology.

Technology should be seen as the enabler, with its various emanations – the Internet, CD-ROM, videoconferencing, webcasting, computers and, most recently, virtual reality – the enabling tools. At the simplest level such technologies can enhance the traditional lecture-based approach. The inclusion of PowerPoint slides may well add life to an otherwise dull, verbal address especially if the full range of the program's features are utilised.

Within PowerPoint[2] there are opportunities to add visuals including photographs, graphs and charts, line-drawings, and special text effects. The

Distance learning is not new. It can be traced it back to Gutenberg's invention of printing (from which emerged the 'independent learner'), through the radio and television to the Internet.[3] From individual reading in the library, distance learning has progressed through correspondence courses to today's distributed classroom.

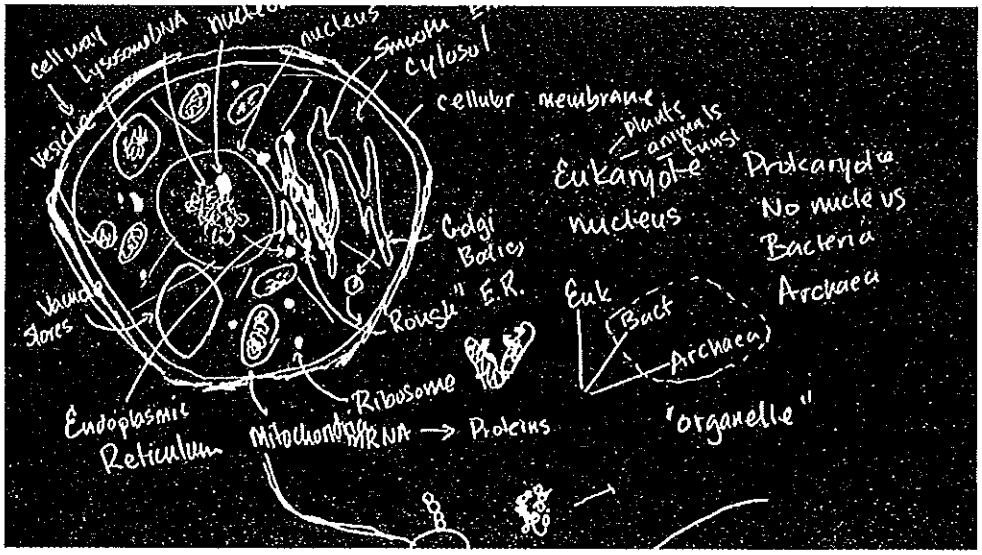
Distance learning was already being offered by London University 150 years ago and more recently, by the Open University (OU), which opened in 1969 and has blazed the trail for flexible methods of teaching and learning. The original OU courses were primarily based on printed material which was mailed to students. They soon became enhanced through

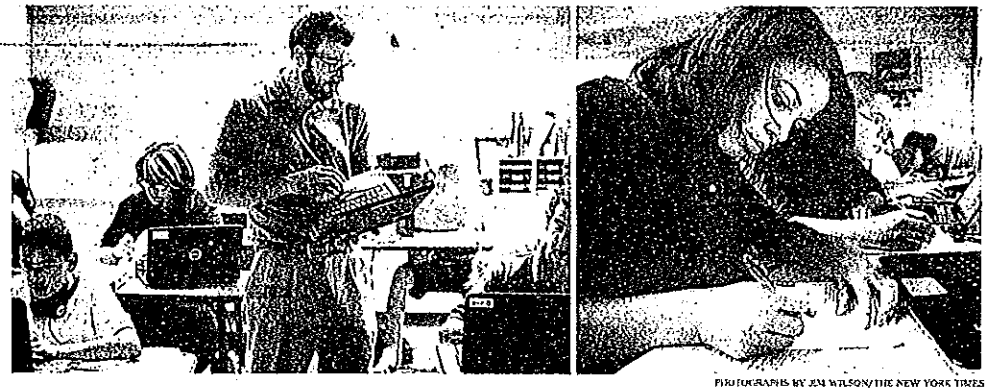
teacher in any medium,[1] with an innate

of the Internet is a valuable resource that overcomes one of the major limitations of traditional distance learning. In addition, collaboration and contact, whether with teaching staff or fellow students, can be more frequent and easier through utilities such as chat rooms, email, and bulletin boards and videoconferencing – in fact, what is being described is e-learning.

In this new paradigm 'distance learning' represents a change in the fundamental orientation of the learning environment. Traditional, physically co-present classrooms and pedagogical practices involve face-to-face instructor-learner relationships. These physically and socially immediate instructional

Online Learning, Personalized: A Math Teacher on the Web Blends His Technique With Classrooms
SENGUPTA, SOMINI
New York Times (1923-Current file); Dec 5, 2011;
ProQuest Historical Newspapers: The New York Times with Index
pg. B1





PHOTOGRAPHS BY JIM WILSON/THE NEW YORK TIMES

Jesse Roe, a teacher in the Summit school in San Jose, can use the teaching software to monitor the math progress of students like Cheyenne Grant, 14, right. Top, a lesson on the parts of a cell from a Khan Academy video on YouTube.

Online Learning, Personalized

A Math Teacher on the Web Blends His Technique With Classrooms

By SOMINI SENGUPTA

SAN JOSE, Calif. — Jesse Roe, a ninth-grade math teacher at a charter school here called Summit, has a peephole into the brains of each of his 38 students.

He can see that a girl sitting against the wall is zipping through geometry exercises; that a boy with long curls over his eyes is stuck on a lesson on long equations; and that another boy in the front row is getting a handle on probability.

GRADING THE DIGITAL SCHOOL
Combining Man and Machine

Each student's math journey shows up instantly on the laptop Mr. Roe carries as he wanders the room. He stops at each desk, cajoles, offers tips, reassures. For an hour, this crowded, dimly lighted classroom in the hardscrabble shadow of Silicon Valley hums with the sound of fingers clicking on keyboards, pencils scratching on paper and an occasional whoop when a student scores a streak of right answers.

