



O'MORE
COLLEGE
OF DESIGN

the Design Review

an academic journal exploring the art and science of education

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Advances in
Communication?

A blended learning system for the new millennium

Purpose

The purpose of learning is to enhance one's understanding and application of knowledge in a given area. The challenges of effectively facilitating the learning process are complex and multifaceted. For example, no two people synthesize information in the same fashion. Some learn mostly by hearing, others mostly learn by seeing, while still others learn by doing. Most people learn by a combination of any two or three of these models. Learning is very complex.

The Supplemental Online Learning System (SOLS) was built from the ground up to provide an environment that caters to the diversified set of learning styles. The foundational design and purpose of SOLS is to serve as a conduit to understanding. It does so by combining the strengths of each learning style. SOLS achieves this outcome of enhanced learning by blending hearing (auditory learners), seeing (visual learners), and doing (kinesthetic learners) into a single unified application. This combination of learning styles is accomplished in real time through the innovations in its unique design.

In addition to serving a diverse set of learning models, SOLS serves as an educational time machine for students. Many of us can recount the hundreds of times we were in a religion, psychology, English, math, or design course and a concept or technique was introduced that completely blew past us. Learning moments are crucial, and many

times students cannot react quickly enough to capture the information into a retrievable, archived form (for example, note-taking or a digital picture of the slideshow on the projector). These moments of clarity are often lightning-quick, and understanding typically fades immediately as the next tornado of concepts or techniques are shown. These brief interactions where a student connects with a concept are intended to facilitate learning. Unfortunately, memory fades, especially when the concept has not had time to make a deep impression on the learner and other "moments of clarity" come crashing in.

SOLS allows students to re-live these knowledge-building moments as many times as needed. Students can review and replay lectures in the learning-centric online environment straight from their laptop or desktop computer. This ability to "replay history" allows students to build their skills through repetition in order to aid in learning difficult concepts and techniques. For example, if students are at home working over the weekend and they didn't quite grasp a technique that was shown by the professor on Monday, they can log on to SOLS and replay the instructional topic. By having the ability to play, rewind, and pause the lectures, students can absorb information at a pace that is congruent with their speed of learning. At the end of the day, SOLS is a powerful knowledge-building tool that

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Technology in Design

WearTech

Mention the word “technology” to people and most often they think of something with molded plastic features: computer, cell phone, iPod®. Thanks to great innovators like Apple and Microsoft, it is no wonder that these items are considered ubiquitous in our everyday world. Now, with exciting recent innovations and the promise for more, fashion design is emerging as the next great playing field for technological advances.

Throughout history, fashion design has been a consistent source of inspiration for other design fields, mostly in the areas of color, print, and form. Over the course of the last decade, however, there has been a slow rumbling in the area considered to be the genesis of all great soft goods design: textiles. The advancements made in fiber and fabric technology will continue to have a profound effect on consumers’ choices as we move forward in fashion’s future.

Fabrics with nanotechnology, which are very stain and wrinkle resistant, and laser cut finishes are already available on the market and continue to grow in popularity. In technical outerwear, welded seam technology has erased the notion that tiny holes with thread running through them need to be punched into clothing for it to stay together (“Nanotech in Fashion”). All of these relatively recent advances are just the beginning.

With an increased societal emphasis on mind and body wellness, there is an opportunity for textile technology to make a definite impact. Right around the corner lies apparel that can potentially help you sleep better at night, protect your skin from UV rays, provide nutrients at the same time, and even help with healing (Banerjee-Rantala; “Smart Fabrics”). As with any innovation, there will be an early adoption of products that can look and feel a

bit clunky. The most exciting products, however, will very quickly follow as the design world grabs hold and creates inspired choices for their consumers.

