THE STATE OF DESIGN EDUCATION

UCDA DESIGN EDUCATION SUMMIT

Conference Proceedings

Papers, Abstracts, Panel Discussion and Posters

Hosted by New Jersey City University

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A Program of the University & College Designers Association

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2011 Program Chairs
Ella Rue, New Jersey City University

University & College Designers Association
The University & College Designers Association supports and recognizes all you do to create every day. We know what working in education is about. Our members are designers, design educators, art directors, creative directors, managers, directors of print shops, editors, writers, directors of media services, photographers, and businesses associated with visual communication.

UCDA provides a forum for new ideas, new perspectives on the design industry, and professional development opportunities, and access to a large network of generous professionals.

Design Education
UCDA surveyed design educators from North America on their unique professional development needs.

Top issues identified:
- Creating the climate of opinion in which high standards of design may flourish.
- Improving standards and awareness of graphic design as a profession.
- Communicating on a regular basis with other design educators.

UCDA was advised by design educators:
- to actively include educators in programming by understanding that design educators must create NEW knowledge, along with participation in the professional's world.
- that an alternative is needed to fill the void left by ACD and GDEA.
- that UCDA should begin more of a dialogue with educators.

The UCDA Design Education Summit continues what we hope will be an ongoing community created specifically for graphic design educators with many opportunities for your own professional participation and development.

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Good Work! Incorporating Service Learning in Graphic Design Curriculum

Anne Beekman
The University of Findlay

Abstract

This paper discusses the benefits and challenges of using Service Learning in graphic design classes. The presenter is a tenure-track faculty at a Liberal Arts college who has been using Service Learning components in every class taught for over seven years. Drawing on this experience, advice will be given on coordinating with on-campus program staff and local non-profit agencies to give students real-world work experience. Tips on logistics, planning, and privacy issues when working with community organizations will be addressed.

By providing examples of actual projects used in the classroom, the presenter will offer insight into making pro-bono design work an invaluable educational experience at introductory through advanced levels in undergraduate programs. It will be shown how students donate their time to local non-profit organizations to create published work within a structured curriculum. In doing so they gain portfolio pieces, while giving back to their community. Not only do students bear the responsibility of creating high-quality artwork that fulfills communication needs, they also learn professional and business practices. This includes interacting with clients throughout the design process, dealing with budgets, model releases, purchasing stock images, and even writing copy.

Assignment briefs for in-class projects, spanning anywhere from one week to an entire semester will be reviewed, including detailed lesson plans and objectives. Samples of published student work includes advertising and collateral design, posters, book design, and website development.

Finally, it will be shown how Service Learning can be a positive experience for all involved. It builds good will and makes economic sense, to the benefit of the student, the community, the faculty and the entire design profession.

Interdisciplinary Design Education and Collaborating with Industry

Frank Baseman
Philadelphia University

Maribeth Kradel-Weitzel
Philadelphia University

Nioka Wyatt
Philadelphia University

Abstract
Interdisciplinary design projects and industry collaboration are major components of our University's Strategic Plan. While many institutions are attempting this, the case study we present is particularly creative and ambitious—involving nine faculty, 100 students from five unique disciplines and trans-global communication. As the result, we can illustrate many universally beneficial tips for best practices.

Faculty representing Fashion Design, Graphic Design, Business and Fashion Industry Management incorporated this project into five courses. We partnered with global retailer, QVC, to create a project that utilized design thinking, market research, merchandising and sourcing.

We identified a target market that QVC had not addressed. Through research into consumer behavior and the existing marketplace and through design development, the ultimate deliverable was a line of Mother and Child apparel and gift with purchase product for QVC.

The project's purpose was:
1. Convey the complexity and process involved in the development of Mother and Child apparel and complimentary products.
2. Gain appreciation for benefits and difficulties of interdisciplinary collaboration.
3. Develop students' critical thinking skills, ability to work with industry and global competencies through sourcing.

The project's initial phases involved Business students researching the target market and trends. A resulting narrative inspired Fashion Design students to create Mother and Child garments and Graphic Design students to develop branding strategies and a gift with purchase. Students in Fashion Industry Management sourced materials, created technical packets and distributed materials to QVC's sourcing team in China for sample production. Upon receipt of the samples from QVC's factory in China, students performed quality control assessments. Collectively, students in Merchandising and Buying Operations worked on costing and merchandising concepts. Ultimately, all faculty and students involved made a final presentation to QVC and the University community.

The Design Studio: A 30-year Experiment in Service Learning for Design Students

Alan Robbins
Kean University

Abstract
The Design Studio is a course for majors in a graphic design program that serves as an in-house internship and undergraduate work experience. Students in the Design Studio produce professional quality work on a pro- bono basis for a wide range of regional and national clients. The work has won numerous design awards and has attracted a great deal of media attention.

At the 30-year anniversary of the creation of this course, this presentation will describe and assess the role, value, and challenges of service learning and undergraduate work experience in enhancing the education of design students.

Courses like the Design Studio can help establish design standards, instill work ethics, introduce project management and scheduling skills, and allow students to practice client interaction and the presentation of their ideas to non-designers.

In addition, service learning as a whole is a valuable approach that integrates meaningful community service with instruction and reflection to enrich the learning experience, teach civic responsibility, and strengthen community ties. By working for non-profit agencies, these students are exposed to a wealth of programs whose purpose is to help others rather than strictly to make a profit. Therefore, in addition to learning valuable design skills working on real-world problems in this context, students in the course learn how design can improve the world and even save lives.

Writing a Wrong in a Graphic Design Curriculum. Where is Writing Introduced? How is it Nourished?

Bonnie Blake
Ramapo College of New Jersey

Abstract

Writing is among the most important skills and sensibilities graphic design students need to master in order to thrive in a competitive field. Why do graphic design students need to write well? Some reasons are obvious: designers write creative briefs, design briefs, proposals, and edit copy. Writing makes designers better at spotting typos and grammatical errors. Plus, they need to understand the "business" of the discipline and this includes communicating ideas to clients, visually, verbally, and in writing.

Most important, designers use text and image to design. They visually communicate the essence of text and image and in doing so define the value and identity of the work itself. It goes without saying that, in order to design the written word well, one must have an understanding of the text itself. Writing skills build comprehension and vice versa. If, through design, one can "remake the grammar of communication" as French philosopher Jacques Derrida suggested, then design, writing and communication are always intertwined and therefore an essential skill for young designers to develop and sustain.

In this poster, design educators and designers comment on how writing is/should be introduced into areas of a design curriculum, even in classes where students might not typically write. Extracts from syllabi are also displayed around the poster. Since writing in a design curriculum is a contentious issue, the counterpoint to my thesis, (i.e., "Writing is unnecessary in studio classes." or "Students do enough writing in other classes so they don't need to write more in a design class.") is also addressed. Conference participants are encouraged to interact by posting comments (using post it notes) on and around the poster. The poster's objective is to encourage lively discussion in an area not typically addressed at conferences.

Improving Student Writing and Graphic Skills through Land Art

Jon Hunt
Kansas State University

Abstract

This paper describes an introductory graphic design and visual thinking course that helps students to improve their writing skills while discovering environmental inspiration for their graphic designs through the assembly of a land art installation. After construction of the land art installation, students examine and record the temporal, physical, sensual, and emotive qualities of the installation. Students examine how the installation impacts its surrounding site and how surrounding natural or man-made processes modify the installation's physical characteristics. The course is based on foundational drawing, graphic design, and visual thinking methods where students study their land art installation over a several week time frame; document their findings in their sketchbooks through drawings, diagrams and written narratives.

To help improve students' grammar and composition skills, they are given a series of writing exercises that explore their memory, sensual and emotive experiences and observations about their land art and its surrounding context. For some exercises, students are encouraged to write in a stream of conscious style, thus allowing free flowing, spontaneous responses to place. Students document key words, abstract thoughts and inspirations. For other exercises, students create succinct and clear prose. While in the landscape, students research the elements of design: color, textures, form and the ordering principles while documenting the natural processes that are revealed and other findings in written narrative form.

For the final deliverable, students translate their written narratives and observations into graphic means that express their findings. Students produce a well composed and well-crafted presentation book. Composed statements and final graphics communicate their creative thought processes and experimentation, reveal understanding of color theory, typography, and demonstrate the understanding of the ordering and aesthetic principles of design. The final presentations include references to understanding and reflection discovered through the weeks of observation of the land art installation.

A Helpful Intersection: Design and Creative Writing

Maria Fabrizio
University of South Carolina

Abstract

Design students often struggle to understand their creative process in the first years of their education. When students do not understand their process, they often have trouble giving helpful feedback to other students in critique situations. This struggle can lead to a cyclical classroom critique issue, where the instructor's input is the only one articulated and digested. When students can produce meaningful, well-thought feedback to one another they not only fuel the classroom design to a higher level of aesthetic understanding but they also begin to learn how they will one day explain and present to clients.

The critique problem begins with the individual student finding ways to disconnect from their current project and learn to reflect, in a meaningful way. Design students think visually, so it seems obvious to have the student begin to examine their work by re-sketching, collaging or de-construct their work, but since design students think visually, they think in descriptive adjectives. There is a distinct intersection between visual thinkers and creative writers. Designers need to be able to describe their work in a clear, interesting and persuasive way, the same is true for writers describing a scene or a conversation. Creative writers often have an intuitive understanding of the visual arts and designers often understand how to see things and describe things in beautiful prose, if the words have been encouraged to manifest.

This paper will explain how if students are encouraged to start writing about their process, to keep a journal, to note their habits, and reflect on how their decisions relate emotionally, then they can find beautiful and intentional ways of talking about the work. This paper will show that this method of examining their process can be translated into more meaningful classroom conversations and eventually more successful design projects.

Teaching Portfolio Design as a Distance Course

Jon Hunt
Kansas State University

Abstract
Due to curriculum constraints for faculty and students, we developed a portfolio design course as a distance, on-line offering. Many of the students had internships or full-time summer positions. The distance course allowed them to take a credit course without being on campus.

The portfolio design course is a distance course with a high degree of interaction and feedback between instructors and students. The university's online, interactive classroom and message board are the primary tools used to deliver this course. The assignments are organized in a series of 'packages' containing instructions, readings, and other supportive materials. Through various exercises, students explore portfolio concept and visual communication with a culminating goal of producing a final portfolio of original work for the printed format. Emphasis is placed upon clear and creative communication from concept to final product.

This paper will explore the approaches and challenges for effective teaching for a distance learning course. The development of the distance education is an adaptation of the traditional studio teaching course. The online course strengthened faculties' ability to analyze and understand the strengths and weaknesses of assignments in terms of properly stating learning outcomes, objectives, and delivery. Faculty became more concise and cohesive with statements and questions to strengthen learner understanding through reinforcement, review and repetition for each assignment/task.

Instructional challenges included the lack of direct contact, traditional pin-up reviews and instructive marks which are commonly used to communicate critique of graphic products. Student writing ability— creating succinct, clear prose to accompany images— was the main challenge in student preparedness. In our first offering of the course, we underestimated the time required for faculty feedback on multiple submissions of edited and re-edited text and layouts.

The State of Design Education
UCDA Design Education Summit
May 26-27, 2011, New Jersey City University, Jersey City, New Jersey
Professor Jane Milkie, Northern Michigan University, School of Art and Design

Print *relinquishes to* **Digital**

The state of design education parallels the transformation of print graphics' evolution to digital communication. Digital communication is dominating what formerly was the domain of print graphics. Embracing the new becomes important and relevant during any transition. Valuing the past not just as history can be satisfying on an individual level. Designer Paula Scher, featured in an Artist Series video by Hillman Curtis[1], described her craft as physical proficiency, working with her hands, not with a keyboard, not with a mouse. Her personal art displays typographically illustrated maps, laborious and satisfying. Designer Rick Valicenti stated in a past UCDA design education summit, his reflection about how technology over took the life-long skill sets he developed; his art of decades, now readily done by high school-level computer tools.

The fast-paced rate of technological progression in the digital age is costly, challenging, and continually evolving. The Internet a driving force in connectivity, delivery, commerce, news, and entertainment provides design education with pedagogical opportunities. Interestingly enough, some of the reasons I value it are contrasted to aspects that I find challenging. It is now so integrated into my curriculum and teaching that I could not function without it, nor could I without computers and software. Design education, as I know it needs the support of infrastructure. On a daily basis tools that I use are mainly virtual: Adobe Creative Suite software, art file and web servers, classroom digital projection, WiFi wireless technology, and electricity. The Mac Book Pro laptop computer that I carry with me holds the work of years and is the resource that our students are also fortunate to lease.

My class meets in a physical space semester to semester. Only our art history curriculum offers on-line web courses presently. This past semester, I utilized long-distance learning through video conferencing with SKYPE software. A graduate student from Indiana University presented her research on book design to our undergraduate students, far more inspiring than viewing it solely on her website. Alumni from our graphic communication program find it an honor to SKYPE back to class informing senior students about career and job seeking strategies. One student awoke at 4:30 am and addressed my class at 11am EST from Hawaii. The screen projects larger than life alumni in low resolution, yet as close to face to face as could be considering cost, logistics, and distance. In a rural environment long distance communication has revolutionized possibilities for education and commerce.

Our campus was honored by a visit from President Obama this past February. Four of my students were invited to hear his remarks; where as I like many watched live video on the web. He came to see a demonstration of how the University's WiMAX network has enabled

distance learning for university and community students and how local business owners have used broadband access to grow their businesses. High speed Internet is a way for rural America to win 'the future.' Northern has the largest educational WiMAX network in the United States and is one of the first universities to deploy a WiMAX network. Our WiMax G4 network extends to communities 30 miles from campus.[2]

The digital environment at our institution has afforded us the opportunity to 'go paper-less' in how we operate as an institution. As an advisor, I use the web for on-line audits, virtual advising, to locate forms and to e-mail students. Database access to all sorts of information can be retrieved quickly. The system seems at times confusing to newer students. Navigation albeit specific is resourceful for those who are familiar with what they might be looking for. Some seem happier with printed bulletins navigation by page numbers and an alphabetical index.

In my Introduction to Graphic Communication course I include a one-page essay assignment. Students can select from four questions and 75% of a class often favors as a topic: *Digital vs. Print, which delivery should dominate, and why?* Some students take the course as an elective and so they write on the topic from a painter or photographer's perspective. Often answers are general in that they address the phenomena of e-books, and digital delivery devices such as the Amazon Kindle or Microsoft Courier or the Apple iPad. I thought that students of the current generation would favor digital delivery of information, yet many discussed advantages and disadvantages of each system, many seemed to think that coexistence was valuable and some surprised me in that they much preferred traditional physical books to electronic formats. They describe a printed bound book as a treasure, nostalgic, something with character, a smell, a process of accomplishment in turning pages, something with history of use, something that could be marked, pages that could be bent.

The use of a book seemed to be an experience, an artifact of human interaction. They also strongly felt it was user preference. The quantity, speed, immediacy, and multiplicity of electronic devices was not enough of an advantage for those who preferred books and the cost and convenience was argued as a plus or minus either way. Harm to an electronic device (such as with moisture, dropping, viruses, malfunction, bugs) seemed more devastating than what could happen to a book. Others argued that not all books are in electronic formats, batteries need charging and that sometimes, electronic users might need a break from staring at a screen.

One student found it troubling that his ten-year old nephew did not feel compelled to read at all until he received an iPad as a gift. Another student stated how he does not read; his sources of entertainment are far more visual.

As a resource for information however, consensus indicated that the Internet was a 'go to' source for many purposes, especially for information, such as in using databases like *Google* and *Wikipedia*. One student commented that books are trustworthy because they go through a filter with an editing system.

In researching for these essays students found that in 2009, 249.2 million books were sold and 29.3 million Amazon Kindles[3]. By December 2010 the Amazon Kindle was the most gifted item in Amazon History and that holiday season the most digital books ever were purchased. Also, that 2011 was declared the year of the tablet with 70 million purchases[4].