The software program unleashed in this classroom is the brainchild of Salman Khan, an Ivy League-trained math whiz and the son of an immigrant single mother. Mr. Khan, 35, has become something of an online sensation with his Khan Academy math and science lessons on YouTube, which has attracted up to 3.5 million viewers a month.

Now he wants to weave those digital lessons into the fabric of the school curriculum — a more ambitious and as yet untested proposition.

This semester, at least 36 schools nationwide are trying out Mr. Khan's experiment: splitting up the work of teaching between man and machine, and combining teacher-led lessons with computer-based lectures and exercises.

As schools try to sort out confusing claims about the benefits of using technology in the classroom, and companies ponder the profits from big education contracts, Khan Academy

Continued on Page 7

A Math Teacher on the Web Blends His Technique With Classroom Needs

From First Business Page

may seem like just another product vying for attention.

But what makes Mr. Khan's venture stand out is that the lessons and software tools are entirely free — available to anyone with access to a reasonably fast Internet connection.

"The core of our mission is to give material to people who need it," Mr. Khan said. "You could ask, 'Why should it be free?' But why shouldn't it be free?"

For now, Mr. Khan's small team is subsidized by more than $16.5 million from technology donors, including Bill Gates, Google, the Silicon Valley Community Foundation and the O'Sullivan Foundation. He intends to raise an endowment. And this summer, starting in the Bay Area, where he is based, he plans to hold an educational summer camp.

It is too early to know whether the Khan Academy software makes a real difference in learning. A limited study with students in Oakland, Calif., this year found that children who had fallen behind in math caught up equally well if they used the software or were tutored in small groups. The research firm SRI International is working on an evaluation of the software in the classroom.

Mr. Khan's critics say that his model is really a return to rote learning under a high-tech facade, and that it would be far better to help children puzzle through a concept than drill it into their heads.

"Instead of showing our students a better lecture, let's get them doing something better than lecture," Frank Noschese, a high school physics teacher in Cross River, N.Y., wrote on his blog in June.

But in education circles, Mr. Khan's efforts have captured imaginations and spawned imitators. Two Stanford professors have drawn on his model to offer a free online artificial intelligence class. Thirty-four thousand people are now taking the course, and many more have signed up. Stanford Medical School, which allows its students to take lectures online if they want, summoned Mr. Khan to help its faculty spice up their presentations.

And a New York-based luxury real estate company credited Mr. Khan with inspiring its profit-making venture: the Floating University, a set of online courses taught by academic superstars, repackaged and sold to Ivy League colleges and eventually to anyone who wants to pay for them.

"What Khan represents is a model that's tapped into the desire that everyone has to personalize the learning experience and get it cheap and quick," said Jim Shelton, assistant deputy secretary for innovation and improvement at the Education Department.

Mr. Shelton predicted that there would be "a bunch of knockoffs" that would take the Khan approach and try to expand on it. "This is going to spread like wildfire," he said.

Mr. Khan grew up in a suburb of New Orleans, where his mother, who is from Bangladesh, raised him on her own by cobbling together a series of jobs and businesses. He went to public schools, where, as he recalls, a few classmates were fresh out of jail and others were bound for top universities.

Math became his passion. He pored over textbooks and joined the math club. He came to see math as storytelling. "Math is a language for thinking," he said, "as opposed to voodoo magical incantations where you have no idea where they're coming from."

The YouTube lectures got their start six years ago when Mr. Khan needed a way to help a cousin catch up on high school math. They are startlingly simple. Each one covers a single topic, like long division or the debt crisis, usually in a bite-size 10-minute segment. The viewer hears Mr. Khan talking, in his typically chatty, older brother sort of way. But his face is never seen, just his scribbles on the screen. More recently he has included two outside specialists to give lectures on art history topics like the Rosetta Stone and Caravaggio.

Computers freeing up teachers to offer more customized attention.

Today, the Khan Academy site offers 2,700 instructional videos and a constellation of practice exercises. Master one concept, move on to the next. Earn rewards for a streak of correct answers. For teachers, there is an analytics dashboard that shows both an aggregate picture of how the class is doing and a detailed map of each student's math comprehension. In other words, a peephole.

Diane Tavenner, chief of the Summit chain of four charter schools, said that at first she was ambivalent about using Mr. Khan's software. It would require buying laptops for every student and investing in more Internet capacity. And she found the Khan Academy model of instructor and blackboard — albeit a digital one — to be a bit too traditional.

In the past, math class at the Summit schools was always hands-on: the class worked on a problem, usually in small groups, sometimes for days at a time. But getting an entire class of ninth graders to master the fundamentals of math was never easy. Without those, the higher-level conceptual exercises were impossible.

That is where the machine came in handy. The Khan software offered students a new, engaging way to learn the basics.

Ms. Tavenner says she believes that computers cannot replace teachers. But the computer, she recognizes, can do some things a teacher cannot. It can offer personal feedback to a whole room of students as they work. And it can give the teacher additional class time to do more creative and customized teaching.

"Combining Khan with that kind of teaching will produce the best kind of math," she argued. "Teachers are more effective because they have a window into the student's mind."

Ms. Tavenner's students here inhabit a world that seems distant from the dazzle and wealth of adjacent Silicon Valley. Nearly half come from families where English is a second language. Forty percent qualify for free lunches. So pervasive is gang violence in the area that school uniforms have been mandated as a safeguard against the display of gang colors. Not all students have a computer at home, or parents who can help with homework.