As with any industry considering how best to innovate with technology, the world of high-end fashion design has dipped its toe into the world of consumer electronics creating “wearable technology.” *Time* magazine awarded the Hug Shirt as one of the best inventions of 2006. It is a “high-tech garment that simulates the experience of being embraced by a loved one. When a friend sends you a virtual hug, your cell phone notifies the shirt wirelessly, via Bluetooth” (Hamilton). Another company has designed a shirt that lights up when the wearer enters any Wi-Fi zone.

Considering that clothing is something very personal to the wearer, showcasing sense of style, personality, and even values, the future landscape for the collaboration of fashion design and technology looks very exciting. It may just give a whole new meaning to the term “second skin.”

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Computers and Interior Design

In the minds of most laypeople, “interior design” and “high tech” just don’t seem to go together. But actually computers have become an indispensable part of the profession in the last few decades. Designers now can have access to electronically-produced floor plans as well as the ability to produce virtual walk-throughs of a yet-to-be-built interior space, all thanks to new technology.

This current tech revolution had its genesis in post World War II computer advances. An outgrowth of military research, it was first used for processing weather, radar, and other information. Its inclusion in the design professions didn’t occur until a couple of decades later, when automotive and aerospace companies began to put their own research into it. CAD (short for “computer aided design”) software was first created for PCs in 1979.

In 1989, John Walker formed a company called Autodesk, which is now the foremost provider of design software to architects and interior designers. Its biggest seller is Autocad, a tool used by architects, engineers, and product designers. Used primarily for 2-D projects, Autocad has some three-dimensional capability as well, but Autodesk has several other programs which offer designers more 3-D options. Architecture is geared specifically to the building design professions and has the capability of creating actual architectural elements like walls and windows, instead of just lines. Max and Viz are 3-D modeling programs; Max is more of a generalist program and is often used by computer game designers and movie special effects artists. Viz is intended for those in architecture and other building design fields—like Architecture, it offers

automatically-generated architectural elements. Of course, there are other software manufacturers who offer architectural design software as well. (Autodesk is also heavily involved in the computer animation field; they own Maya, one of the most widely used computer tools in that particular profession.) Sketchup is a popular 3-D program used by many designers; a free version is available at the Google website.

Here at O’More, all students are required to take two semesters of Autocad and one semester of Architecture. We also offer an elective 3-D CAD course; it primarily deals with Viz, with a little 3-D Autocad as well.

It isn’t easy keeping up with such a rapidly developing field, but we put a great deal of effort into ensuring that our students leave with an up-to-date knowledge of design software. We think that computer experience will give our students the edge they need to succeed.

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Through the Arch: Inside O'More

The Presidential Blueprint

Dr. K. Mark Hilliard

As institutions of higher education we cannot remain stagnant in the ways in which we teach our students and remain a viable option for a formal college education. If educators remain passive in their teaching styles, the college experience of today and yesteryear will soon be replaced with a solely technological form of pedagogy. Indeed, with higher education around the world going the way of the web, an extraordinary amount of the academic experience is already being offered without the intercommunication benefit of teachers and students in the classroom together.

Teachers and students of today, more than any time in the past, are growing up in a highly technologically dynamic age of teaching and learning. My concern, however, is not with advanced technology in the teaching process, which is a wonderful blessing, but rather with technology that is not guided by the human element. Machines will never be able to meet the “whole” needs of the learner, for they cannot read the daily emotions, the inner feelings, or the unique spirit of a student as he or she sits anxiously desiring information that can be utilized in a highly individualized and practical way.

Yet, as I examine the typical university classroom in the United States, the human element continues to be reduced as instructors and professors everywhere detach themselves from their students through only lecturing, either behind a podium with a yellow pad of notes or behind a computer with a PowerPoint. No wonder students are not “getting it.” The use of only long lectures, with or without technology, cannot inspire creative minds.