Essays were turned in digitally. It is a slower process for me to read them, however paper is saved and the process is more cost effective and convenient for the students. Traditional tools were highly valued mainly for personal satisfaction: physical books for those who like to read, physical paint for artists, darkroom prints for photographers. I was incorrect in assuming that the digital realm is a *traditional* environment for this generation.

Culturally the Internet and the generation of students who have grown up with this way of life affords the marketing industry an optimum source of content, speed, and sharing in that it can connect product to people in targeted and timely ways. Social networking sites are tailored to individual's preferences profiling demographics. A colleague exhibited a portrait series this past semester in the De Vos Museum at NMU. Artist Emily Lanctot typically works with physical artifacts, for this series she chose digital artifacts. Portraits were created by painting lists of words, words were comprised of the Amazon wish lists for each person, all accessible public information.

Networking has always been an effective strategy for seeking employment. What an amazing resource the Internet is for those who participate with online networking. Web portfolios link to sites like Linkedin, Twitter, Facebook, and portfolio sites such as Coroflot, and Behance, to name just few assist employer with finding best fit employees for positions they aim to fill. The viral nature, 'word of mouth' shared information serves individuals, employers and communities of users.

Collective conversations occur on a number of levels, blogs and chat rooms, video postings, wiki's as well as on individual web sites. Serving the design community Internet resources such as: DesignChat video podcast[5], *Design Matters* Debbie Millman's blog and podcasts[6], Little & Co.'s *Thirty Conversations on Design*[7], and Twitter events such as the global conversation, *One Day for Design* sponsored by AIGA, April 13, 2011 [8] are all at a student's finger tips.

The convergence of media on the Internet continues to provide users and seekers with overwhelming amounts of information. Sophisticated search engines and personal web portals afford users quick access to finding specific content. E-learning, podcasts and long distance learning has transformed education into a global classroom. Over one million YouTube videos are posted daily. The art world comes to its viewers in ways never possible in the past. In October 2010, YouTube's *Play* a biennial of creative video live from the Guggenheim[9] and Google's Art Project[10] a virtual tour inside acclaimed art museum's collections are just two examples.

In the year 2000, A&E Biography of the Millennium's list of the 100 most influential people was topped by Johann Gutenberg (c.1400-1468)[11], credited with the invention-the printing press. With printed books, knowledge and the power of ideas spread to the multitudes. I

think the list might have been prioritized in a different way after the launch of Facebook in 2004 and its current global expansion. Watching the movie *The Social Network* about the founding of *Facebook*, I thought at the time how democratizing one of its purposes was, to make a 'level playing field' on the collegiate social scene. It was inspiring to me to see the Egyptian democratic uprising on January 25, 2011 catalyzed by activists Wael Ghonim's use of *Facebook* to mobilize youth and people in the streets of Cairo[12].

Michael Wesch, Assistant Professor of Cultural Anthropology at Kansas State University, researches and studies the effects of social media and digital technology on global society. He notes that our classrooms have changed in that students disengage unless they are empowered and engaged in finding answers to real and relevant questions. He further states that digital media can be a tool that assists in the making of knowledge, not just disseminating it. To combat what he calls a '*crisis of significance*' he advocates that students find, sort, analyze, share, discuss, critique, and create information. Digital media affords us the opportunity to participate collaboratively in a culture of discussion[13].

The curriculum in our graphics concentration has technologically evolved over time as well. Within the span of our last graduating class what was primarily a two dimensional print focus has expanded to included motion graphics and web. Consequently, primary software expanded from Adobe Illustrator, Photoshop and InDesign to Dreamweaver, Flash, After Effects as well as Maxon Cinema 4D. Our school uses additional software, all of which require faculty to teach, funding to upgrade, and faculty to administer. The sophistication of software requires dedicated faculty who specialize and in our location part-time faculty often would not have opportunity to stay current with such a diverse range of software.

We are now planning for a further shift of emphasis to web from print. We anticipate digital communication to continue its growth. Graduates will find work in App development, in web site design, in content management, in viral advertising, in mobile devices, in video and in digital photography. If budgets are available we anticipate adding a faculty member to our program who is a web specialist, someone who can teach programming and coding.

I see the future as ever evolving with growth and expansion of digital media and communication. Also, the expansion of collaborative, participatory, interactive experiences for designers and those they build relationships with.

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http://katyareka.com/ (graduate student, Indiana University Bloomington, IN)

http://www.mikeforesterdesign.com/ (alumnus, NMU, Rome Snowboards)

http://webb.nmu.edu/ACAC/SiteSections/Advising/AskVirtualAdviser.shtml

http://mediasite.nmu.edu/NMUMediasite/SilverlightPlayer/Default.aspx?peid=cb7e54000831491f847d59ac34564e2f1d (artist, alumna NMU, Emily Lanctot)

http://www.stalesundays.com/fiction/ (alumnus, NMU Noah Schloss)

Promoting Graphic Design Presentation Utilizing Autodesk Maya

Wujun Wang
Central Connecticut
State University

Abstract
In the competitive design job market, it is in the best interest of graphic design students to develop a solid portfolio package in their senior year. *Autodesk Maya* is well known for its capacity to create photo-realistic 3-D models and environments. Despite its widespread use in the fields of 3-D illustration, architecture, engineering and the entertainment industry, it is under-utilized in graphic design field. It is indeed a powerful tool that takes graphic design presentation to another level and beyond. This paper will introduce the experience of teaching *Autodesk Maya* in a graphic design program and the experiment in which students are encouraged to utilize Maya mental ray rendering techniques for creating stunning graphic design presentations for their senior design portfolio.

Moving into a Brave New World: Introducing the 4th Dimension in a 2D World

Vanessa Cruz
University of North Florida

Abstract

The days of driving down the highway and viewing billboards that are actually meant to be read, are long since past. Graphic Design is and has been emigrating to new platforms at a rapid rate. Society's interaction with technology is no longer limited to the field of science and business. It has become a part of everyday life. Elementary students share assignments through Wikispaces, home-makers use Smartphones to organize their day, and the rest of us, well it's become so embedded in our everyday we don't give it a second thought. Digital billboards have replaced its old-fashioned counterparts, LCD multi-displays in subway stations such as New York and London have replaced traditional paste-ups, eReaders are displaying more and more interactive features than simple reading content. So how are we preparing our graphic design students to enter into this brave new world?

This paper addresses issues related to incorporating digital media into a traditional graphic design course matrix; the redesigning of curriculum, the challenge to introducing students in print to time-based media, and the pitfalls and successes of its development.

The Value of Motion in Design Education

Gretchen Rinnert
Kent State University

Abstract
Motion design education is often an under-developed dominion of design curriculum, usually an elective course, sometimes housed in computer labs, taught by graduate students or junior level faculty members. While these courses have often been associated with long planning hours, tedious software exercises and inadequate formal results, they do carry significant value for the design students education. The trials and tribulations of teaching motion design can be unparalleled, but it can also be exciting and dramatic.

Integration of motion into a curriculum has exponential value as it can teach students systems thinking, research skills, and information design. We are entering an exciting time in graphic design, when motion, interaction and information are merging to form innovative new products and applications.

In my paper I will cover strategies for teaching motion design that go beyond the traditionally abstract principles and delve into contextual issues that mimic problems students will face as a new designer.

1. Incorporating stop motion as a means to teach editing, sequencing and information structure as students prepare "how-to" lessons
2. Developing a TV spot to advertise a film in order to teach narrative structure, interpretation, voice, expressive typographic and basic audio integration.
3. Creating informational and persuasive messages that focus on basic composition and communication.

Learning motion design doesn't just allow a student to create trendy You Tube videos. An understanding and familiarity with motion can help a designer anticipate movement and navigation through an interactive space, and a 3D environment. Designers with a clear understanding of motion can think in time, and are prepared to clearly communicate information in a way that is applicable to current technology. Finally I will discuss how motion understanding can broaden a designers ability and range, as they can draft scenarios, prototypes, and visually represent information layered sequences

The Motion Graphics Fight Club

Geoffrey Beatty

Presentation at the
UCDA Design Education Summit

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The first rule of Fight Club is, "Don't talk about Fight Club." But despite the threat of severe consequences, I'm breaking that rule in order to talk about how we might use the lessons of Fight Club to improve student engagement in our design studio classes. I should state up front that I am not suggesting we should retreat to a basement storage room, select two students at random, and have them duke it out. Interesting, perhaps even tempting at times, but not what I'm talking about. I mean "Fight Club" as a model for pushing students towards a more adventurous form of learning, one that involves creative risk-taking and fosters a sense of community.

Let me explain. In the Chuck Palanhiuk book and David Fincher film, "Fight Club" was primarily a regular, informal gathering of men looking to reconnect with their lost masculinity through street fighting. There was more to it, though. It became a movement that sought to liberate men from what Thoreau called "... lives of quiet desperation" (8). Fighting was just one part of that. In addition, they were given weekly assignments, homework if you will. For instance, one week they had to start a fight. Another time, they had to destroy a piece of corporate art. These challenges were meant to foster a sense of camaraderie and build what an acquaintance of mine calls "comfort with risk." Fight Club was created to be a disruptive enterprise both to existing social contracts and also to an individual's sense of order and purpose. In this sense, I believe it is a perfect model for design education.

The "Motion Graphics Fight Club" attempts to do the same as the original Fight Club, but in a classroom environment and with less criminality. It upends the students' pre-conceived notions of design class as software tutorials, or a "sage on the stage," or one task of many in a multi-tasking social media world. It seeks to bring them together regularly but then sends them outward to the periphery of the subject matter in a search for adventure and possibly wisdom. It is intended to build a dedicated group of warrior designers ready to tackle their assignments and make them comfortable with taking creative risks.

I teach in the Animation program at Philadelphia University. We are part of the School of Design and Engineering, which is itself a part of the newly created College of Design, Engineering and Commerce. My own education was steeped in traditional, hand-drawn and experimental animation, but my professional work has run the gamut from 3D animation for interactive experiences to Flash-animated music videos to broadcast design. The students in our program mirror this range of interests and career goals. Since we exist within a design context, students follow their Foundation studies in drawing and design with classes in Graphic Design, Storyboarding, 3D Animation, and Motion Graphics.

Last Summer, as I was preparing yet again to teach Motion Graphics I in the Fall, I was reflecting on what worked and what didn't in previous semesters. I felt in part that I had gotten so used to teaching the course as it was that I wasn't even really thinking beyond superficial changes from year to year: show this film instead of that one; demonstrate this software feature one week earlier. Superficial stuff. This "tweaking" really only led to marginally better work, or in some cases a decline in quality.

This was not acceptable, nor did it take full advantage of the wonderful opportunities that a study of motion graphics provides. It sits at the nexus of so many different skills, namely graphic design (and typography in particular), illustration, character animation, 3D, 2D, sound, and video. Because of this, you can get away with screening dance films, playing jazz, and looking at old Russian Constructivist posters for inspiration. It also offers a very real chance to investigate and experiment with different pedagogical approaches to design and animation.

I needed a new framework for approaching this, something radical and disruptive. I started listing some problems, problems which I also felt might be common to a lot of design courses. First and foremost was the space – a computer lab. Of course the digitization of design necessitates the presence of computers in the classroom. But when did this come to mean that the modern design classroom should be a computer lab? These rooms, often organized for the convenience of various

cables and power outlets rather than learning, kill creativity. Where is the room for brainstorming, for all the "off-line" activities that are necessary for creativity? Specifically for animation, where is the space to act things out, to workshop storyboards, to watch and discuss a scene from a film? Furthermore, the centrality of the computer screen to the student's physical classroom experience reinforces the false notion mentioned previously that, for example, "This class teaches you Photoshop." This then perpetuates the idea that all creative work happens in front of the computer.

Another problem with the course was that the various pieces of content had no coherent framework. As I mentioned before, the topic of Motion Graphics encompasses a wide spectrum of techniques and ideas. But in my class, there was nothing tying that rich cornucopia together into a meaningful whole. There was no grand, unified vision of how the different competencies fit with one another. These projects would initiate students for sure, but would there be meaning attached? Or would they seem like random hoops the professor was asking them to jump through? Over here is "how you set keyframes in After Effects," and over here is "the principles of traditional animation" and over here is "all the stuff you learned and promptly forgot from Design Foundations I." How could students learn to synthesize the various parts of their broad, liberal-arts infused professional education if they weren't able to make sense of the disparate parts of a single design assignment?

Finally, my previous class was not tuned into the social and relational investment that a creative classroom requires. Beyond the technical and conceptual skills, there was no sense of shared purpose, a general timidity during critiques, and a natural, but potentially toxic cliquishness. Creatively, the class was a set of individuals pursuing strictly individual projects and solely concerned about individual outcomes. There was very little joy in seeing a classmate's success.

Adding these up, it could be said that while my intentions had always been to prepare students for a professional environment, in reality it was unlike any professional environment that I'd ever been a part of. Any change to the way things were done had to address these concerns,

which meant that it had to be a pretty radical re-thinking of the course. However, I knew that the core projects were sound and worth keeping. It's just that they weren't enough to sustain it. What had to change was the space around and in between these projects, all the lessons and small assignments and introductory lectures.

The Motion Graphics I class pursues four distinct projects tackling four overlapping themes. The first is a thirty-second animation using only black and white abstract shapes set to music. This addresses abstraction and musical synchronization. The second project is a typographic music video. Using only type and a limited amount of abstract shapes, the students must present the lyrics of a song as they are sung. This retains the elements of abstraction and musical synchronization from the first project and now introduces typography. The third project is a video poem. Students select a poem, find or generate a reading, and then composite type with the video footage in some manner. This project addresses type and now adds the element of image or video. The final project is a self-directed project that can address any or all of the above.

The first project, the abstract animation, was my first opportunity to try a different approach. Aside from the strict limitations (which as my friend once said, "... inspire creativity"), this project is complicated by the fact that it's also the first time these students have begun to use the necessary software, in this specific case Adobe After Effects. Therefore, the first project becomes a mix of introduction to Motion Graphics, an introduction to software, and an introduction to graphic/abstract storytelling. That's a lot of things to juggle, a lot of pots on the stove at one time.

Into the normal routine of music selection, storyboarding, and animating, I added a new element to the process – acting. This might seem like a strange ingredient when dealing with abstract shapes and music, but one thing that I stress in my courses is the unity of animation principles across the spectrum of styles and techniques. The act of acting helps the animator to develop an embodied sense of the motion of their character, or in this case, abstract shapes. Even

as they sit in the chair working at 24 images per second, they are able to "feel" the quality of the motion in their body.

I brought in a stack of black and white construction paper, glue, tape, and wooden coffee stirrers. In groups of four or five, they selected a 30-second music clip and assembled a variety of abstract shapes out of the provided materials. With these elements, they had to stage an abstract shape puppet performance piece. After some initial reluctance, the groups began performing for their classmates. After all, the last rule of Fight Club is "If this is your first time, you must fight."

While they were not necessarily going to win any acting awards, the performances were very entertaining and instructive. The students learned not only to synchronize their movements with the timing of the music, they also matched the style of movement implicit in the instrumentation. They coordinated a set of overlapping actions which duplicated the layered soundtrack (as opposed to a linear or serial version of actions). And most importantly, this simple in-class activity addressed each of my greater concerns about the course. It pulled students away from the computer for an extended period of creativity. It effectively located this project as a bridge between their studies in static design and their studies in character animation. And the component of a semi-public performance became a socially cohesive moment for the class, as every student had to participate in this somewhat embarrassing display.

In addition, this first challenge set the standard for following ones. It was low-threshold, meaning that it could be accomplished in a short amount of time. This meant that creative decisions weren't too precious and had to be made quickly. Also, it wasn't graded. A student needed to feel completely safe to fail, screw up, and generally make a fool of herself in order to feel confidently proceed in the challenge. And it was collaborative. Nothing was an individual pursuit.