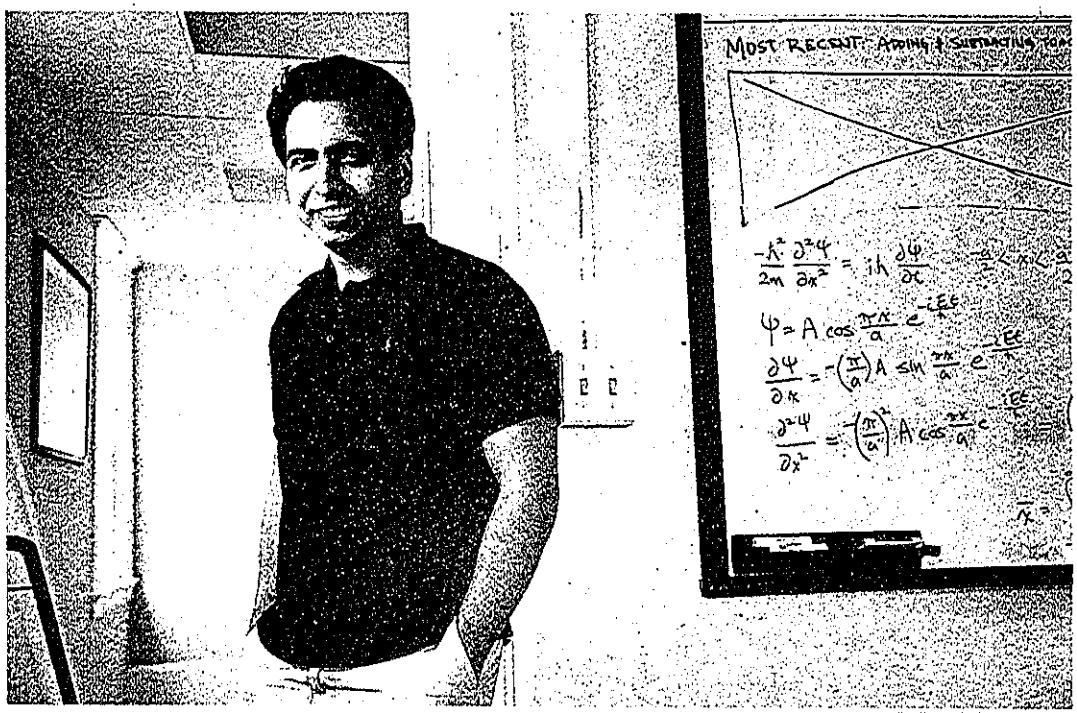
Math class at Summit on one afternoon this fall began like many around the country. Mr. Roe was at the whiteboard at the head of the room, explaining order of operations — the math concept that dictates the sequence in which calculations should be performed in a long equation. Handouts were passed out, and there was a series of questions and answers.

In the second hour, the students were huddled over laptops, each working on a different set of exercises. Nicole Bermudez, 14, was on geometry. She had trouble with math in middle school. Her teacher, she said, had no time to help her, and her mother did not have the patience. "She would just yell at me. She would say, 'You can't get it? This is simple math.'"

The Khan Academy software, she pointed out, offers hints and instructional videos to nudge her ahead. It waits until she has mastered one concept before she can move on to the next. She can ask Mr. Roe when she is really stuck.

In the back of the class, two girls wearing headphones watched one of Mr. Khan's videos. Moses Rodriguez plodded slowly through some exercises, his attention occasionally wandering until Mr. Roe came around and prodded him. The classroom was quiet, apart from the occasional eruptions of victory.

"Is your brain hurting yet?" one girl asked her neighbor.



JIM WILSON/THE NEW YORK TIMES

Salman Khan in the offices of his company, Khan Academy in Mountain View, Calif. His math lessons are popular on YouTube.

Grading the Digital School

Articles in this series are looking at the intersection of education, technology and business as schools embrace digital learning.

ONLINE: *Previous articles in the series.*

nytimes.com/digitalschool

Matt Richtel contributed reporting.

10 REASONS STUDENTS SAY THEY PREFER LEARNING ONLINE

At the recent iNacol Virtual Schools Symposium, participants had the opportunity to hear directly from a panel of students who explained why they preferred learning online. Here are some of the reasons they shared:

1 I can sleep in. While this may sound indulgent to the over-30 crowd, the reality is that adolescents need more sleep than adults and often function best late at night.

2 I can pursue my passions. Several students are learning online because they are pursuing passions that do not allow them to fit into the traditional school system. We heard from a student who competes in equestrian competitions; for others it may be music, writing, acting, or filmmaking.

3 I can focus on my work without distractions from my classmates. For many students, school is a huge distraction, especially in high school, where the focus is often more on socializing and fitting in than on learning. Students shared that in online classes, they can focus their attention on learning.

4 I can move at my own pace.

5 I don't have to compete to share my thoughts and ideas. The playing field is leveled, and students can provide feedback about such things as posts, videos, and student work as well as participate in discussion forums.

6 I can take classes that are more interesting. Providing online opportunities for students means providing more choice.

7 I can learn with a schedule that meets my needs.

8 I can learn despite health problems that might get in the way of a traditional class setting.

9 I can easily communicate with my teacher when I have to. Online environments typically have structures in place whereby students can easily send private instant messages or emails to their teachers and end up feeling much more supported by and connected to those teachers.

10 I can easily communicate with my classmates when I want to. A traditional classroom setting often discourages students from communicating with one another. The online environment makes it much easier for students to connect with one another on topics of interest in both synchronous and asynchronous environments.

—Lisa Nielsen

CEOS IN THE 21ST CENTURY

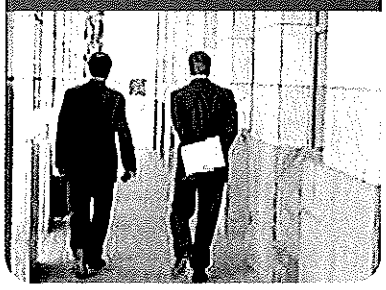
IBM recently interviewed global leaders, including education respondents in 13 countries. It published its findings in "Capitalizing on Complexity," which included four primary insights into how global leaders think they will fare in a technologically transitional marketplace:

1 The vast majority of CEOs anticipate even greater complexity in the future, and more than half doubt their ability to manage it.