So how do we create this union of the human element and technology? While the future of higher education most certainly involves heavy support from newfound technology, I believe the greater need is personalized, interactive styles of teaching and learning. We cannot teach the subject matter by simply repeating it as a mindless mechanical gesture, and we cannot dismiss the place new technology plays in supporting the educational process. Rather, we must learn how to touch our students with our words and our actions, and then offer educational

technology as a supportive tool. To engage students into the learning process, I maintain that quality communication guided by the instructor, active student involvement in the teaching and learning experience in a classroom and in the field, and technology which supports the human element and the subject matter at hand, are the best formula for success.

The ultimate goal of a teacher is to become the sensory stimulation that engages students into the learning process. The ultimate goal of technology is to support the sensory stimulation provided by the human element. The ultimate goal of a student is to learn in such a manner that he or she can apply, in a useful, personal, and practical manner, the knowledge and skills acquired. Together, teachers, students, and appropriate technology create an environment where true and whole learning can take place: learning that is useful, practical, and beneficial in making our world a better place to live.



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helps learning and understanding take place for every student.

Production

At the heart of SOLS is an audio/video engine and a unique relational-based network. The audio/video engine allows professors to easily upload both in-class and pre-recorded lectures. Depending on the complexity of the topic and the length of lecture required, the system fully supports short presentations as well as lectures lasting several hours. The streamlined production environment of SOLS enables instructors to add supplemental information quickly.

The ease of adding and accessing information is one of the most notable features of SOLS. The core of SOLS is built on an original LMS (Learning Management System) which is a database-driven information warehouse. This allows instructors to add any type of information with just a few intuitive steps. After logging into SOLS, instructors choose the class they would like to place their information in, choose a unit for the content, then upload. The information is then instantly put into the "library" and thus available to students.

The database system is scalable and allows for any amount of information to be compiled within the institution's learning resources. Once this information is added it is secure from hackers and outside visitors. Items such as class details, audio/video lectures, and all information in SOLS are secured through a three-tiered password-protection system, ensuring that

only enrolled students have access to the information. Adding information through the LMS is a simple, clear, and easy process that involves three easy steps: choose a class, choose the unit, and upload.

Value

The true value of SOLS is that students have continual access to important information. The knowledge and techniques of instructors are available and accessible to students twenty-four hours a day, seven days a week. As all teachers and parents know, repetition enhances learning. The opportunity to absorb and re-absorb material is an invaluable asset to learning.

In addition to its function as a time machine to students for in-class lectures, SOLS also serves as a platform for teachers to post pre-recorded lectures in streaming audio/video formats. For classes that have too much information to cover during the in-class sessions, SOLS provides the ideal platform upon which to disseminate supplemental course information. This may include course syllabi, assignment sheets, lecture notes, and any type of file.

As we witness in the classroom, students work and learn at different rates. SOLS empowers students to learn concepts at a deeper level, pushing themselves further while learning at a pace that is appropriate for them. Knowledge-building can take place outside of class, which frees up time in class for questions, discussion, and hands-on application. SOLS is not a classroom or professor replacement,

but rather an empowering tool to help facilitate learning at higher levels.

Currently SOLS is being used by the Visual Communications department at O'More College of Design for courses ranging from History of Graphic Design to Interactive Design and Animation. The ways in which SOLS can be used are limitless. Drawing and design courses, for example, could have archived lectures that show a front-to-back process in how to achieve perspective, value, figure drawing, and more. History courses can have pre-test reviews in PowerPoint or audio/video formats. Math courses could have their in-class sessions recorded, which would be available online for students to review in order to help reinforce hard-to-grasp concepts.

The key feature of SOLS from an educational standpoint is that it allows instructors to create bodies of knowledge which students can draw upon at any time as they synthesize ideas and continually develop into individuals who think critically and make informed decisions. Students can develop their skills faster as they travel deeper into their level of scholarly growth and professional development. SOLS is a vehicle which transforms the way students learn.

See SOLS in action via streaming video demonstrations at www.anomalystudios.com/sols.

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Advances in Communication?