Later in the semester, during their third project, I challenged the students again. The poetry project involves generating video imagery and combining it with type in some fashion. I knew I had to do better than a dry lecture on the use of the video camera and editing. So I developed a short

homework assignment. First, I screened the beginning sections of the films Amelie and The Royal Tennenbaums. Both films incorporate these delightful passages which introduce the cast of characters and very directly tell us about their lives (e.g. "Chas Tenenbaum had, since elementary school, taken most of his meals in his room, standing up at his desk with a cup of coffee, to save time.") I then charged my students to do the same thing, to shoot a video that told us about themselves. It could be made up, but it had to be entertaining and informative.

Again, after some initial reluctance, they returned the next class with some hilarious footage. Obviously, this little project gave them a fun way to practice with the video camera and editing software and adding typography. But again, more importantly, it was an attempt to address what were increasingly becoming my core concerns. In the process of making their bio video, they had to share some previously unshared aspects of their lives with their classmates, things they may not have volunteered if the assignment hadn't prompted them to do so. It also helped to place the poetry project, with its mix of image and type, within the continuum of other real-world examples with which they were more familiar. And finally, it got them away from their computers and performing in front of a camera for an extended period of time.

These were just two examples of the sort of challenges I gave my students. I also sent them on photographic scavenger hunts and asked them to read poetry aloud in class, among other things. I did dare them to participate in some riskier challenges. For instance, during the time of the first abstract project, I asked them to find some negative space in the world and exploit it in some way. I wanted them to begin to use their design studies as a lens through which to observe the natural and architectural forms around them. During the second project, the typographic music video, I suggested they find some typography in the real world and change it (non-destructively of course) in a way that would draw attention to the unique qualities of the typeface. Unfortunately, these challenges were never taken up. Students were willing to suffer a little foolishness in the classroom

or perhaps in their dorm room, but they weren't willing to interact with the larger natural or built environment.

Despite these misfires, by the end of the semester I was seeing that my attempt at incorporating these disruptive elements into the curriculum was paying off. Compared to the previous semester, students were taking more creative risks, becoming more involved in each other's projects, and finding ways to synthesize the lessons from their various studio courses and electives into the final, self-directed project. The quality of work improved over the previous year as well. And not to be ignored, the students' course evaluations indicated a higher level of overall enjoyment with the material. There were fewer complaints from the character-oriented students about the relevancy of the course to their studies. And a few students who were less inclined to broadcast design have ended up pursuing it as a possible career path.

For myself, I had found a way of directing the course that allowed for experimentation and sometimes even failure without losing rigor or becoming formless. In terms of the space, if it couldn't be radically rearranged (in our classrooms, each computer is fiber-optically alarmed and very sensitive to movement – even a slight re-adjustment to the tables alerts security, tying up valuable class time as we sheepishly explain to the guard what happened), then I learned to reconsider the role that the actual classroom played in our work. It couldn't be the limits of our workspace. Through the challenges, we expanded the classroom to include the greater campus, whether it was the hallway or the quad or the student center. The creative process would not be confined to a single spot in a single room.

Concerning the social and relational component, I discovered that it's important to impress upon the students their shared purpose. While they were reluctant, perhaps rightly so, to tackle long-term team projects, it was perfectly appropriate to throw them into a short-term, low-threshold situation where they needed to depend on one another. They did that best when they knew each other well, so it seemed that any sort of activity which allowed them to share themselves would bear

fruit in that regard. I found that I could combine "ice-breaker" type interactions with real assignments that addressed some of the more technical and conceptual concerns of the class. In effect, they were being given the opportunity to share who they were through the medium they loved. While this may sound obvious, it's rare that students get to incorporate this so directly into their classroom work.

Finally, I learned that to give the students a cohesive vision of the course content, I needed to lead them on a "hero's journey" of sorts. To follow Campbell's model, it first required a statement of a problem, in this case a design brief. Next came a "call to adventure," a challenge. They were dragged by this challenge out of their complacent existence in rolling office chairs to the "magical world" outside. Here they were tested, and during these tests they became allies to one another. Finally, they returned to the "real world" of the computer lab with some helpful artifact of wisdom or technical information or creative idea with which they could solve their current problem, whether it was the abstract animation or self-directed project.

Naturally, this also became the framework for myself as well while I was leading the course. After all, Fight Club not only transformed a group of supporting characters, it also was the process by which the narrator came to a point of clarity about his own role in life. While all the Fight Club rhetoric revolving around violence and masculinity may not be applicable to design studio courses, the rest of it became for me a very useful model for a disruptive, engaging, and illuminating classroom experience. In the words of Tyler Durden, a "near-life experience."

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Culture and Design Education: Pedagogical Discourse for a Globalized World

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Alma Hoffmann
Harrington College of Design

Renee Meyer Ernst
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Panel Abstract
This panel addresses a few of the most predominant issues in graphic design education: globalization, the influence of culture on both macro and micro scales, the examination of cultural meaning and practices in visual communication, and pedagogical approaches to asserting these topics in the classroom. These papers strive to inspire educators to provide our students with the tools needed for a successful and meaningful practice as designers.

Innovative technologies such as the World Wide Web, social networking, digital communication, and globalization have begun to reshape the education and practice of graphic design. Our contemporary ideological modes of learning, interacting, and visually communicating have shifted towards a larger global spectrum. Cross-cultural interactions, relationships, and business practices now provide new and exciting opportunities to interact with clientele across the globe. Because of these global and cultural changes, the field of graphic design education curriculum in higher education must be re-examined. This panel will discuss areas and ideas to engage students in meaningful design discourse that to equip students to meet these innovations and cultural shifts.

Paper One: The Cultural Parameters of Universal Design (Alma Hoffmann)
If design aims to make a better society, should it respond to the status quo? In the midst of the social media revolution, a counter force emerged: fear. The events of 9-11 changed the rhetoric from advocating diversity on every campus to advocating fear. Design students receive both messages: engage cross-culturally and fear the stranger. Students face ethical challenges in cultural and political arenas. This paper aims to examine the implications for design education. How do we prepare students to both be agents of change and make a living? How do we teach students to not repeat painful past rhetoric?

Paper Two: Understanding Culture: Promoting Cultural Sensitivity in the Graphic Design Classroom (Renee Meyer Ernst)
Design Culture. Design and Culture. Cross-Cultural Design. Globalization. These are four hot topics in design today... but how are they similar, and what are the differences between them? What do they mean in the context of design education? This paper examines the connotation behind each phrase, along with their relationship to *culturability*, a term coined by web usability experts Wendy Barber and Albert Badre. Originally pertaining to web design, we will look at how culturability concerns all areas of design, consequences of neglecting culturability in the design process, and its potential place in design pedagogy.

Paper Three: Color, Symbol, and Image: Cultural Definitions in Visual Communication (Brooke Scherer)
Red—America: Warning, Love; China: Celebration, Fortune. *Owl*—America: Wisdom; China: Misfortune, Bad Luck. Colors, symbols, and even the way a visual image is constructed all possess their own meanings and interpretations across various cultures. Our job as graphic designers participating in this ever-flattening, globalized world is to understand the connotative variations of these design components before visually communicating to any international audience; a knowledge that must begin in the classroom. This paper will examine these cultural differences and address how we, as educators, can integrate new pedagogy into the classroom to ensure the successful, globally-communicative futures of our students.

Treatise: Graphic Design Education In and Beyond the Classroom

Prof. Anthony Inciong Montclair State University, Dept of Art & Design

Jessica Helfand, practitioner, writer, critic, and educator, describes graphic design as "the most ubiquitous of all the arts.... informed by many disciplines". She explains that it is a "complex combination of words and pictures ... that ... demands the clear thinking of a particularly thoughtful individual"[1]. But thoughtfulness is not a given and educators know that it takes more than words to inscribe the principles of graphic design into the minds of students, students whose notion of graphic design is:

There are two approaches to graphic design teaching, conventional on the one hand, comprehensive in the other – the former is the least likely to produce leaders. The conventional graphic design teacher will invoke the demands of industry to justify her or his routines, though education in a variegated, constantly changing global economy is anything but and despite the fact that graphic design curricula amounts to educated guesswork about field priorities. She or he seldom considers the likelihood that her or his hopefuls will migrate to a related discipline or withdraw from graphic design entirely; the conventional teacher – who is apt to confuse routine for prescience – does not encourage students to adopt critical methods of reading, writing, and research that will enable them to thrive in a demanding world.

Course loads, program and department obligations, and the imperative to bear scholarly work often discourages graphic design faculty from reflecting upon their teaching methods. Reflection raises questions concerning the viability and correctness of one's perspective and the manner in which one portrays graphic design in the classroom. But, by stressing execution over methods that lead to a greater understanding of problems, the conventional teacher imposes her or his aesthetic preferences upon students and, in doing so, takes control of

graphic design outcomes which not only undermines learning but also discourages risk-taking. The conventional teacher suspends the process of discovery by her or his implied ownership of assignments; she or he portrays the discipline as though it had reached stasis. Comprehensive teaching, by comparison, encourages students to think in terms of what can be. It is profoundly different because it aligns pedagogy with educational themes that are anticipated to change the very nature of professional graphic design practice: interdisciplinarity, collaboration, calculated methods of problem solving, and grasp of problems at the component and systems level.[2] Comprehensive teaching enables students to address the cardinal expectations of practice and prepares them for the vicissitudes of a global, knowledge economy.

Despite graphic design's popularity in liberal arts settings, much of what passes for an education by way of it is drudgery. Though interdisciplinary approaches to teaching and learning are a much sought-after feature of higher education today, the means and methods of graphic design – research, problem identification, prototyping, testing, analysis, and refinement (though not necessarily in this order) – are rarely emphasized and rarely used to take advantage of the knowledge students gain in courses outside graphic design. Because it highlights intuition and technique as opposed to reason, conventional teaching hinders exploration and shortchanges promising students.

The disparity of skills and knowledge among my students prompted my research into pedagogies that would improve both the quality of their work and their desire to learn. I focus on pedagogy because the need to counteract the increasing isolation among disciplines in higher education can no longer be ignored, because it is crucial for graphic design educators to help students integrate their learning and adapt to circumstances both favorable and unforeseen, and because students must possess the wherewithal to critically evaluate messages embedded in media, objects, structures, and spaces. I focus on pedagogy because conventional, practice-based teaching is indoctrination, not education. The work on pages 3–6 embody a particular brand of comprehensive teaching.

Students in my Typography II course at Montclair State University worked in teams of two to design posters that explain physics as well as the life and work of a physics luminary to a high school audience. The posters are a visual and textual response to seven motivating questions: *What is physics? Where did it come from? How is it done? What does it look like? What kinds of physics are there? Why is it worth studying? How has it improved our lives?*

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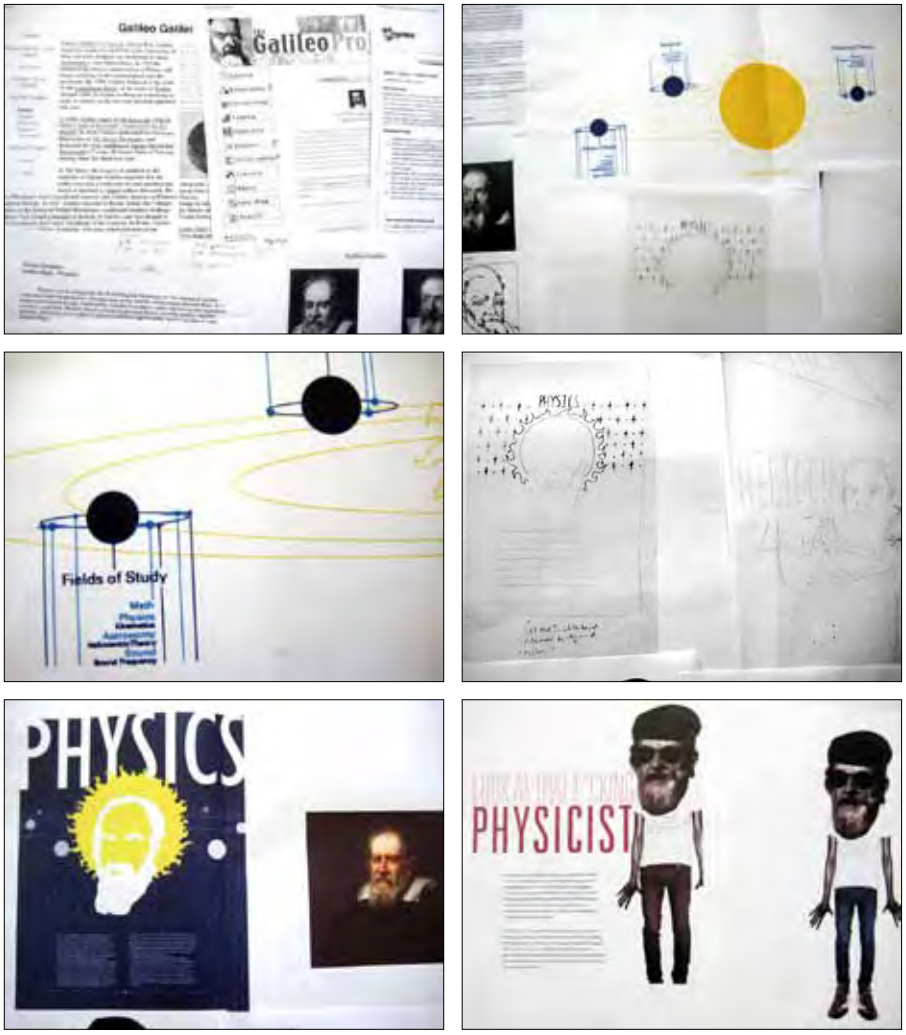
CLOCKWISE FROM TOP LEFT, FINAL POSTERS BY Lusine Katrjyan and Eric Quintero, Stephanie Montemurro and Mike Sulick, Evan Hooker and Chris Ortiz, Devon Dempsey and Charles Coffin

/3



PROCESS WORK: Devon Dempsey and Charles Coffin (cont'd on p. 5)

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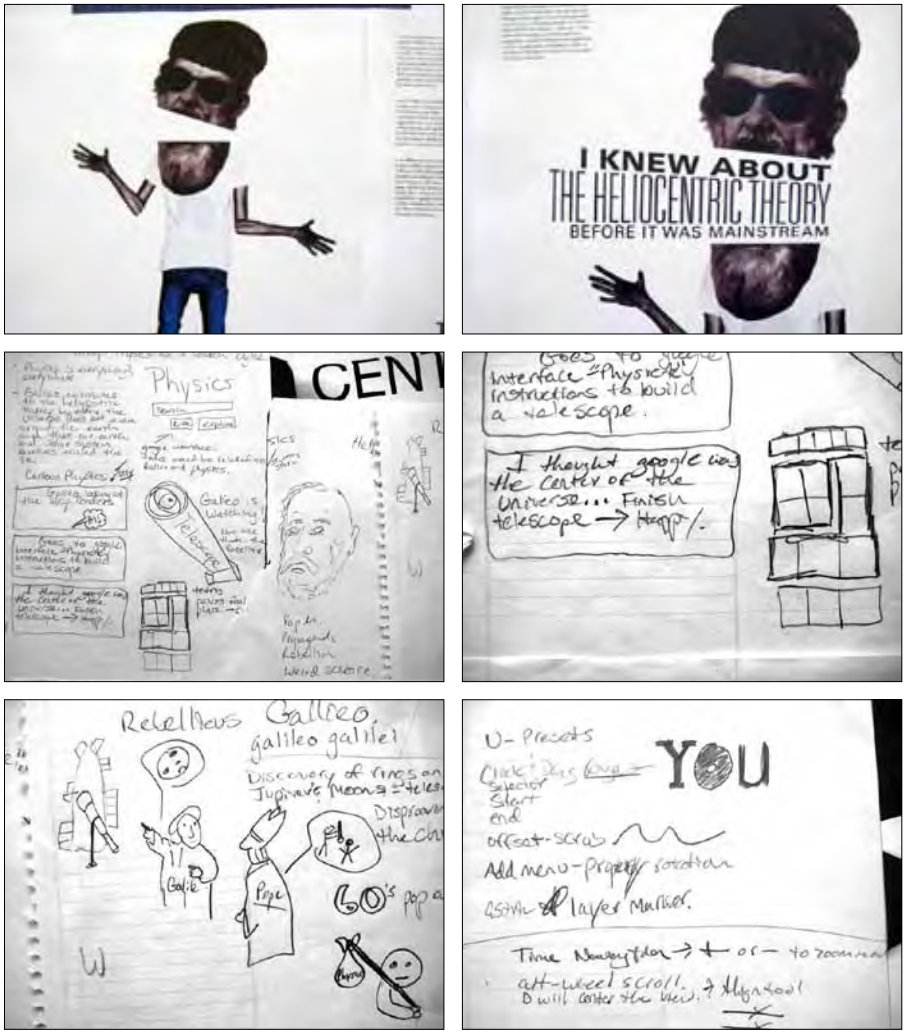

(cont'd from p. 4) Research, writing, mapping, and notes by students who are polar opposites; these sober and playful byproducts demonstrate the depth and sincerity of their investigation. The final poster (p. 3, lower left corner) merges Charlie's rough-and-tumble sensibilities with Devon's warm precision.