2 CEOs believe that creativity is the most important leadership quality. Creative leaders encourage experimentation and make deeper business-model changes to realize their strategies, take more calculated risks, and keep innovating in how they lead and communicate.

3 The most successful organizations co-create products and services with customers and integrate customers into core processes.

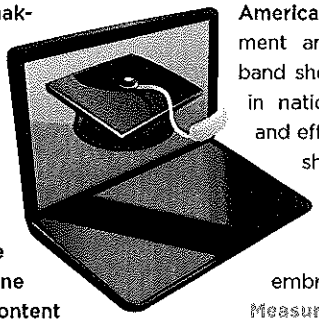
4 Better performers manage complexity on behalf of their organizations, customers, and partners. They do so by simplifying operations and products and increasing dexterity to change the way they work, access resources, and enter markets around the world.



CAN ONLINE LEARNING WORK?

The U.S. Distance Learning Association (USDLA)'s new white paper "Enabled by Broadband, Education Enters a New Frontier" highlights the successes and growth of distance learning. The USDLA identified the following measures to be taken to advance online learning and opportunity:

Measure 1: **Educators and education officials at every level, including the U.S. Department of Education, should move forward with the development of online-based curricula and the digital content to support them.** They also should continue to evaluate the effectiveness of various approaches to online learning and to educate parents, students, teachers, and others about the benefits of online learning.



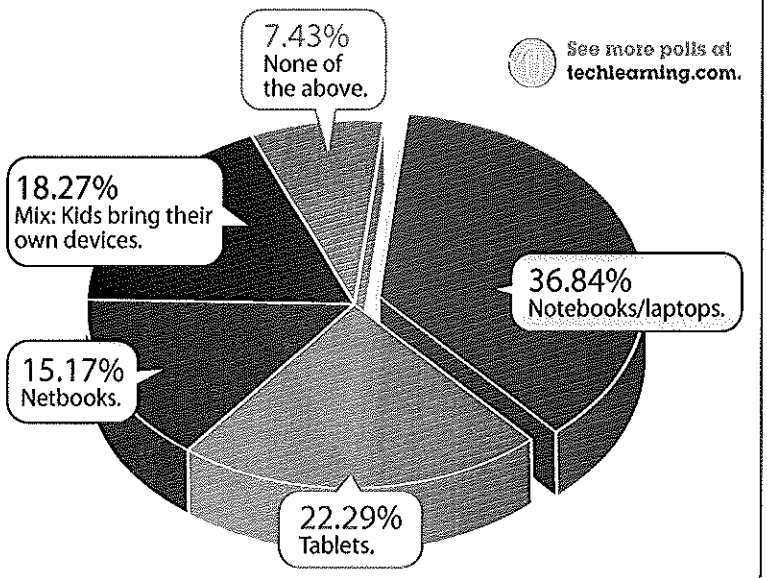
Measure 2: **Policy makers at every level should review accreditation rules, teacher licensing requirements, copyright law, and other laws and regulations that may unintentionally undermine the effectiveness of online access to educational content and limit the use of digital technologies in the classroom.** To the extent that it is possible, antiquated rules should be modified to eliminate unintentional barriers to online learning.

Measure 3: **Makers of public policy should redouble their efforts to deliver broadband connectivity and the opportunity to enjoy online learning to every American.** The universal deployment and adoption of broadband should be the first priority in national technology policy, and efforts to achieve this goal should include digital literacy and education initiatives that encourage late adopters to embrace broadband.

Measure 4: **Makers of technology policy should explore measures, such as the creation of a universal broadband support fund, to enable the deployment and adoption of broadband in high-cost areas.** Similarly, policy makers should avoid establishing rules, including unnecessary regulation, that can raise costs and make it harder for less affluent school districts and individuals to fully adopt broadband technology.

T&L ASKS READERS

Which device do you think is best for 1:1?



Sites We Like:

www.cfr.org/publication/13850/crisis_guide.html

An engaging video that provides the origins of the Israeli-Palestinian conflict to establish a deeper understanding of the continuing crisis.

The Benefits of Continuing Education Online

Rehab Management (Online) Los Angeles: Anthem Media Group. (Mar 6, 2010)

Abstract

First of all, we have no measured learning in the traditional seminar/conference model. Depending on the platform, the following are also advantages of online learning: a. The learner can review the course multiple times; b. Interaction with the speakers; c. Interactive learning with questions and activities for the learner; and d. Interactive = interesting (= more learning).

Full Text

Online CE raises several questions. What is it? Do people learn via online media? Is it a good thing? What are the obstacles? Where does it belong and where does it not belong? What does the future hold for online CE? The purpose of this article is to explore these issues and allow the reader to identify if and where online CE belongs in their learning experience.

WHAT IS ONLINE CE?

There are multiple types of online learning. Prior to embarking on online learning, you will want to understand some of the vocabulary and choices available. First, let's divide online learning into either synchronous or asynchronous. Then we will look at the different types of platforms and learning management systems (LMS).

Synchronous learning occurs when a group of people are presented with the same information at the same time. Lectures in face-to-face environments are the historical form of synchronous learning. Web conferencing whereby the learner is on a conference call for the audio/verbal presentation and in front of the computer where the presentation is visually given is the electronic means of synchronous learning. However, there are pitfalls with this approach: videos don't always play well on these Webinars, conference call lines get bungled, Macs have difficulty on some of the platforms, AND the learner still has to be present at a specific time for the Webinar. Additionally, Webinars tend to be the most costly of online education formats.

Asynchronous online learning is an on-demand recorded event. The asynchronous learning can be interactive with quizzes, activities, and communication with the instructor (the instructor's response to inquiries, however, is not in real time).

Within the asynchronous learning, there are different types of presentation platforms (or electronic media). The most common platforms, and the oldest, are text based: it is like reading a book chapter online. The newer platforms are audio and visual presentations. The audio and visual are typically integrated into some type of Flash presentation (Flash, an Adobe product, is the most widely accepted streamed content for all computer systems). The visual inputs can be slides, videos, animation, etc. The presentation automatically progresses, giving the student a rich environment where the material is seen on the screen while hearing the instructor and interacting with activities, as well as the ability to pause/resume the material and replay at the desire of the learner.