Positive Effects of Technology on Visual Communication

For many, design and technology works together like oil and water. The right-brained creative person sometimes doesn't want to be bothered with the left side's need to use technology. The creative may find technology a barrier in making their ideas become a reality when, in fact, it is essential they have the ability to use it properly. Not only do creativity and technology work hand-in-hand, technology has a tremendous impact on the application of design in both the present and future.

From Johann Gutenberg to Steve Jobs to the internet and beyond, advancement in technology has always played a major role in the visual communications industry. In the least, it creates new ways for designers to apply their skills in an established marketplace. At the extreme, it has often created entirely new industries in which design must be applied.

When Gutenberg invented movable type around 1450, it led to the Renaissance in Europe and is often regarded as the most important invention of the second millennium. It also created an opportunity for people to share their ideas and opinions in ways never before possible. Though the technology was

essential in this process, the way design was applied also had a major role in its success. Without content designed in a way to make it engaging and understood, technology alone would fall short in its goals.

When Steve Jobs' Macintosh computer became the main tool for graphic design in the late 1980s, it empowered visual communicators unlike anything since Gutenberg. It allowed designers a greater flexibility and ability to experiment while also allowing more control over the finished product. It also reduced the time between identifying the problem a design is intended to solve to the final printed piece. Those who embraced the technology and the opportunities it presented were able to expand their creativity and apply it in ways never before possible.

Several feel the internet is the biggest breakthrough in communication since Gutenberg's. Like the many technological advances before it and since, creative and effective design was key to its success. Hundreds of thousands of jobs were opened to those designers who applied their skills to this new technology.

Whether it be a new area in which design can be applied or something that gives more ability to designers to use their creativity in new and unique ways, one thing is certain—technology will continue to evolve. Those who embrace this reality, and look for ways to apply their design skill through it, will have more avenues for their creative expression and, in turn, a means to maintaining a career in visual communications.



Negative Effects of Technology in Visual Communications

Though technology has opened many doors in the visual communications industry, it usually also closes one behind it. When Gutenberg invented movable type and revolutionized the printing process, it slowly made the scribe, who reproduced books and documents by hand for generations, obsolete. When the Macintosh computer became mainstream in its use among graphic designers, those who didn't learn the new technology became extinct as did the thousands of typesetters and engravers who were no longer needed.

The bulk of most modern technological advancements result in fewer designers being able to do more work. Today, technology allows one designer to create as much work as three or four could just two decades ago. The result is that the cost for design and printing has become less expensive as designers have over-saturated the market. In theory, one would think a "survival of the fittest" situation in the industry would result in a dramatic improvement in design overall, since only the most talented would find themselves in demand. However, this is far from the case of the current visual communications industry.

What technology has created is the ability for non-professionals to produce their own design though the numerous software programs available and bypass the professional designer. Today, anyone with a computer and the ability to follow a step-by-step guide can produce everything from logos and brochures to multi-page websites. The result is that our society has too many cookie-cutter, poorly-designed

graphics and an overall lower standard of what is acceptable as "good design." We too often see the judgment of quality design as whether or not it is "slick" while totally ignoring that visual communications is an idea-driven industry where design serves to communicate a desired image to an intended demographic in the most unique and creative way possible.

The most dangerous part of technology's impact on design is the dependency it creates. John Kenneth Galbraith said, "We are becoming the servants in thought, as in action, of the machine we have created to serve us," and the same holds true in visual communications. The temptation for designers is to seek the quickest and easiest solution by clicking a button in a software program to make something "pretty." This further lowers the standards of quality design. Designers must remember technology is simply a tool to achieve a greater goal and that quality solutions start with identifying the problem the design is intended to solve and then develops concepts which leads to an approach both unique and effective.

The only way to break through the clutter of "watered down" design solutions is to create those which truly serve clients. This way, the focus shifts away from the technology used to the value of the design itself.

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