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PROCESS WORK: Evan Hooker/Chris Ortiz

The team's painstakingly researched, drawn, and typeset mind maps undoubtedly led to their primarily language- and typography-based poster (p. 3, lower right corner). Stratified and exquisitely put together, Chris and Evan eschewed their unmistakable personal preferences for the sake of a coherent and entertaining message.

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Students were urged to think of the project as an opportunity to avert an ongoing crisis: the United States continues to lag behind its rivals due because of its waning interest in the sciences. "The nation faces stiff competition in teaching the STEM (science, technology, engineering, and math) fields from China and India … countries churning out large numbers of engineers, computer programmers, and scientists…. We're just not turning out enough raw material for our colleges and businesses, and that has implications for everything we do…."[3]

I encouraged students to think beyond object and image making; I encouraged them to think of themselves as learners and teachers, an approach that gave meaning to the methodology I recommended. To supplement the customary sketching of thumbnails and rendering of comps, students were required to conduct research, summarize the life and work of a luminary, and confirm their learning through mind maps; I also assured them that research, writing, mapping, sketching, and prototyping could take place in a sequence their respective teams deemed to be logical, practical, or otherwise beneficial to the overall message.

The world into which fledgling graphic designers will enter has already changed. While it may seem practical in an economy that continues to fall deeper into the trenches to narrow the purview of graphic design education – to emphasize its most obvious aspects of forms, colors, patterns, formats, styles, tools, and norms – it is comprehensive teaching – pedagogy, as opposed to Art Direction – that distinguishes hopefuls and, in the best of circumstances, makes civic and disciplinary leaders of them. Graphic design education must live up to the rubric; graphic design educators must cultivate learning by crafting pedagogy around empathy, courage, and discipline – guiding virtues unbound by time, subject, or circumstance. The thoughtfulness that figures so prominently in Helfand's description of graphic design emerges from an ambitious and optimistic portrayal of the discipline.

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1 "What is Graphic Design?" last modified May 24, 2011, http://www.aiga.org/what-is-design.
2 "Design of 2015 Trends," last modified May 24, 2011, http://www.aiga.org/interior.aspx?pageid=44&id=1824.
3 Jessica Kitchin, "Physical Attraction," *New Jersey Monthly*, September, 2008, 94.

Page one illustration, courtesy of Joseph Morgan, May 2011.

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Globalization, Culture, and Communication: Proposal for Cultural Studies Integration within Higher Education Graphic Design Curriculum

Brooke Scherer
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Abstract

The late twentieth century was a time of great change. The advent of Internet connectivity and the World Wide Web dramatically redefined the way all humans live and communicate, both verbally and visually. Where cross-cultural interactions, relationships, and business practices once existed primarily for the wealthy and powerful, we now find these opportunities readily available to all. One major area greatly affected by this transformation is the field of graphic design. For the first time, practitioners find themselves in positions that allow for working with international clientele, as well as the chance to design for global audiences. As a direct result, educators now face a sudden demand to redesign traditional graphic design curriculum in order to adequately prepare students for successful futures in a newly globalized industry. Gone are the days of teaching how to visually communicate for local markets; rather our new challenge exists in preparing students to design according to the many diverse cultural sensitivities, such color and symbolic meaning, that shape the existence and every day life of various global nations.

To ensure designer success in this newly globalized world, we must make certain that students are leaving the academy equipped with the proper tools and education needed to relay accurate and appropriate visual messages to intended demographics. This research aims to outline these culturally specific tools, variances, and dimensions which affect many major components of graphic design (such as diverse social spectra, aesthetic appeal, and purchasing habits), and will support these findings by illustrating and discussing important case studies that explore previous globally focused visual communication campaigns, both successful and unsuccessful. Additionally, the information presented here will serve as a basis for introducing new pedagogic models that integrate cultural studies into higher education graphic design curriculum.

Making Choices in Graphic Design Curriculum Development

Production and Communication

Stuart Morris & John O. Smith

Rapid expansion in graphic design media and the increase in production responsibilities for designers using digital tools have created challenges for graphic design programs when developing curriculum. It is becoming increasing clear that undergraduate BFA programs cannot teach students to be proficient in every media and have the preparation to enter the profession with skills in every technology. Programs must evaluate their strengths and the needs of their students to choose a curricular focus. In this paper we will introduce an approach to guide this important choice.

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Developing graphic design curriculum is a complex puzzle — there is an expanding group of tools, concepts, media, processes, and ideas that can be introduced to students. Ensuring that class content is efficient and effective requires planning and coordination. Sorting through options and grouping them together into a scaffolded sequence of classes and projects is imperative. As classes advance, the curriculum must become more challenging and complex, building on the skills introduced in preceding classes.

Many approaches to graphic design curriculum solve this puzzle by introducing students to a broad variety of graphic design approaches. BFA programs often attempt to teach all skills (composition, typography, image-making, a variety of software, hand skills, design processes, professional practices, etc); as many media as possible (print, web, multi-media, motion graphics, video, way-finding, 3D graphics, package design, etc); and a variety of professional options (publication, advertising, branding, logo/identity, package design, promotion, etc)

Approaches to curriculum development vary from school to school. Many programs try to teach everything, and find it challenging to fit all graphic design media and processes into a small set of classes. As the professional field expands, graphic design programs try to keep up. Classes shift focus, introducing new concepts and projects into already full schedules. Existing processes and media are squeezed out, as others are added in. Problems arise because BFA graphic design programs are limited in the number of courses available, and students cannot be taught every approach to graphic design. There are also challenges in coordinating curriculum in programs with multiple full- and part-time faculty.

It's a scenario we all know very well. And it is clear that this system does not work. Graphic design BFA programs are constantly making difficult choices that limit the experiences and skills introduced to students.

A practical method for guiding these choices in curriculum is to clearly define program outcomes and create a set of learning goals to achieve them. These learning goals can then be used to develop a curriculum that leads to student success in a focused area of graphic design practice. Matching the scope of these learning goals to the available classes leads to challenging questions: What should we teach? When? What should we include in the curriculum? And what skills and processes don't make it into the curriculum?

There is an important question at the root of all of these decisions: How does a graphic design program choose a focus for the curriculum?

Many creative disciplines educate students to perform different tasks in the same field by creating separate tracks within the program. Music and film/theatre programs introduce very different curricula for directors, composers, writers, musicians, actors etc. Directors often act and understand the craft of acting, but their training focuses on skills and processes of direction. Composers play musical instruments, but musicians are trained to play them with more focused skill and creativity.

Architecture programs focus on training students to work creatively with other disciplines. Classes selectively introduce principles to help guide future practice, introducing students to basic principles of mechanical electrical systems, structures, vibration analysis, security, etc. The focus is not on developing a mastery of these principles, but on developing an understanding of the limitations associated with various production methods. Students developing the agency to create work for production, while not necessarily becoming capable of the production themselves.

In the graphic design field, a variety of concentrations have been introduced. An incomplete list includes: design for print, design for web, design theory, design as personal expression, digital art, design for new media, interface design, motion graphics, game design, animation, etc. In each of these concentrations course content is often developed to introduce every aspect of design, from ideation through production, and students learn to be responsible for all aspects.

As individual graphic design programs develop program focus, it is important to consider the skills provided to students entering the graphic design profession. Educational goals should be focused to provide the most complete set of skills and understanding. There would be great benefits to students, faculty, and industry professionals as graphic design programs focus on teaching a deeper understanding of a more limited set of skills.

It is also important to note that all graphic design programs do not necessarily need to focus on teaching the same set of skills. Creating unique and focused curriculum goals will have many benefits: avoiding duplication in regional programs, providing students better information as they make school choices, and giving industry professionals a better understanding of the skills students have as they enter the job market.

To resolve the challenge of developing curriculum within the limits of most graphic design programs, we propose a basic structure for focusing curriculum development. Inherent to all areas of graphic design, there is an underlying distinction between Design for Production and Design for Communication. Making a choice to focus on one of these two tracks can provide graphic design curriculum a much-needed primary focus.

The distinction between Production and Communication is very useful and practical. The two approaches are related, and there is overlap in their goals. Both approaches focus on using language, symbol, and image to create successful graphic design solutions. But there is a difference in the methods and skills students must learn to be successful. In a Production curriculum students are trained to use specific techniques and processes to produce design. In a Communication curriculum students learn methods for developing communication structures and strategies.

As students progress into advanced classes and explore advanced concepts and techniques, the difference between these two approaches becomes greater.

For example, consider the broad curricular goal to teach students to create web and/or print design. In both tracks, students would begin with an initial study of language (typography) and image creation. However as the curriculum progresses, the two tracks diverge. In a Production curriculum, it quickly becomes necessary to teach a thorough understanding of media, software, code, color management, and other increasingly complex production tools. In a Communication curriculum the focus is on teaching equally complex skills in researching and analyzing content, ordering information, and developing communication strategies that lead to graphic design solutions.

While it would be possible to teach these curricula in an interwoven manner, to do it thoroughly and well requires more courses than most BFA programs can provide. Many programs can only offer 6 or 7 graphic design courses, and even programs that offer 12-15 classes find it challenging to effectively teach a complete understanding of both Production and Communication. Current models that introduce both tracks are preparing students for neither. The fewer courses available in a curriculum, the more important it is to make a clear distinction in curriculum focus.

It is also true that designers enter the world(s) of design through many doors. Students well-trained in production can develop professionally to be a masterful design communicators, and conversely, students trained in design communication can develop

impeccable production skills. But, as educators, it is crucial is that we develop curriculum to guide students in their education, preparing them to enter the profession with confidence and skill. A curriculum distinction between Production and Communication provides this focus.

So how does a program develop focus on one of these two curricular directions?

We propose that programs initially evaluate a number of factors, including: faculty skills and experience, student goals, regional professional opportunities, program facilities and support, competition with other nearby programs, etc. This evaluation will help determine an overall curricular focus on either Design Production or Design Communication. Once this general focus has been determined, a set of learning goals can be developed and applied to classes that effectively teach a focused approach to graphic design.

We have developed the following outline of basic distinctions between the two areas of focus, providing a broad overview of the characteristics and teaching strategies for both:

Production Focus

- Focus on *how* to produce language, image, and symbol
- Respond creatively to direction, project strategies, and content
- Understand materials and media for production
- Use tools, hardware, and software effectively
- Recognize and respond to trends in media and production
- Learn continually evolving technologies
- Manage successful production
- Troubleshoot and maintain new and existing projects
- Focus on production skills for specific media

Communication Focus

- Focus on *what* language, image, and symbol to produce. And *why*?
- Evaluate and analyze project goals and content
- Employ processes of ideation, research, and creative brainstorming
- Develop effective communication strategies
- Organize and structure content to create meaning
- Respond creatively to anticipated end-user experience
- Choose media to best communicate content
- Plan, prepare, and oversee production
- Understand options and limitations of a variety of media

There are many significant benefits to creating curriculum focus in Graphic Design programs:

- Programs cannot teach it all with the number of courses available
- Provides direction to guide course and curriculum development
- Provides a deeper and more thorough professional training to students
- Program descriptions more accurately define and present curricular goals
- Students have better information to inform their school selection process
- Clearly identified learning goals are more easily shared with adjunct instructors
- Program curriculum can be more clearly shared during faculty hiring process
- Professionals have better understanding of student skills as they enter job market
- Duplication in regional programs can be avoided
- External review and assessment is more accurate and informative

We call upon national design education organizations to lead this dialog and assist programs in evaluation of curriculum and development of curricular focus. Organizations such as UCDA, AIGA, and NASAD can work together to create structures to outline graphic design curriculum paths, taking into account a variety of important factors including: program location, professional need in the region, faculty skills and training, student background and goals, avoiding duplication with other programs in the region or on the same campus, etc.

As this paper developed, we realized that there are many options available for creating curricular focus. We also discovered, through dialog at the UCDA State of Education Summit, that many other programs are working to resolve curriculum challenges as media and professional options rapidly expand.

This paper presents introductory ideas about this important issue, and we encourage evolving dialog. Our goal is to continue this conversation on a national level at upcoming conferences hosted by UCDA, AIGA, and other design organizations. If you have interest in contributing to the dialog, please contact us.

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PRESENTATION SLIDES

Making Choices in Graphic Design Curriculum
Production and Communication

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John O. Smith
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How many graphic design courses are in your program?

What do we want our students to learn?

formal design principles
gestalt
composition
contrast
implied and optical line
cropping
visual narrative
page geometry
typography
font management
font choices
type styles
type hierarchy
type as communication
type as expression
history of type
typographic conventions
type/image combination
typeface design
type color
grid systems
readability/legibility
copy editing
copywriting
layout software
illustration software
photo software
web software
production software
animation software
video editing software
file management

layout for screen media
layout for paper/print
layout for handheld devices
package design
labeling design
publication design
advertising
signage
wayfinding
point of purchase design
snail mail design
email design
poster
logo design
symbol development
semiotics
branding
identity systems
web design
HTML
CSS
navigation
web image and color
web typography
print design
paper selection
post-production processes
foil stamping
die-cutting
folding
bindery
embossing

color systems
CMKY
Pantone color
RGB
indexed color
raw color
hexadecimal color
vector illustration
bitmap illustration
hand-drawn illustration
resolution and image size
scanning
photography
studio lighting
digital camera use
digital darkroom techniques
color balancing
file formats
image prep for print
image prep for screen
stock photo usage
copyright
professional practices
client interaction
meeting coordination
scheduling
budgeting
production oversight
invoicing
freelance practices
art directing
taking art direction

problem solving
research
brainstorming
ideation
thumbnails/comping
selection and refinement
completing work
presenting work
responding to critique
leading critique
promotional strategies
identity strategies
marketing strategies
campaign strategies
content development
content management
project maintenance
troubleshooting
graphic design history
production history
communication trends
technology trends
design theory
portfolio development
portfolio presentation
resumé writing
networking
professional interaction
exhibition opportunities
design leadership
professional options
job search

Is there anything we missed?
Anything to add to the list?

How can we teach all of this content in the available courses?

Is it possible to teach it all well?

So what do we do?

How do we decide what to teach?
And what not to teach?

Production Focus

- Focus on *how* to produce language, image, and symbol
- Respond creatively to direction, project strategies, and content
- Understand materials and media for production
- Use tools, hardware, and software effectively
- Recognize and respond to trends in media and production
- Learn continually evolving technologies
- Manage successful production
- Troubleshoot and maintain new and existing projects
- Focus on production skills for specific media

Communication Focus

- Focus on *what* language, image, and symbol to produce. And *why*?
- Evaluate and analyze project goals and content
- Employ processes of ideation, research, and creative brainstorming
- Develop effective communication strategies
- Organize and structure content to create meaning
- Respond creatively to anticipated end-user experience
- Choose media to best communicate content
- Plan, prepare, and oversee production
- Understand options and limitations of a variety of media

Why should we focus our programs?