Whether choosing synchronous or asynchronous learning, there needs to be a LMS wrapped around the presentation platform. The LMS will handle the registration, tracking, and storage systems of the learner activities; the quizzes (if applicable); and the distribution of certificates of completion.

DO PEOPLE LEARN VIA ONLINE MEDIA?

First of all, we have no measured learning in the traditional seminar/conference model. Absolutely no evidence of learning in the face-to-face environments! All those years (and money) of CE and no evidence of any learning; we, the people of evidence-based practice, find it amazing that we accepted this antiquated practice for so long.

Some electronic platforms do have means to measure learning. And there are several studies that prove we learn better with online courses than in the face-to-face environment.[1,2]

So, "yes!" we do learn quite a bit with online education.

IS ONLINE CE A GOOD THING?

In addition to the above, here are a few of the other reasons why online CE might be a good thing:

1. Convenience. It can be done at your home or office, and, in the case of asynchronous learning, at the time of your choosing. Depending on the platform, you may be able to pause the asynchronous presentation and resume later at your bookmarked spot.

2. Asynchronous online education tends to be less expensive than going to a conference (and much less expensive than live Webinars).

3. No travel, no hassle, no expense.

4. Less time away from work and/or family

5. More choices of courses since you do not have to select courses based on geographic availability.

6. Can be higher quality in that the best-of-the best material/educators can be scaled to reach all of us

7. Need last minute CEs for relicensure? Online learning is always available.

8. Depending on the platform, the following are also advantages of online learning:

a. The learner can review the course multiple times;

b. Interaction with the speakers;

c. Interactive learning with questions and activities for the learner; and

d. Interactive = interesting (= more learning).

Therapists are smart people. It was tough getting into school (and even tougher getting out). So, if we use our smarts to select the appropriate applications for online learning, we will optimize our learning. But first, let's look at the obstacles we need to overcome.

OBSTACLES IN ONLINE LEARNING

As with all of life, if we can accurately identify our obstacles, the chances to overcome those obstacles exponentially increase.

#1 OBSTACLE: ONLINE EDUCATION = BEHAVIORAL CHANGE

There are three ways we can deal with change:

a. Resent that which happens to you;

b. Consent to that which happens to you;

c. Invent that which happens to you.

Unfortunately, a and b are much more common than is c. Changing our behavior to online learning is much tougher than the status quo of conferences and seminars. As a matter of fact, change (including our CE practices) can be so tough that Milton Friedman, a Nobel Laureate in economics, calls it the *Tyranny of the Status Quo* (Harcourt Brace, 1983). Also, think of Galen in 200 AD, who stridently proclaimed many "infallibles" based on his animal dissections. He was refuted in later years--and those who initially refuted him were rejected by the medical society. It was not until about 1770 that medicine began to advance based on the scientific and accurate work of Morgagni and Vesalius. Let's hope that changing our behaviors to accepting online education does not take the 1,500 years that it took us to base our medical practice on scientific, anatomically correct information.

#2 OBSTACLE: MEDICAL PROFESSIONALS TEND TO BE LOW-TECH

Medical professionals are notoriously slow adapters to technological change. We are a profession that works on our feet with our hands all day long. The amount of time we spend in front of a computer is relatively small. We don't "dink around" with the computer any more than we do with our patients: we just want things that are proven to work.

#3 OBSTACLE: THERAPISTS ARE SOCIAL BEINGS

We LIKE being with people, and tend to be much more people-driven than task-driven. Also, social networking does not meet our social needs. In a survey of more than 1,000 therapists, less than 2% indicated a desire to choose online courses with a social networking component. The socialization that drives us is the human presence of one another. So, some form of conferences/hand-on learning needs to be in our learning model to fulfill that need. Ways to do so are discussed shortly.

So, they are, the three biggest obstacles to online learning--ourselves. If we can face the challenges we present to ourselves, then perhaps we can overcome them, and use online education when it is appropriate.

WHEN IS ONLINE LEARNING APPROPRIATE? WHEN IS IT NOT?

Anywhere we sat in a chair at a conference/classroom and listened to a talking head is the appropriate place for online learning. Conferences and classrooms can be reborn into hands-on laboratories. The lectures can all be done online, then we will use our time wisely to travel and attend advanced hands-on learning.

This model of learning is just now beginning. Robert Landel, PT, DPT, OCS, the 2009 recipient of the James A. Gould Excellence in Teaching Award from the orthopedic section of the APTA, now offers his CE lectures on vestibular rehabilitation online (www.educata.com/courseprofile.aspx?c=2 or www.educata.com/courseprofile.aspx?c=4 or www.educata.com/courseprofile.aspx?c=6) and then learners take his hands-on labs (Link no longer available). In Landel's opinion, "This is a great model for both the learner and the educator. As an educator, I can use my time wisely by not repeating lectures on topics that the learner can review independently--I can use that time, instead, to answer questions on the material and deepen the learner's understanding. This leaves more time for hands-on labs, which, obviously, can't be done online. Being able to progress through the lecture material at one's own pace is a distinct advantage for the learner. In addition, the learner's time with the educator is maximized, focused on meeting his or her needs in a true learner-centered instructional approach."

Likewise, Dale L Avers, PT, DPT, PhD, CHP, (www.educata.com/professorprofile.aspx?i=7) and Patrick J. VanBeveren, PT, DPT, (www.educata.com/professorprofile.aspx?i=8) who are pioneers in gerontology and leaders within the APTA, are offering hands-on labs in conjunction with the California Physical Therapy Association (www.ccapta.org/displaycommon.cfm?an=1&subarticlenbr=114) to complement their online lectures. "The model of providing the lecture content on-line gives me the opportunity to follow up with the learner to identify unclear points and to focus on the application of the material. Since learning comes with repetition, the model of a combination of online learning and hands-on workshops that build on online material is ideal," says Avers.