- We can't teach it all with the number of courses we have available
- Provides direction to guide course and curriculum development
- Provides a deeper and more thorough professional training to students
- Program descriptions more accurately define and present curricular goals
- Students have better information to inform their school selection process
- Clearly identified learning goals are more easily shared with adjunct instructors
- Program curriculum can be more clearly shared during faculty hiring process
- Professionals have better understanding of student skills as they enter job market
- Duplication in regional programs can be avoided
- External review and assessment is more accurate and informative

Thank you.

Stuart Morris
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3D Type: Doughnuts, Bread, Felting, Clay, a Refreshing Departure

Paula Curran
Iowa State University

Abstract
Without question, graphic design students must become highly proficient using the Adobe Suite of programs: InDesign, Illustrator, Photoshop. It is to their advantage if they also learn DreamWeaver, Flash, (?) This technical knowledge is paramount as they seek internships and employment.

I teach in a BFA graphic design program in a public university. Students in their sophomore year purchase or lease laptops and begin learning the Adobe Suite of programs. And they learn them well, almost too well.

Students often become reticent solving a design problem without using their beloved laptops. Where drawing something may be quicker and easier with a piece of paper and a pencil, they are unable to see this simple solution. Instead they may spend hours "cleaning up" an image in Photoshop when using a simple pair of scissors might do the job instead. Or, they may spend an inordinate amount of time creating 3D typography when making the real thing is far superior.

Presentation for UCDA
May 26, 2011

WHY DESIGN EDUCATION MATTERS IN THE DIY AGE

Allow me to take you back in time. The year is 1982. I'm a first time university teacher working at a small school in Oklahoma. Southwestern Oklahoma State University to be exact. I'm fresh out of industry where I worked as a print production supervisor and soon after as an advertising art director for several years.

My new teaching job is housed in the art department. My schedule includes classes in two dimensional design, drawing, art photography, publication layout, illustration and screen printing.

Flash forward to 2011. I've been teaching now for 29 years. I work in the Bob Dole Technology Building in the Kansas Technology Center in the College of Technology in the department of Graphics and Imaging Technology, at Pittsburg State University, Pittsburg, Kansas.

Perhaps you can see that the emphasis has changed. I teach two sections of beginning Graphic Design every semester but I'm also called upon to teach two sections of software training. The focus is definitely on technology rather than design. In years past I've seen three faculty members of my department with art degrees be replaced by people with tech ed degrees and industrial art degrees. However, that pendulum is swinging in the other direction these days. I'll tell you more about that later.

Over the years,
as my career has been pushed toward technology education and away from design education, the ways I teach has changed. I've asked myself, "What was lost and what could be gained by pushing the focus back in the direction of design?" This is the thrust of this paper but I want to be clear. I'm not positing that technology is the root of all evil. I've always embraced technology. I've always taught students how to use the tools of the trade and we should of course continue to do that. But let's not forget this truism; Design skills are the most important thing that separates the professionals from the amateurs. It is one of the most important human driven pieces of communications that can't be provided by technology.

Design skills training, as important as it is, can lose out to the ever increasing demands of tech skill know how. AND for teachers, technology skills are often easier to evaluate than design skills. Evaluating software skills for example are often more concrete, less subjective and more of a right or wrong determination. Teachers, through professional demands for accountability and sometimes due to burn out or laziness, may opt for the easier path.

That may or may not relate to your situation but in many places, schools are so focused on training the entry level production person, often for reasons of providing numbers for accrediting agencies and program reviews, that they undermine students with big talents by not providing enough of the challenging project-based assignments in which that kind of student can really excel. What is lost is the opportunity to identify and recognize exceptional students and to provide opportunities for them to achieve at a high level in the graphics professions.

One senses that the same is true in secondary education. I often see college freshmen that can't crop a photo in a well balanced way. They have trouble determining between symmetrical and asymmetrical composition. They can build a thousand layers of soft focus color and ripped off images from the web, but they don't understand balance. They've been taught how to operate the equipment but haven't been taught the rudiments of planning - design.

As media becomes more complex,
university departments have struggled to determine their appropriate scope. They struggle to determine what, how much, and how far they want to teach; what they want to include in their department's curriculum. Typically, as they expand to attract students they require more and more need for technology skills training. Now we find departments trying to cover so much; that are spread so thin that basic design training gets less than its due attention. These departments are expanding their reach but may be diminishing their quality.

Another part of this problem, especially at the post secondary level, is the diminishing numbers of full time professors. Since 1991, part time hires have increased by 87% while full time positions have increased by only 18%.* As deans and department chairs are pressured by internal program reviews and accrediting agencies to do more with reduced budgets, they hire more adjuncts as a way to encourage professionals into their programs at a cut rate price. Too often these hires have current skills but little teaching experience. They are hired to teach computer skills often with little attention focused on design.

Another aspect of this paper is how technology,
as it spreads through the populace and as the general public adopt and use tools of our trade, do things that once were considered the purview of professionals. The do-it-yourself (DIY) graphic designers have sprung up in droves as tools become affordable and attractive. Individuals learn to press the buttons and drag the mouse and are creating home made works but have little or no training on the subtleties of design. A "That's good enough" mentality spreads and standards for what is truly good, diminishes. Seeing something in print or online validates the good enough efforts of those that have created it, and not to let their efforts go unrewarded, become convinced that the project really is good enough.

A friend of mine pointed out this problem during a meeting of a design department advisory council he and I both sit on as he lamented the end of his kind of work. He's had a very long and successful career as a commercial photographer. He said that fewer potential clients consider it important enough to hire a professional like himself anymore - that many are doing the photography themselves or hiring a friend or relative instead. He said they care so much about cost that they care too little about quality. They settle for "good enough."

I have noticed a similar trend with business identity. It seems to be harder than ever to get an identity project that pays well. Businesses looking to start up or revamp an existing identity are turning more and more to crowd sourcing and other DIY sources in order to save money. (And they often get what they pay for!) This is why we see so many logo designs that are indistinguishable from one another - letter marks galore that mean nothing and are so generic that no one remembers them one from the next - poor company names with design considerations that extend no further than the founder's name even when that name is unpronounceable or reflects negatively.

Today there are several web sites that encourage competitions in a DIY-crowd sourcing environment. They are wildly successful. Honestly, I have mixed feelings about such web sites. On the one hand they provides opportunities for practicing one's design skills with a chance, albeit small, to get work purchased. On the other hand, as this type of design competition is big business for the organizers, designers tempted into the crowd are finding themselves doing work on spec with no guarantee of compensation and they risk sharing their work with others who may misappropriate it. I suspect that most of the work submitted at these web sites is by beginning designers and may be therefore forwarding the "good enough" problem even further.

What can teachers/schools do about these issues?
First, require students to learn the software on their own time. Developing a method for doing this involves a mix of online training service combined with original tutorial content created by faculty and an organized faculty monitoring plan.

At my school we're not quite there but we're working toward it. We have converted

many of the graphics software classes to hybrid; part online, part face to face classes. Students are required to subscribe to lynda.com and follow the instructional tutorials there. Exercise files provided by the service are assigned and evaluated every week to be sure that students are following the program. Other exercises, provided first hand by our teachers or by way of screen recordings of demonstrations, are also assigned which parallel the online instruction. Evaluating these departmental files help us determine if students are able to apply what they've been learning online. A performance test, provided about once a month during the semester, allow faculty an opportunity to observe students performing the acquired skills. This along with a good student-to-student tutoring effort, we eventually hope to organize these efforts in such a way that students can work entirely at their own pace completing the performance test as soon as they feel ready.

Related to this is that sometimes incoming students already have quite a bit of the software skills needed. For those, the opportunity to test out of some of the software classes are being made available using the same performance test and/or a portfolio review.

We are finding that motivated students, working at their own pace and teaching themselves is a more efficient way to provide software training and frees time for faculty and students to devote to the design issues of developing talents, skills and good taste.

Next, teachers need to portray design in it's due importance. Design appreciation should be included at the beginning of classes - repeated and reinforced from one class to the next. I suggest the use of online class room discussions where the importance of design is the main topic. I've been doing this for several years. From my experience students discover, especially when their thoughts are well considered and formed into posted comments, just how crucial our industry is.

Consider this discussion item: Identify a situation where poorly considered graphic design could cause injury or death. Students during this exercise love to try to one up the next AND it's a legitimate topic.

Through lively discussion like this students learn that design matters and is more than a cosmetic addition for communication.

Students also need to be convinced that "good enough" is not. We can show students that it is one thing to throw something together that will function at a base level and quite another to create something that can influence human behavior on a big scale. The difference between those two outcomes is design - carefully studied and applied effectively.

Teachers should convey the great value of an in depth study of design. Things such as the powers of persuasion designers wield when they know how to motivate an audience through design and the feeling of satisfaction that their work helps provide a valuable service.

Now, a personal success story about to unfold.

My department, Graphics and Imaging Technologies, just celebrated it's 100 anniversary in 2010. For many years we were the Department of Printing. We taught layout and design skills along with tech skills for commercial printing and worked closely with the Visual and Fine Arts departments.

In 1997 we changed our name and were assigned to the College of Technology along with engineering, plastics, metal foundry, automotive and electronics. At about the same time we became estranged from our art department due to some infighting for the right to use the term "Design." This lead to an almost complete separation of the two departments.

I'm glad to report that due to some recent hires, some retires, and a department review that pointed to some real problems with our past curriculum, we are now including a Graphic Design area of emphasis in our major. This emphasis still has all the software training, a large section of project based design studies and includes, to my great pleasure, a minor in fine arts. A minor that includes hand picked classes that my department helped the Art department design. This is a remarkable step considering our history and for a department so intrenched with tech studies.

Another big design step for my university is the establishment of a cross-campus

Design Committee that includes most all of the faculty from every area that teaches design related skills - Broadcasting, Art, Interior Design, Fashion merchandising, Photo Journalism, and Graphics. We get together once a month to discuss issues and share information so we can take better advantage of each other's programs. This is a profound transformation from the way we've interacted in the past and the common thread is design.

The effects of DIY is currently a hot issue
for both professionals and educators in the commercial graphics industry. As educators we need to decide how to take advantage of opportunities offered by DIY web sites and to take steps to offset any negative effects of it by recognizing the importance of formal design training, portraying it's importance to our students, and keeping design training in the forefront of our programs - even those that come from a technology focus.

David Oldham
Assistant professor
Graphics and Imaging Technologies
Pittsburg State Univiersity
Pittsburg, Kansas

* William Deresewicz, *A Jane Austen Education,* 2011

The Secret Species Project: Constructive Playtime

Marius Valdes

Assistant Professor

Studio Art, Graphic Design

University of South Carolina

Perhaps one of the most difficult aspects of being junior faculty in academia is finding a balance between the role of design educator and design professional while trying to obtain tenure and promotion. Teaching at a Research one institution offers a lighter teaching load but a higher expectation for research that is recognized at a national and international level. The pressure to find opportunities and earn critical acceptance is a challenge. Adding to this challenge is that my teaching focus is graphic design, a commercial art, while I am in the studio art area of our Art Department. Designers do not typically exhibit their work, nor is the work created without consideration of a client's needs unlike many of my colleagues who are pure fine artists.

I love graphic design and I am a seasoned designer with 7 years of experience working as a professional graphic designer and art director before attending graduate school and entering academia. To further complicate the issue of tenure, most of my freelance work comes from illustration or commissioned artworks. While this is still commercial art, it is not graphic design. I find that doing freelance illustration with its quicker deadlines and spur of the moment schedules has actually been easier to fit into my schedule as an educator. Design projects require more commitment and often more client input, changes, and steps in the final outcome of the project.

So to find a solution to the problem of combining my passion for design, illustration, and character-based works, I chose to be my own client. Rather than focus on the work of other designers who are creating character driven work and visual narratives, I decided I would concentrate on making my own body of work and find ways to use this self-initiated work to gain tenure and promotion while enjoying the creative freedom of making fine art.

I have been successful in using this methodology to create opportunities for myself that I think will directly assist in my pursuit of tenure and also have energized my work and teaching. I am investigating a topic that I am passionate about but making sure that everything I do will work in the bigger picture.

Six years ago, the beginning of this project was inspired by several things that happened within a week's time; I discovered the hand made puppets of painter Paul Klee and the drawings of William Steig, I was introduced to an ugly dog contest, I found a book called Raw Vision about Outsider Folk Art, and I began to notice designer toys at the Tower Records store in Richmond. Also, I was extremely burned out on graphic design and illustration after my first semester of graduate school. My reaction to all of these discoveries led me to buy sculpy clay and bake little creatures in my oven. Since that week I have made at least 1000 of these figures. This was the beginning of the Secret Species project though it was not called that at the time.

The Secret Species is an ongoing visual arts creative project that has evolved from my investigation of character-based art development and visual narratives in the fine arts, graphic design and commercial illustration. In 2010, I set out to create a group of characters and new visual narratives that would allow me to research new methodologies, experiment with a variety of media, and develop new fine art that would inform and develop my skills as an educator, illustrator, graphic designer, and activist promoting the arts. My goal was to create a new body of work featuring my characters, The Secret Species, to encourage an audience of all ages to consider the importance of imagination and creativity in their lives.

For this project, I created 100 sculpted clay figures approximately two inches tall that served as my models and muses to make art. Over the course of three months, I created new and original works such as drawings, paintings, comics, children's book, silk-screened three-dimensional packaging, hand-rendered typography, and graphic posters based on The Secret Species characters and a social message of promoting creativity and imagination by making art. This creative endeavor culminated with an interactive public display of the new works in a solo gallery exhibition.

At the opening of the show, I invited viewers to participate by offering one of my one hundred figures, packaged in a custom designed box, and given to the audience in exchange for a drawing of their own. I supplied art materials while the participants rendered drawings of the character they received. For over three hours, people of all ages and ethnic backgrounds made their own art and shared and talked about their art with other participants.

As a direct result of this exhibition and body of work, I was invited to present The Secret Species Project at two academic conferences including the 2010 Illustration Research Symposium at the Cardiff School of Art and Design in Cardiff, Wales and the 2010 South Eastern College Arts Conference held at Virginia Commonwealth University.

In addition to my presentations, several individual pieces from The Secret Species project were selected for juried exhibitions and a national publication including the 15th Seoul International Cartoon and Animation Festival in South Korea (where my art was awarded a special jury prize), Creative Quarterly Magazine's graphic design competition, and The American Institute of Graphic Arts InShow Awards (where my art graphic design received a special judge's award).

Recently I was awarded a grant to take this project to a local elementary school where I will partner with art educators and a class of fifth graders to create their own Secret Species characters to teach them about reading, writing, art, and graphic design. The Secret Species has proven to be very a successful and productive creative project that elevated my work to the national and international level.

The Secret Species Project

The Secret Species is an ongoing visual arts creative project that has evolved from my investigation of character-based art and visual narratives in the areas of fine art, graphic design and commercial illustration.