So, online lectures followed by hands-on labs is one model of incorporating the best-of-the-best lectures with guidance and direct supervision in the labs.

WHAT IS ON THE HORIZON FOR CE?

Undeniable, the horizon will bring accountability both in evidence of learning and in cost. Historically, most employers have offered generous financial and time off packages for CE. Yet with the diminution of expenses, including CE benefits, this financial reality may be the pinnacle upon which we are forced to change our behavior and direct us into online learning. We will have to find less expensive means to meet our CE needs. We will turn to online education for a large part of our fulfillment--and we will learn more! We will save our travel/conference time for hands-on/lab learning. This may be a rare example of decreased financial resources actually bringing increased quality and evidence-based learning. We may be forced to try it--and once we try it, we will love it.

Marilyn M. Pink, PhD, PT, MBA, is founder of a Web-based and evidence-based, health care and fitness company; speaks internationally; and has contributed to more than 100 peer-

reviewed research publications and multiple research awards. Her work focuses on Olympic and professional athletes, as well as younger athletes. She has developed research programs for physicians and for physical therapists in academic settings as well as in private practices. For more information, contact Pink at .

References

1. Mazzoleni MC, Rognoni C, Finozzi E, et al. Usage and effectiveness of e-learning courses for continuous medical education. Stud Health Technol Inform. 2009;150:921-5.

2. Chen CY, Chang RE, Hung MC, Lin MH. Assessing the quality of a web-based learning system for nurses. J Med Syst. 2009;33(4):317-25.

Details

Subject	Distance learning; Education; Online instruction; Seminars
Title	The Benefits of Continuing Education Online
Publication title	Rehab Management (Online)
Publication year	2010
Publication date	Mar 6, 2010
Year	2010
Section	News
Publisher	Anthem Media Group
Place of publication	Los Angeles
Country of publication	United States
Publication subject	Medical Sciences--Physical Medicine And Rehabilitation
Source type	Other Sources
Language of publication	English
Document type	News
ProQuest document ID	1642457411
Document URL	http://proxy.library.umkc.edu/login? url=http://search.proquest.com.proxy.library.umkc.edu/docview/1642457411?accountid=14589
Copyright	Copyright Anthem Media Group Mar 6, 2010
Last updated	2015-01-07
Database	Nursing & Allied Health Database

Benefiting from online learning

The Financial Express [Dhaka] 21 Sep 2016.

Abstract

Particularly, smart phone and nationwide deployment of fibre optics network to offer affordable broadband connections are opening the door to innovation in educational field and its integration into our process of delivering educational services. According to The New York Times, 2012 became "the year of the MOOC" as several well-financed providers, associated with top universities, including Coursera, Udacity and edX, emerged.

Full Text

Bangladesh, Sept. 21 -- Bangladesh's budget for the education sector has been increasing and has reached almost Tk.490 billion in the current year. In the national budget for the fiscal year 2016-2017, allocation for the education sector appears to be above 14 per cent. In addition to allocation of public fund, individual families are also allocating a significant portion of their total expenditure to cover educational expenses. Despite such increase in the allocation of fund, the quality of education has been a growing concern. To reduce the cost and improve the quality, it may be prudent to explore possibilities of the integration of technology and innovation in our educational service delivery process. Particularly, smart phone and nationwide deployment of fibre optics network to offer affordable broadband connections are opening the door to innovation in educational field and its integration into our process of delivering educational services.

There have been a number of initiatives across the world in the area of online learning, particularly by taking the advantage from computing, smart phones and broadband connections. One of the notable examples of online learning is Khan Academy. As of 2015, Khan Academy had 9,000 such video lectures. These videos, hosted via YouTube, also contain many other features such as progress tracking, practice exercises and a variety of tools for teachers in public schools. Mr. Khan's tutoring charisma in explaining abstract concepts in a quite easily understandable way appears to be the main attraction behind high popularity of Khan Academy lessons. A personalised learning engine to help learner track what they have learned and recommend what they can do next appears to be handy. An adaptive web-based exercise system that generates problems for students based on skill and performance appears to be worthwhile to engage learners. To encourage students to improve their performance in such self-managed evaluation, Khan Academy introduced badges as part of a programme to promote gamification of learning in 2010. Target users of Khan Academy content appear to be high school students, who need a bit of extra outside the classroom help - with short lectures to address concise content. It is a system that offers students self-paced learning opportunity. Practice tests are to see the level of mastery of a student, and gamification encourages students to improve learning performance further to get higher-level badges. Khan Academy's approach is to identify the topics a student has not mastered in classrooms thus far, and it provides individualised instruction for the student to plug those holes. But such plug-in does not appear to be replacement of conventional institutional teaching. It rather complements classroom teaching giving the scope of getting added clarification on a list of short topics that an individual student can pick at his/her own pace. Good side of it is that students of all categories benefit from Khan Academy learning materials. Top students love piling up badges, patches and energy points and even unlocking avatars. Struggling students enjoy it even more, because they are making progress and understanding life.

MIT'S EXAMPLE: In the history of online learning, MIT's (Massachusetts Institute of Technology) initiative of open course material created a bang in 2001. There were questions hovering around the justification of MIT's decision of making its core competence open for all: contents faculty members deliver in the classroom. There was perception among some of us that many institutions across the world would be able to catch up MIT, as its intellectual content became open for all. But in reality, no tangible change happened over the last 15 years.

Another global notable example is emergence of MOOCs (massive open online courses). According to The New York Times, 2012 became "the year of the MOOC" as several well-financed providers, associated with top universities, including Coursera, Udacity and edX, emerged. Coursera has a root at Stanford University; and edX emerged as a joint initiative of MIT and Harvard. It was perceived that MOOCs would be growing as a strong substitute to campus-based education. Particularly, students from developing countries would prefer to earn Corsera's or edX's credits instead of spending money and time to attend their local institutions. In many seminars, iconic figures like Prof. Clayton Christensen spoke in favour of emerging disruptive force making online learning a strong substitute for campus-based education-giving hope of having relief from many limitations of brick & mortar-based academic programmes.

DISILLUSIONMENT: It seems that hype of online course materials after reaching the peak of inflated expectations have slid down to the trough of disillusionment. Summarising the learning of MOOCs over first three years, "Stanford researchers who were at the forefront of the movement have concluded that online learning has not been the cure-all that many educators had hoped for." Completion rate of MOOCs courses, offering of high-level online classes from major universities, is extremely low. "We see people struggling and there really isn't any mechanism to help them," said Mitchell, Stanford's vice-provost for teaching and learning.

It appears that faculty members in classrooms perform more than delivering the content. Often unnoticed, the major contribution faculty members make is to inspire minds of students to prepare for learning.

Based on new technology core, although online course materials increase the accessibility of content, but expecting it to grow as a strong substitute to campus-based learning appears to be far from realistic. The purpose of campus-based education is not just limited to delivery of content. The most important role it plays appears to be invisible, that is, the association of faculty members and fellow students to develop the tacit capacity to sharpen insights, create the appetite for learning, groom behaviour to associate in creative problem solving collectively, and prepare the mind for long-term dedication to excel in areas of choice.

With the rapid penetration of the Internet, smart phone, and computers, there has been a growing aspiration that distance from anywhere in the world will no longer be an obstacle for quality education-as long as some one has the Internet connection. Online course material is being perceived to be strong substitute for the hassle of reaching the campuses and sitting in the class to listen to lectures-giving relief to learner. In comparison to online learning, campus-based education has many limitations, like the need for physical presence in

the classroom. For any reason, if a student fails to show up in the class, opportunity of learning for being absent in that class is lost forever, as that class will never be repeated during that current semester. Moreover, lecture delivery is not adapted to the need of individual learners. There is also very limited scope of drawing faculty attention, as 35 or more other students are sharing the faculty time. Despite those limitations and rapid growth of technology, there is no sign that online learning could be a disruptive force to campus-based learning.

ONLINE VERSUS CAMPUS-BASED INSTITUTIONAL LEARNING: Online learning material similar to MOOCs, or Khan Academy programmes, is not a substitute to campus-based institutional learning. For pure content delivery and reaching people who otherwise would not have anything, these are very useful additions. But they do little to motivate the learners or to foster discussion and higher-level thinking-critical component for increasing learning ability.

With the increasing challenge of developing life-long learning capability among students, it may be a good idea to divide the job of education. Conventionally, faculty members have been spending large chunk of their time in delivering content, and only a small fraction for the purpose of motivating, nurturing creativity and developing high-level thinking ability among students. On the other hand, growing role of automation in workplaces is taking away routine jobs; ability of performing them could be acquired by grasping pre-recorded content. Rather the ability of performing jobs for idea generation and work process improvement, which could not be taken over by machines, is getting higher demand in the job market. It may be the time to take help from technology to deliver pure content. In campus-based education, faculty members should rather focus on developing soft abilities among learners. Instead of looking into online learning material as a substitute, it will rather be prudent to integrate them in formal classroom-centric teaching and thus freeing faculty time to concentrate on developing softer abilities.

Moreover, such online course materials could be improved by integrating different features of experimentation and collaboration in the virtual space, by taking the advantage from emerging technologies like virtual reality and interfaces.

Instead of looking into online course materials as a substitute to campus-based education, we should integrate them as a complement to deliver pure content. It will allow us to free faculty time for inspiring, fostering creativity, building thinking ability and nurturing other soft capabilities among students that are critically needed to prepare them for lifelong learning.

M. Rokonuzzaman, Ph.

D is Professor, Department of Electrical and Computer Engineering, North South University.

zaman.rokon.bd@gmail.com

Details

Subject	Distance learning; Education; Students; Teaching; Online instruction; Initiatives; Smartphones; Gamification; Classrooms	
Location	Bangladesh	
Company / organization	Name: NAICS:	Khan Academy 519130;
	Name: NAICS:	Massachusetts Institute of Technology 611310
Title	Benefiting from online learning	
Publication title	The Financial Express	
Publication year	2016	
Publication date	Sep 21, 2016	
Dateline	Bangladesh	
Publisher	HT Media Ltd.	
Place of publication	Dhaka	
Country of publication	India	
Publication subject	Business And Economics	

Blended learning: Technology helps facilitate the face-to-face experience

Abstract

None available.

There is more to designing blended learning programmes than just mixing online teaching materials and face-to-face interaction.

In an era of austerity, developing these courses in the executive education sector can prove challenging. Companies may resort to e-learning tutorials to provide a cost- and time-efficient way of training staff that avoids the travel and accommodation costs of off-site courses.

So how will blended learning progress in the executive education sector? Is the trend moving towards learning virtually rather than in person? Or is there something else in the mix?

Andrew Atzert, chief operating officer at the Aresty Institute of Executive Education at the Wharton School at the University of Pennsylvania, says people tend to prefer the blend. When the financial crisis hit, some businesses asked the institute to convert some programmes wholly online, but companies usually ask for the combined format.

Despite the austerity, face-to-face learning still has a role. Mr Atzert says there is a need to meet in person, as people tend to do business this way. He emphasises that certain skills, such as negotiation, are hard to teach online, as you want to observe participants' non-verbal behaviour in a classroom.

He says that online teaching is an important and increasingly necessary addition for senior leadership programmes. However, such courses are always going to have a strong face-to-face element, as many leadership skills have to be developed in a physical setting.

Tony Sheehan, director of learning services at Ashridge, says the school offers substantial face-to-face contact for those doing a short executive course.

Another advantage is that the school "is surrounded by acres of forest and wildlife, which provides a rich reflective learning experience", he says, contrasting life in a crowded city or doing a busy job where it can be hard to get some time to reflect and learn.