Cast of Characters

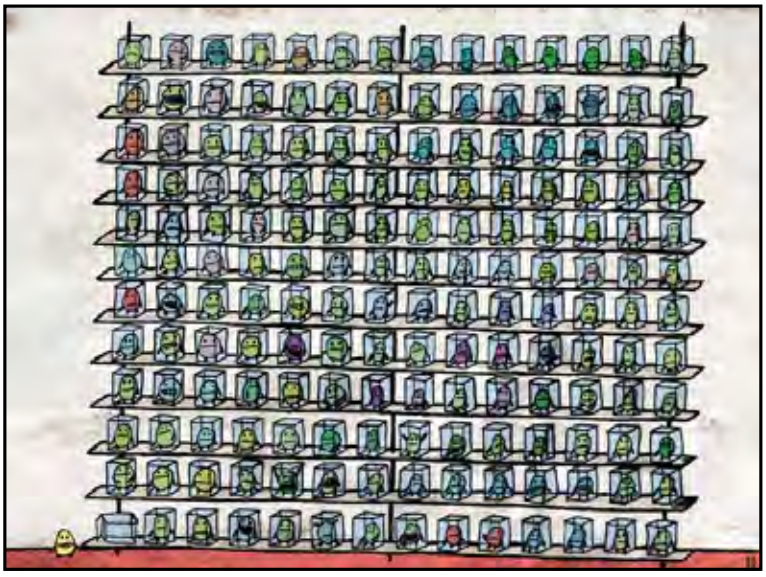
- The Unwantables
- The Secert Species
- Eggs Shotski

Design Products

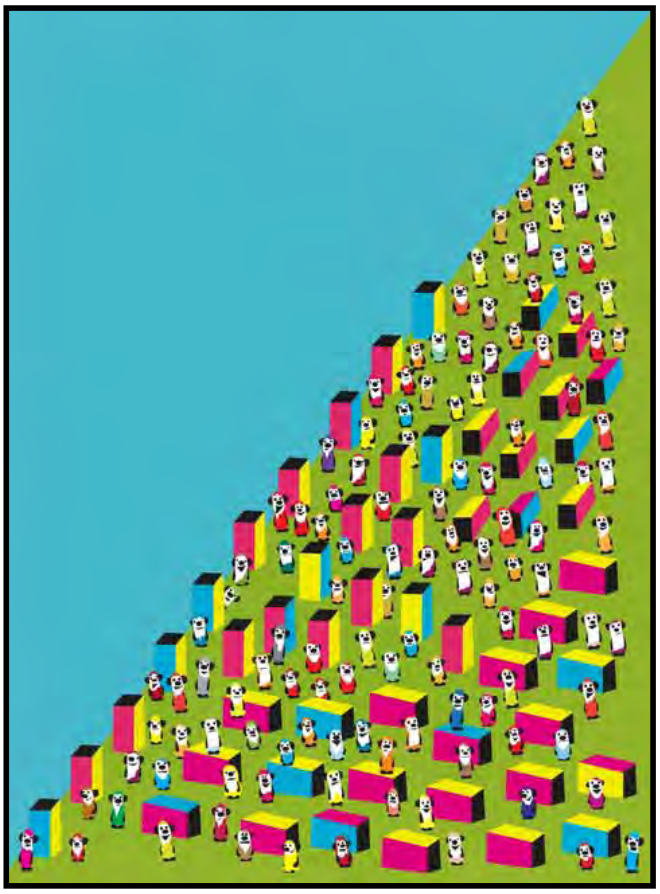
- Figures
- Limited edition silk-screen packaging
- Custom typefaces
- Stickers
- T-shirts
- Children's storybook
- Posters and prints

All profits from 1 project pay for new projects, or entry fees and production costs for new projects such as the t-shirt shown here to the left.

Eggs Shotski



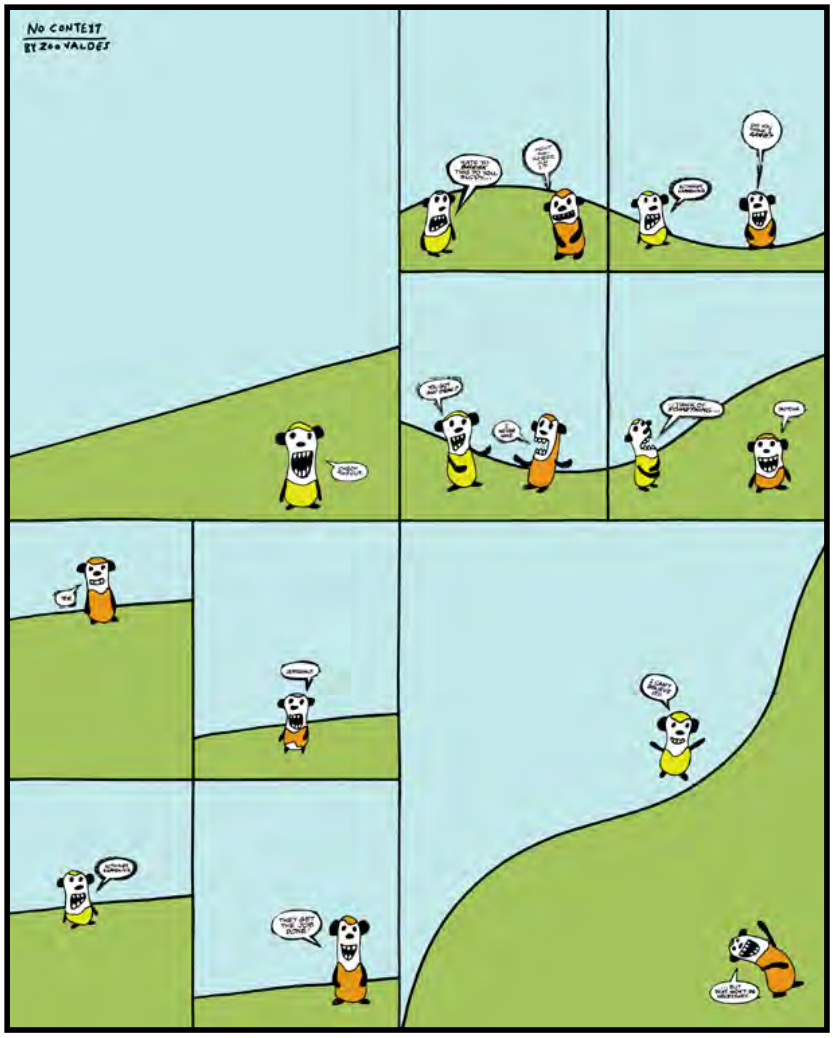
Custom typefaces developed for secret species project.



Experimentation

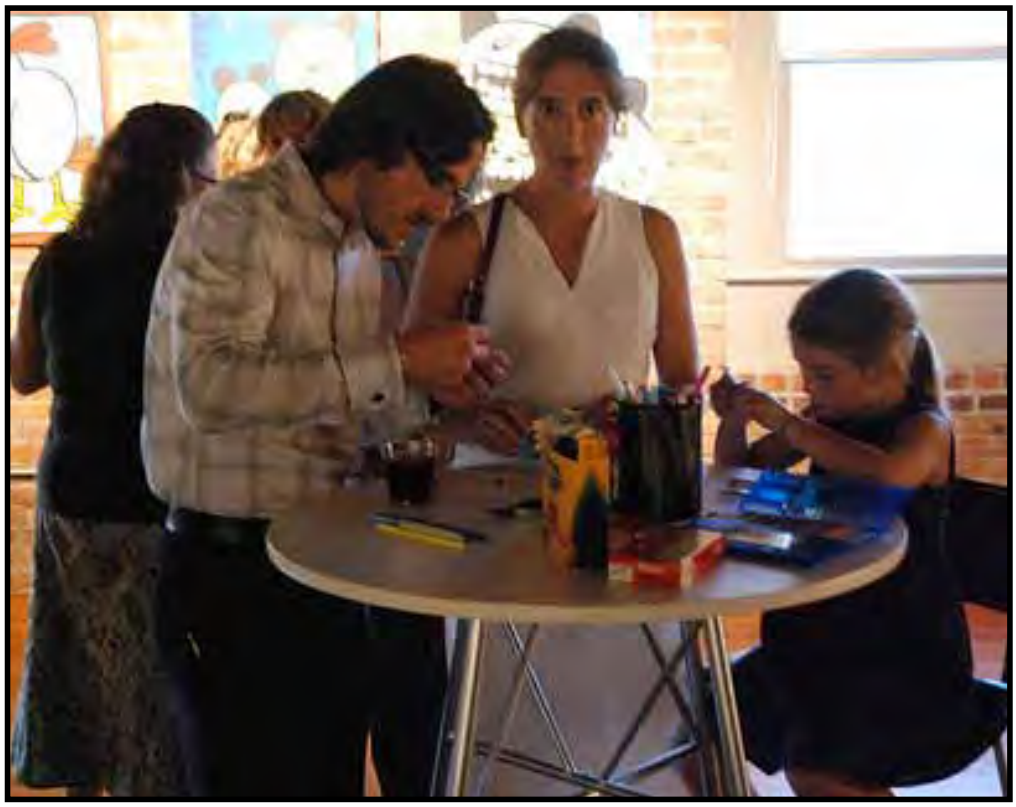
This project helped me work with and refine new methodlogies and techniques that I use in my fine art and in teaching such as creating vector art with newest Adobe software.


THE UNWANTABLES


NO CONTEST
BY ZOE VALDES


THIS HAS NEVER HAPPENED BEFORE.
Yeah?
So now what?
NO CONTEXT
BY ZOO VALDES

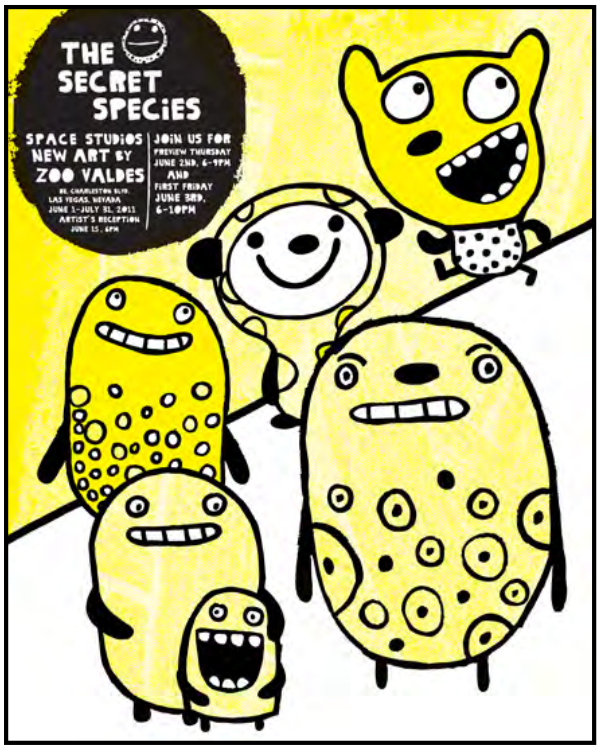

THE SECRET SPECIES
THE SHOWROOM GALLERY
SPARTANBURG, SC
JUNE 9 - JULY 9
2010
NEW ART BY MARIUS VALDES




MAKE ART BELOW OR USE PROVIDED PAPER AND SUPPLIES.
HAVE FUN WITH IT, YOU CAN DO NO WRONG!


AMBLANCHARD
Fast Eddie
JESSICA WIGHT


CHARACTERS
THAT
COMMUNICATE
MAYMESTER 2011
CHARACTER DESIGN
AND ILLUSTRATION


THE SECRET SPECIES
SPACE STUDIOS
NEW ART BY
ZOO VALDES
JOIN US FOR
PREVIEW THURSDAY
JUNE 2ND, 6-9PM
AND
FIRST FRIDAY
JUNE 3RD,
6-10PM

Future Explorations

- Exploring Licencesing
- Work with elementary schools
- QR codes
- AfterEffects
- Animation
- App for PDA
- self-publish book or zine
- Online archive

A.C. Moore Elementary

- Grant funded projects with elementary school children and literacy reseacrh
- Design artifacts for exhibitions of fine art
- Design Competitions
- Presentations

Re-New: How the History of Graphic Design Informs the Present

Sarah Stackhouse
Ramapo College
of New Jersey

Abstract
The history of graphic design is a relatively new area of study, coming of age at the end of the 20th century. Since innovation and invention are inherent parts of the field, the role of history is often overlooked in studio courses and relegated to more traditional slide/lecture classes. The fact is that many designers are looking to the past with imagination and informed reflection. Antiquated technologies, techniques, and styles can infuse contemporary work with rich concepts and contexts. From the era of appropriation in the 1980s, to the DIY movement of the late 1990s, to the current renewed interested in letterpress, graphic designers are increasingly concerned with both preserving and utilizing the history of the field. Reasons for this include the organization of the history of graphic design–separate from painting or decorative arts–and an inclination for exclusivity and authenticity. By infusing studio courses with historical context, students can develop a greater visual vocabulary, solve design problems with more insight, and connect to a continuum of individuals engaged in the creative process.

Interacting with Local History: A Mobile App for the 19th Century

Amy Papaelias
Assistant Professor of Graphic Design / Foundation
State University of New York at New Paltz

UCDA Design Education Summit 2011

Presentation Abstract

What do 21st century students and 19th century carpet weavers have in common? When the university museum exhibited a collection of locally made coverlets (bed coverings), an interesting opportunity emerged to bridge 19th century technical advances in weaving with the rise of mobile device applications in the 21st century. Graphic Design students enrolled in "Interaction Design" were challenged to create a mobile app that allows museum visitors to create their own coverlet designs.

Students were encouraged to consider the original coverlet manufacturing process and how principles of pattern and repetition could shape the functionality and user interface of the game.

The results of this project served as visual and structural guidelines for a team of Computer Science students who worked on developing applications for Android mobile devices.

When the project was presented to local historians and weavers, we were all pleased to discover many parallels between the processes engaged by design students in the development of the mobile application and the 19th century coverlet designers' and weavers' processes for creating the coverlets' intricate patterns.

This project engaged Graphic Design students in a collaborative process that accessed a variety of campus and community resources. By working with curators at the university museum, weaving historians and a local historical society, students experienced a truly "interactive" design project.

This presentation documents the projects and presents students' research, ideation and final concept development.

Christopher J. Freer, carpet weaver, ca. 1900 in the Bevier-Elting House on Huguenot Street in New Paltz. Courtesy of Historic Huguenot Street.

So, what is a woven coverlet?

Coverlets are woven bed coverings used in the US up until the mid-19th century. From the exhibition documentation: "They were used as blankets on the best beds in rural households. They were practical necessities-warm in winter–but decorative as well. They were meant to be seen, admired, and sometimes read." (http://www.hrvh.org/exhibit/hhsbinary/)

How can the design classroom become a place for investigation into local history?

This project was completed in the first 4 weeks of the Spring 2011 semester in "Interaction Design", a senior-level graphic design course that engages students in issues related to interface design and interactive media.

Instead of introducing students to heavy doses of software and code, the assignment was intended to get students to think critically about how a user can interact with historical content in a game format.

The project was introduced through a computer science professor teaching a mobile device programming course. He had already proposed the idea that his students would create a coverlet-making application on the Android platform, but was concerned that his students would not be focused on issues related to user interface. I offered that not only would my students be able to come up with some smart designs, they would also be able to creatively / effectively communicate the concepts to his students, historical organizations and university museum.

Woven Coverlet. Courtesy of Historic Huguenot Street.

Interacting with Local History: A Mobile App for the 19th Century
Amy Papaelias | Assistant Professor of Graphic Design and Foundation | State University of New York at New Paltz
UCDA Design Education Summit 2011

Research + Ideation:

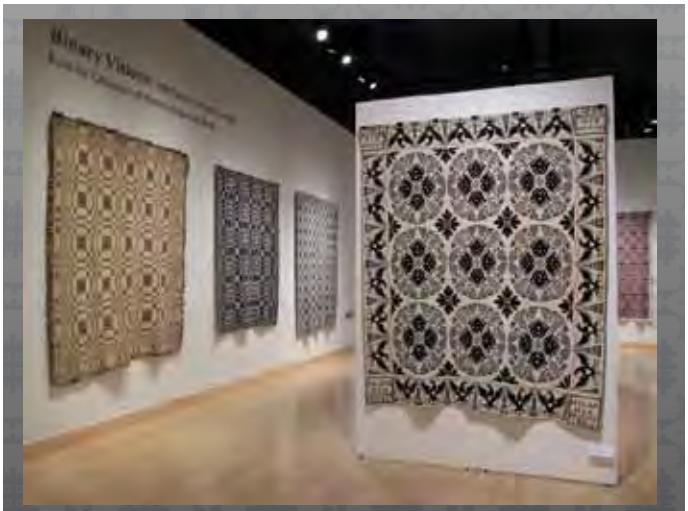
For the first phase of the project, the class was invited to take a guided tour of the exhibition, "Binary Visions: 19th Century Woven Coverlets from the Collection of Historic Huguenot Street" at the Samuel Dorsky Museum of Art, located on the SUNY New Paltz campus.