Mr Sheehan says the biggest challenge with learning today is coping with the fast pace of work. People are increasingly reliant on information being readily available, rather than learning it in advance just in case. He says it has become a world of "just-in-time" learning.

This change means there will be a focus on supporting mobile devices, such as tablets, to enable people to access information easily, so as to learn "just in time" in any place, he says.

The future of blended learning is about choice and personalisation. Ashridge's online learning platform, called Virtual Ashridge, lets students home in on certain interests and choose a style of learning that fits their personality without information overload.

Some may want to listen to an audio file or read text, while others may want to take part in an online discussion.

Blended learning is also evolving to combine online and in person teaching, leading to simulated face-to-face solutions. For example, Duke Corporate Education (Duke CE), has developed an online induction game with one of its clients. New employees have to deal with an unhappy customer played by an experienced person in the organisation. The game is overseen by an instructor and peers can watch and listen to the session.

It takes place in a 3D virtual meeting room via avatars. They can talk to each other using the internet about how to deal with the customer.

Steve Mahaley, global practice lead of the learning innovations team at Duke CE, believes the future of blended learning will move from 2D to 3D. "If we look at what technologies provide today for blended learning, typically we see e-learning content, podcasts on mobile devices and live events in webinars.

"We will see the addition of 3D online environments that provide a more sensory-rich, interactive and shared experience. These technologies offer learning designers a new way to provide immersive, hands-on experiences that go far beyond the more passive attendance at webinars," he says.

Kris Downing, director of business strategy and partnerships at the Centre for Creative Leadership (CCL) says as immersive simulation and gaming have become more sophisticated, they can replicate role-plays and scenarios that were previously reserved for the classroom. However, CCL does not see such tools replacing the classroom as it sees great value in peer discussion, live coaching and videotaping.

When developing virtual solutions, external factors can provide additional challenges for learning designers. Mr Sheehan notes that standards and expectations for virtual learning tend to be set by popular websites and applications.

Examples are search engines such as Google and social networking sites such as Facebook. Providers of virtual learning have to ensure that standards are the same as such sites to match user expectations.

Business and workplace trends are also affecting education. Wharton's Aresty Institute mirrors developments in standard technology used at work when designing executive education

courses.

This makes it easier for people to get started, if they are familiar with the technology used on the programmes. Common technologies include Adobe Connect, the web conferencing software for conducting online meetings.

The trends and changes in blended learning not only relate to teaching and learning methods, but to content as well. Mr Mahaley of Duke CE says that Twitter can be used to share insights and data.

"Mobile devices can be used with a Flickr account to upload photos from local sites that help all learners understand more about the business context from different geographies," he adds.

Mr Atzert emphasises that "participants bring a lot of knowledge into the learning environment, and social networking provides a means of exploiting that, so participants can learn from one another as well as from faculty. It also provides a means for participants to stay connected and use one another as a resource after a programme ends."

The future of blended learning in executive education is about combining the best of online and face-to-face teaching.

Ms Downing says: "Virtual solutions can bring people together to solve problems collectively. The ultimate aim is to use technology as an enabler: to preserve and extend impact of the face-to-face experience."

Credit: By Wai Kwen Chan

People	Atzert, Andrew; Sheehan, Tony
Title	Blended learning: Technology helps facilitate the face-to-face experience
Author	Chan, Wai Kwen
Publication title	FT.com
Publication year	2011
Publication date	Mar 14, 2011
Publisher	The Financial Times Limited
Place of publication	London
Country of publication	United Kingdom
Publication subject	Business And Economics
Source type	Trade Journals
Language of publication	English
Document type	News
ProQuest document ID	857500447
Document URL	http://proxy.library.umkc.edu/login?url=http://search.proquest.com.proxy.library.umkc.edu/docview/857500447?accountid=14589
Copyright	(Copyright Financial Times Ltd. 2011. All rights reserved.)
Last updated	2011-03-18
Database	ABI/INFORM Collection

Bibliography

Citation style: MLA8

Chan, Wai K. "Blended Learning: Technology Helps Facilitate the Face-to-Face Experience." FT.com, 2011.http://proxy.library.umkc.edu/login?url=http://search.proquest.com.proxy.library.umkc.edu/docview/857500447?accountid=14589.

Nielsen, Lisa. "10 REASONS STUDENTS SAY THEY PREFER LEARNING ONLINE." *Tech & Learning*, vol. 31, no. 7, 2011., pp. 12http://proxy.library.umkc.edu/login?url=http://search.proquest.com.proxy.library.umkc.edu/docview/848431348?accountid=14589.

SENGUPTA, SOMINI. "Online Learning, Personalized." *New York Times (1923-Current file)*, New York, N.Y., 2011.http://proxy.library.umkc.edu/login?url=http://search.proquest.com.proxy.library.umkc.edu/docview/1634287707?accountid=14589.

The benefits of continuing education online (2010). . Los Angeles: Anthem Media Group. Retrieved from http://proxy.library.umkc.edu/login?url=http://search.proquest.com.proxy.libr

"CAN ONLINE LEARNING WORK?" *Tech & Learning*, vol. 31, no. 7, 2011., pp. 10. http://proxy.library.umkc.edu/login?url=http://search.proquest.com.proxy.library.umkc.edu/docview/848431365?accountid=14589.

"Benefiting from Online Learning." *The Financial Express*, Dhaka, 2016.http://proxy.library.umkc.edu/login?url=http://search.proquest.com.proxy.library.umkc.edu/docview/1821862020?accountid=14589.ary.umk

Reynolds, P. A., R. Mason, and K. A. Eaton. "Remember the Days in the Old School Yard: From Lectures to Online Learning." *British dental journal*, vol. 204, no. 8, 2008., pp. 447-51doi:http://dx.doi.org.proxy.library.umkc.edu/10.1038/sj.bdj.2008.299.c.edu/docview/1642457411?accountid=14589