The exhibition featured coverlets woven from cotton and wool in small factories in the mid-Hudson Valley during the first half of the 19th century.

The coverlets in the exhibition all originate from the collections at Historic Huguenot Street, a National Historic Landmark District featuring houses dating to the early 1700s.

Students spent time studying the patterns and forms found in the coverlet designs. In addition to studying the formal qualities, students also investigated how coverlets were originally used and displayed, as well as the manufacturing processes used to produce them.

Exhibited in the museum show, the pattern cards from the Jacquard-type loom c. 1930. A mechanical loom invented in 1801 that uses a punch card system. The Jacquard loom simplified the manufacturing process of textiles. The Jacquard loom has special significance to the history of computer technologies as it is the first system to employ the idea of the punch card system, a precursor to the early days of computer programming.



Installation photograph of "Binary Visions: 19th-Century Woven Coverlets from the Collection of Historic Huguenot Street". Courtesy of the Samuel Dorsky Museum of Art.

Installation photograph of "Binary Visions: 19th-Century Woven Coverlets from the Collection of Historic Huguenot Street". Courtesy of the Samuel Dorsky Museum of Art.

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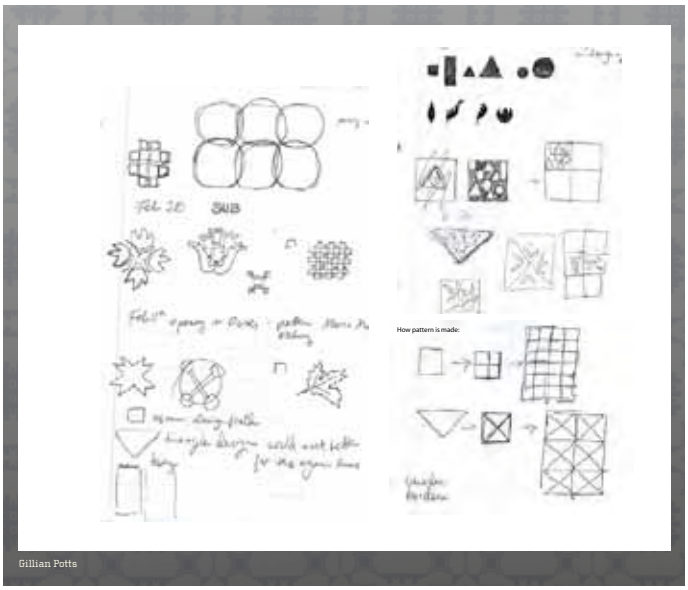
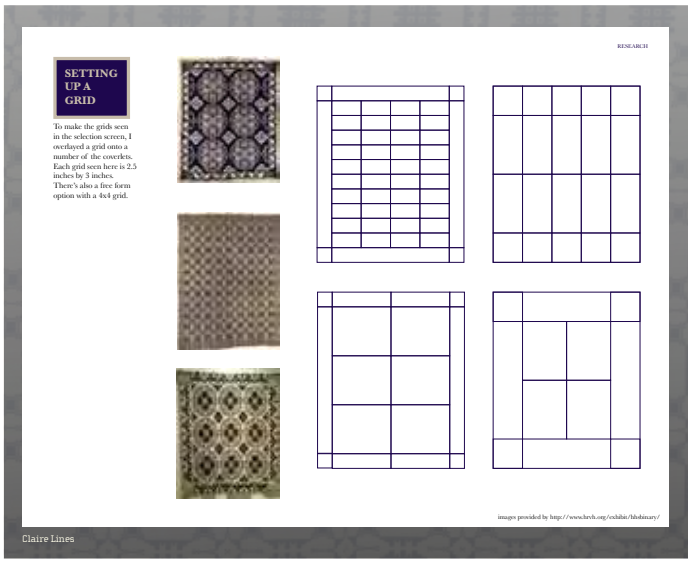
Shown here are ideation sketches drawn during the exhibition tour as well as a simple analysis of the coverlet grid structures found in the exhibition. Students studied the geometric and ornamental patterns and forms and noticed the parallels to pixel-based design.

In addition to research about the coverlet designs, students also looked at Android apps and games with similar functionality and relevant interface designs, as well as the Android User Interface Guidelines.



Gillian Potts



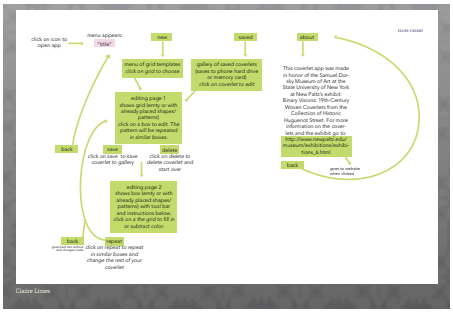
Claire Lines

Interacting with Local History: A Mobile App for the 19th Century
Amy Papaelias | Assistant Professor of Graphic Design and Foundation | State University of New York at New Paltz
UCDA Design Education Summit 2011

Wireframing

Wireframing provided students the opportunity to flesh out their ideas and to more deeply understand how the user would "move" through the game. The wireframing process began with creating written flowcharts, followed by hand drawn storyboards. This step proved to be vital as it pointed out areas where the concept might be too complex or confusing to the user. Shown here are several examples of different students' flowcharts and wireframes.

During this phase, several computer science students visited our class to see what the students were working on. Although in the early stages, it was an important for the students to be able to communicate their ideas to an audience outside of their peers in the class.



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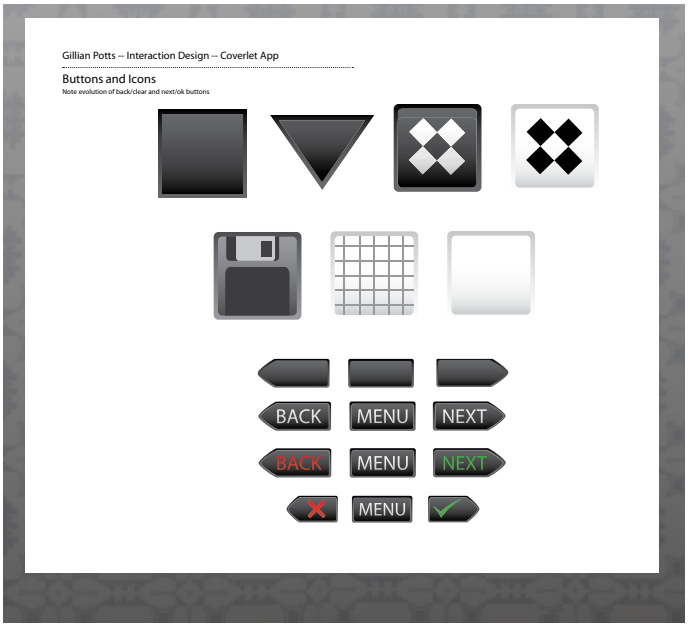
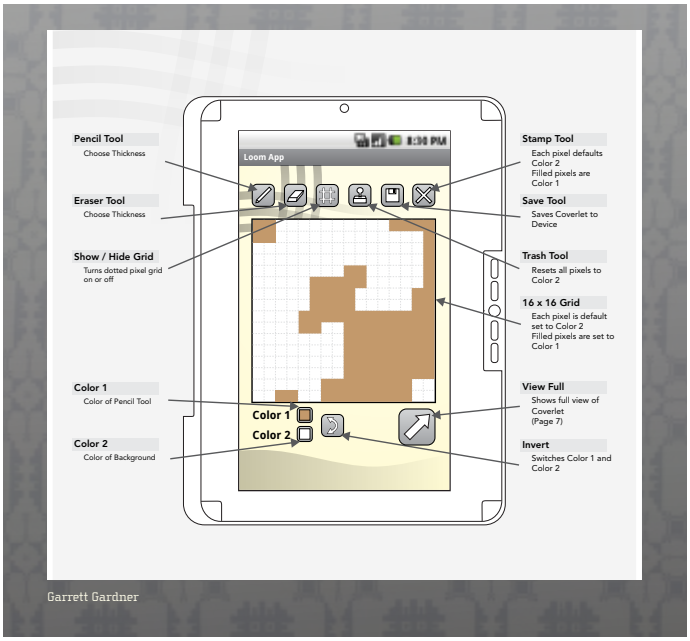
Interface + Icons

Students developed their own user interface designs, including custom buttons and graphics. During this phase, students were asked to document their experience with an interface they use everyday --- ie, a microwave, car stereo, remote control --- and post their writings to the course blog. This simple activity reminded students of the importance of a well designed interface that provides intuitive visual cues for the user.





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Final Concepts

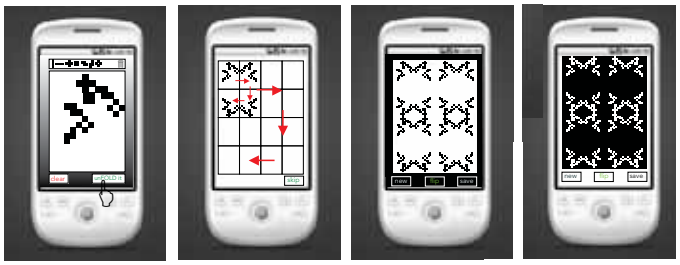
The final stage consisted of refined storyboards that communicated the app's concept. Shown here are some examples of the students' final designs.

In Gillian's design (top), the user begins by selecting from a palette of shapes to create a design which is then repeated to form the coverlet.

In HIllary's application (second from top), the user is given a selection of simple grids and a variety of stamps that, when selected, will "snap" to the points on the grid. The user can then select different grids to determine how the pattern will repeat.

Anna (second from bottom) was inspired by the idea of "unfolding" a coverlet to discover its pattern. Once the user has created their design, they can then watch their coverlet pattern unfold.

Zak's application (bottom) brings a 21st century twist on the idea of coverlet pattern design through randomization. In this application, the user selects from an existing library of simple shapes and forms (found in the original coverlet designs) and the application will then generates a random pattern based on those selections. If the user isn't satisfied with the design, they can simply choose to re-generate another pattern using the same forms.



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The Results

Each student created a final PDF presentation documenting their research, ideation, and concept development. The final presentation also included a clever / relevant name for their app, such as: *Finger Loom, Loomer, MyMobileLoom, Loominator*, and *Warp & Weft* (inspired by the names of the interlocking vertical / horizontal threads in weaving).

The presentations were then sent to both the computer science professor and the coverlet exhibition curator. Based on the quality of these presentations, students were invited to present their work at a public talk on the exhibition, which included a local weaving historian and the curators of the exhibition.

From the positive feedback received at the public presentation, the project was then featured in the Spring 2011 newsletter of Historic Huguenot Street.

A student in the course was also able to secure a summer internship with Historic Huguenot Street, the local organization that provided the coverlets for the museum exhibition.

Progress with Computer Science students working on application development continues. Although these students did not utilize any specific design suggestions from my class, I believe it was a successful partnership in that there is now more communication and collaboration potential between the Computer Science and Graphic Design programs.

VOLUME 10
NUMBER 1
SPRING 2011

ON HUGUENOT STREET
The Newsletter of Historic Huguenot Street

COVERLETS INSPIRE STUDENTS TO CREATE SMARTPHONE APPS

Binary Visions: 19th Century Woven Coverlets from the Collection of Historic Huguenot Street, the exhibit which closed in mid March, was a great success.

"Fingerloom" app design created by SUNY New Paltz student Hilary Lindeman

One of the benefits of collaborating with the Samuel Dorsky Museum of Art to present *Binary Visions* was that the exhibit was viewed by many students. The Dorsky Museum is located on the campus of the State University of New York at New Paltz.

At the suggestion of Dorsky Curator Brian Wallace, who co-curated the event with our own Leslie LeFevre-Stratton, two very different programs came together to develop a 21st century twist on our historic coverlets – applications (also known as apps) for Android smartphones. On the design end, graphic design students enrolled in Assistant Professor Amy Papaelias' Interaction Design class were challenged to create a mobile app that would allow users to create their own coverlet designs. Students were encouraged to consider the original coverlet manufacturing process and how principles of pattern and repetition could shape the functionality and user interface of the app. One of these was Hilary Lindeman's Fingerloom (at left). The idea is that the user can "build" their own coverlet.

The results of this project were then given to the Computer Science Department. Under the direction of Department Chair Andy Pletch, students used these designs as visual suggestions or a template for developing applications for Android mobile devices. The resulting app is now in beta version awaiting further refinement.

Of the project, Amy Papaelias says, "It uncovered many parallels between the processes engaged by design students in the development of the mobile application and the 19th century coverlet designers' and weavers' processes for the intricate coverlet patterns."

Once completed, we will make the app available to those who would like to create their own 21st century "coverlet."

INSIDE STORIES

Historic Huguenot Street is a National Historic Landmark District
18 Broadhead Avenue
New Paltz, New York 12561-1403
845.255.1660 or 1889
www.huguenotstreet.org

On Huguenot Street is a Bi-Annual Publication. Richard Heyl de Ortiz, Editor. Jan Melchior, Designer.

Interacting with Local History: A Mobile App for the 19th Century
Amy Papaelias | Assistant Professor of Graphic Design and Foundation | State University of New York at New Paltz
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Conclusion

Shown here are examples of the original coverlets and the designs generated by the students' apps.

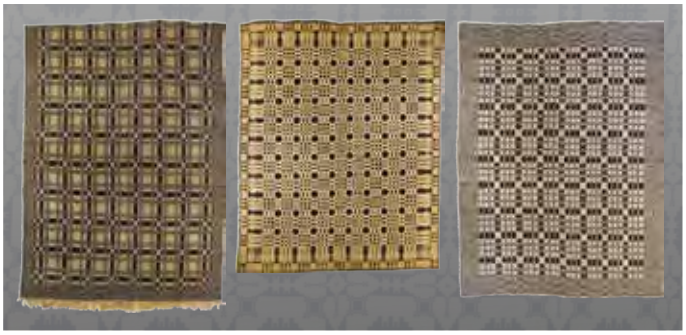
The project proved to be a successful introduction to the course subject matter. By focusing on the concept development and not on the technical / software / programming, students became familiar with issues related to interaction design (interface, usability, etc.) and were able to apply this knowledge to future studio projects.

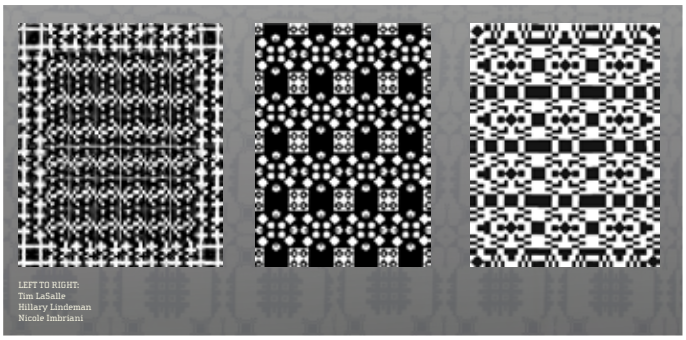
In addition, students were able to critically engage 21st century and 19th design technologies with local history. By working with computer science students, local historical organizations and the university museum, students became involved in a truly interactive experience.

> *"The word "binary" refers to the two threading directions on the loom and to the basic over-and-under manipulation of these threads by the weaver. Binary also refers to the fundamental structure of the digital technologies that enable and channel so much of today's visual communication and creativity. This exhibition outlines a two-century-old story of industry and invention, patterning and appropriation, and collaboration and entrepreneurship. It is intended to prompt reflection on, and further research into, these subjects."*
>
> — Leslie Lefevre, Curator of Collections, Historic Huguenot Street, and Brian Wallace, Curator, Dorsky Museum

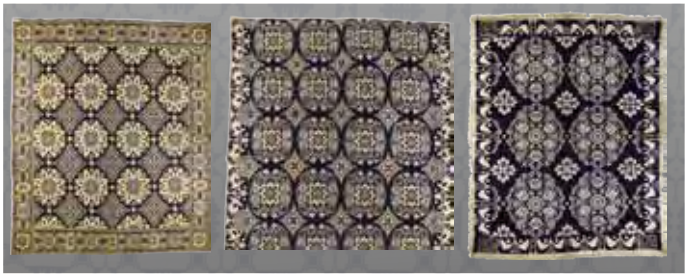
For more information about the "Binary Visions" exhibition, visit: http://www.hrvh.org/exhibit/hhsbinary/

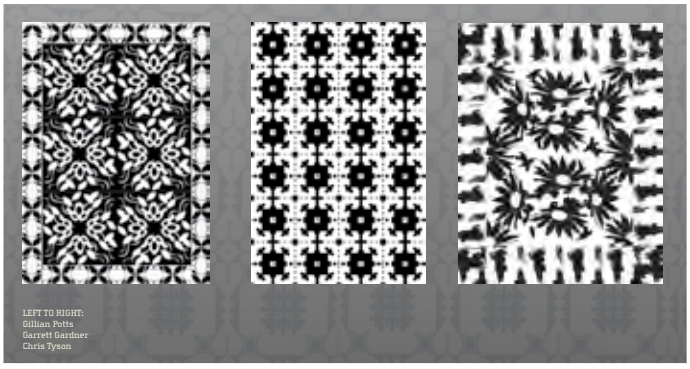
All photos of coverlets and the exhibition are courtesy Historic Huguenot Street and the Dorsky Museum.





LEFT TO RIGHT:
Tim LaSalle
Hillary Lindeman
Nicole Imbriani





LEFT TO RIGHT:
Gillian Potts
Garrett Gardner
Chris Tyson

Interacting with Local History: A Mobile App for the 19th Century
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Blake Coglianese
Assistant Professor of Graphic Design + Digital Media
University of North Florida

There's a project for that.

In the not so distant past, a successful design curriculum was composed of courses deep-rooted in developing print-oriented designers. As the needs of the industry have changed, the role of the graphic designer has evolved. Design schools are reacting by introducing digital media coursework into the curriculum. Once, an understanding of design principles, a good eye for type and the knowledge of a handful of software applications were enough. Student's now must become user-experience designers, internet architects and technological wizards. These aren't the latest features found in any one software application, but skills and requirements vital in many positions available to recent graduates as entry-level graphic designers. For many, this additional knowledge base is not easy to master, nor is it necessarily manageable in current curricula.

One emerging opportunity is smart phone and tablet application design and development. While the technical requirements to build an application may be too daunting a task for most right-brained visual thinkers, the user-interface, screen development and branding is a beneficial exercise which can result in an impressive designed system. This paper examines one pedagogic approach to incorporating mobile application design into a graphic design and digital media curriculum. When building non-working models, is it possible for design students to learn about interface design? Can technical requirements be reduced in order to produce a flawless prototype with a focus on the user experience? The objective of this project was to introduce students to a new medium, and illustrate the vast number of opportunities available to design students without adding another overwhelmingly demanding technical requirement.

If you spend time reviewing job descriptions and requirements for entry-level graphic design and/or digital media positions you will note the ever growing list of software and technical requirements desired to secure that opportunity. Repeatedly, students are reminded that mastery of the tool is what's important. It is important to note that most job listings that were reviewed did include design related and user-experience skills in their description, however they never appeared to be as important.

Select job requirements sourced from entry-level graphic and web design positions found on web sites such as www.aiga.org, www.coroflot.com and www.krop.com.

Intermediate to advanced knowledge of Photoshop and Illustrator. * Must know HTML, CSS and web standards. If you don't know what HTML5 is you probably shouldn't apply. * We don't expect you to have mastered the Adobe Creative Suite, but you need to be at least somewhat familiar with using these programs: Photoshop, Illustrator, InDesign, Acrobat * Understanding of HTML, CSS, Javascript * Knowledge of current web standards & browser/platform compatibility issues * Intimate knowledge of Adobe CS Suite applications * Expert knowledge of Adobe Creative Suite - Fireworks, Photoshop, Illustrator, InDesign, Flash, etc. * A solid understanding of HTML and CSS (including cross-browser compatibility) and the ability to hand code a mockup with standards compliant, semantic code. * Strong working knowledge of WordPress customization and theming. You don't need to be a developer, but you should understand the WordPress theme architecture * Experience building ad creative in Flash Actionscript a plus * Basic pre-press experience (words like pre-flight and press check should mean something to you) with experience designing to press specs.

However as Jon Kolko points out, "This tool centeredness seems to indicate that a design problem can be fixed by simply providing the right set of skills. In fact, the process of design requires a rigorous methodology combined with a broad set of skills and a tremendous amount of passion." (Kolko, 2011, p.16)[1]

While most industry professionals would agree that these skills are most important to possess as a designer, typically job descriptions tend to focus on the tools and technology.

Creativity and strong conceptual problem solving * Design visually compelling and award winning graphic interface solutions * Employ visual and user-centered design principles to create delightful experiences * Strong understanding of interaction design, typography, and color theory in creating motivating online communications * Must be extremely detail-oriented, and be able to think strategically about solutions * Design web pages, interfaces and assets for consumer-focused web sites and web applications. * Produce innovative, engaging, and effective designs that meet technical requirements, user needs, and company goals. * Lead the design process using wireframes and create rapid prototypes and mock-ups to validate design concepts. * Design visually attractive assets, interfaces, and web pages based on principles of design and usability * Proactively look for ways to evolve and enhance the user experience through intelligent design solutions and new user interactions * Strong typographic skills * Great understanding and use of design principles (color theory, layout, etc.) * Knowledge of best practices as applied to web design, information design and usability.

[1] Kolko, John (2011). *Thoughts on Interaction Design*. Burlington, MA:Morgan Kaufmann.

In the advanced web design class, I was beginning to notice a decline in creativity. After reviewing the curricula, I attributed the change to the increase in technical topics I was attempting to cover during the semester. "Assessment defines what students regard as important, how they spend their time and how they come to see themselves as students and then as graduates." (Brown, Bull & Pendleburry, 1997, p. 7.)[2] If students think this way in the classroom, I would assume they would approach their first job search with a comparable technique.

Similar to the online job postings I reviewed, my course was reinforcing the importance of technology over design. With this new knowledge I developed a class project that would place an emphasis on the skills found above and seek to bring critical thinking back into what is commonly considered a technology intensive course. I was concerned that students would have a difficult time switching gears, but I felt it was important that this class project aid in developing a more empathetic designer. In order to succeed, students would need to consider more than the final visuals and the underlying technology. Organizing and understanding the interaction between the application and the potential user would be the priority. The new project would be to design a mobile phone application.

REFOCUS OBJECTIVES

- Develop a strong concept.
- Have students relate to their intended audience and emphasize the user-experience.
- Step back and examine: what they were creating, and why they were creating.

WHY AN iPHONE APP?

As an alternative to designing another web site I concluded that exploring a new medium such as mobile apps would help students examine the role of digital media from a fresh perspective. In my opinion, one of the issues with teaching a class with a strong focus on learning technology is that students are consumed with trying to make their project functional. In this instance students did not have the necessary skills to build a working model of their application, which meant it was impossible to agonize over limitations and technical problems.

PROJECT DESCRIPTION

The following paragraph is an excerpt from the project sheet.

Design a new iPhone app. Everyone always says, "I wish there was an app that did…" so here's your chance. -or- Redesign an existing iPhone app. There's an iphone app out there that you use but it has it's issues. For example: confusing or poor user- interface, visually unappealing, does too much, does too little, etc… If you decide to redesign, you are still required to create a new brand. This shouldn't be a simple re-skinning of the UI.

---

[2] Brown, G., Bull, J., & Pendlebury, M. (1997). *Assessing student learning in higher education*. NY: Routledge.

PROJECT REQUIREMENTS

The project was designed to be a group project. Students were allowed to put together their own group based on their own perceived needs, and it was suggested that each group work with students that had complementary skill sets. The groups were required to collaborate on the initial concepts, but after the ideas were approved tasks could be divided amongst individual team members. Each team then designed and built a system made up of multiple components.

Project components

- Name the application.
- Design a logo for the application.
- Create paper prototypes to illustrate screen flow and information architecture. *(The prototypes were then used to assist in basic user-interaction testing.)*
- Design the user interface and demonstrate functionality of the application
- Build a working prototype of the web site which would be used to market the application. *(I did find it necessary to include technical specifications for this particular component. Each web site had to be built using html5 and css3 standards and the site needed to incorporate responsive design techniques.)*
- As a group, present the final application and walk-through describing its use and how the potential user would interact with the application.

WHY PAPER PROTOTYPES?

"Paper prototyping is fast. Paper prototyping can be done on the spot. Sure, I could always produce an electronic version using whatever tool; but a paper prototype is fast, simple and usually non-distracting—it lends its focus on the interaction being examined."

—Michael Poulter, Sr. Interaction Designer at Oracle

"Paper prototyping encourages iteration…and puts fewer assumed constraints on a design. So, as an early design tool, I think that paper prototyping as well as sketching continue to be useful tools."

— Dieter Zirkler, Lead Program Manager at Microsoft

More comments discussing the benefits of paper prototyping can be found on www.linkedin.com, in the Interaction Design Association (IXDA) group. Rohitashwa, Jain. "Paper prototype, do we still need this?." Linked In, 06 May 2011. Web. 15 May 2011.

Example of paper prototype for Transit Choice application.

CHALLENGES

This is the second time I've assigned this project, the first time was in Spring 2010 and most recently the Spring 2011 semester and after reviewing the process, a number of concerns surfaced.

1. I assumed more students owned iPhones/iPads/other mobile devices. In both classes, less than 30% of the class owned a smart device.
   Which resulted in:
   - more time spent discussing basic functionality of the iPhone interface.
   - students and I hovering around the few smart phones available to us in class.
2. At the start of the project students approached application design in the same way they would begin to design and build a web site. This is not out of the ordinary, this was a brand new medium and most students in class considered a web site visually similar.
   Which resulted in:
   - students simply modifying their designs to fit a smaller screen.

- students organizing content and approaching functionality from a personal computer centric point of view.
- first round application concepts that were functionally and visually over-complicated.

When building non-working models, is it possible for design students to learn about interface design?
The challenge wasn't necessarily the design, but the interaction between the interface and the potential application's user. Through the use of low-fidelity wireframes and paper prototypes the student's were able to complete basic user-testing methods and uncover potential usability issues.

Can technical requirements be minimized in order to facilitate the production of a model prototype with a focus on user experience?
Students were not instructed on how to build a working iPhone application. This was done for a number of reasons, first the necessary knowledge needed to complete a working application was out of scope for the type of class. Second, the schedule for this project did not allow time to examine iPhone programming, but most importantly the goals for the project did not align with a focus on technical development. In an effort to create an engaging concept and a well-conceived user-experience each student group was instructed to use the time typically reserved at the end of a project for technical production, and utilize the time at the start to emphasize the importance of research, concepting and planning.

ENCOURAGING OUTCOMES
By limiting the technical demands needed to complete this project students were able to devote more time and energy creating an engaging concept and a well-conceived user experience. This focus also lead to a greater visual consistency between all visual components in the system.

When looking at the group dynamic it was interesting to see how they prioritized tasks and how each member responded to the project. Most groups were made up of three students, and systematically each student took on the role of building out one component in the system. Students were encouraged to build teams and split responsibilities based on their own strengths. The only requirement was that the group collaborate on the initial concept and work together to solidify the idea and overall functionality.

As I observed the groups working together, I noticed similarities in both attitude and level of involvement in the project. For example, students that accepted the role of lead application designer had a tendency to be the group's leader and worked as the art director making sure all components were visually consistent. They also had a tendency to be the biggest advocate for the initial concept.

The more technically inclined student typically took the role of lead web designer, and in some cases it wasn't necessarily the most technically inclined but the student most interested in expanding their front-end development skills. The student who was least interested in web design and digital media became the

logo designer for the project and lead the design for the final presentation. These students were the self-proclaimed “print designers”.

As the class completed the project it was refreshing to see their full attention placed on the user-experience. Rarely did we discuss how the final application would be built or the core technologies relating to production of such an app. Instead, student inquiry revolved around the interactive nature of the medium and how it impacted the audience. This would seem to indicate the students took an empathetic approach to their design solutions focusing not on technology or decorative wallpaper but the user-experience.

GROUP EXAMPLES

BRB, team members: Kourntney Gabik and Kimberly Koenig

Dialog, team members: Corey Kolb, Christina Roberts and Joel Schmidt

Home Grown, team members: Barbara Georges, Leila Nguyen and Summer Wood

Transit Choice, team members: Brent Baughman, Lance Drake and Theresa Lopez

Community Alert, team members: Greg Ausum and Andy Gattis

Teaching Sustainable Entrepreneurship to Design and Art Students

Joseph Coates
University of Maryland,
Baltimore County

Abstract

With few exceptions, there is little time devoted during undergraduate or graduate study to discuss how a designer or artist can start a business - for profit or non profit - from scratch. Yet most designers and artists are entrepreneurs by nature or find themselves at some point to be small business owners. The painter, photographer, or sculpture may show in a gallery system or a graphic designer, architect, or fashion designer will be on her own with clients. Even independent film makers are small business owners if they realize it or not. (I'll leave out crafts areas ceramics, wood, glass, etc. for brevity.)

Design students in particular can often find jobs as employees with other designers or as part of a design department at a company or organization. Often the first job is as an in house designer. But many new alumni freelance and then open up shop. In house designers also often end up leaving to be on their own. Also not uncommon is the designer who is laid off and must work as an independent.

After design and art schools teach foundation courses, the required liberal arts and other science classes, etc.; electives, and completing a sequence of ever growing required major courses, there is not much time to cover entrepreneurship.

Yet, this idea of being individually creative and either selling or giving your work to others is the very core of design and art making. But we don't typically cover it as part of any curriculum in any design or art school.

This presentation will look at existing programs that do offer entrepreneurship seminars to design and art students, present the differences, offer advice on what should be covered, resources for faculty who teach such courses, look at the importance of sustainable business practices, and generally give an overview of the process toward teaching entrepreneurship and sustainable business practices to design and art students.

Human-centered Design: Helping Educators Teach Design Responsibility and Ethical Practice

Ivana Savic
University of Minnesota Duluth

Abstract

Planning and creating a responsible or ethical design is a challenge for any designer, but especially those who are just starting out in the practice. Recently, there has been more pressure from the market, clients, and consumers to create more ethically sound products and messages. At this time, much of design ethics relies on personal opinions, feelings and moral, which creates an unprofessional aura around design. In order for design to be treated as a serious discipline, such as architecture and engineering, and in order for designers to be perceived as more then just a link between clients and consumers, graphic design students must be educated about ethical practice. While a course dedicated to this topic only is not a reality for most design programs, there is a necessity for a teaching tool which would help design educators teach ethical issues and responsible design practices.

The purpose of this study was to create a teaching tool through the use of human-centered design methods. Specifically, the research process involved 80 undergraduate students and had several stages. After the preliminary background research, the target audience was tested in order to determine their knowledge of the topic and define the level of information the final product needed. Throughout the process, several prototypes were developed and tested with the audience, and later refined based on the feedback from the sessions. In addition, the value of each research stage and information gathering session was analyzed for its necessity and data quality. The final result of this iterative design process is a set of cards which can be used as a part of the learning process in the classroom. The cards give tangibility to the topic, but they leave flexibility for an instructor to incorporate them into different assignments, homework, or group activities.

National UCDA Design Education Summit
The State of Design Education
May 26-27, 2011
Jersey City, New Jersey

Aaron Scott
Assistant Professor of Design
Southern Illinois University Carbondale, IL

Utilization of designscape ecosystems: *a collaborative project approach that allows a holistic understanding of the stake holders involved in the educational innovation process.*

Keywords: collaboration; information graphics; innovation; design research

Abstract
Design education has struggled with the application and assessment of collaborative projects. This paper will address how the creation of designscape ecosystems will allow public universities to adapt through interdisciplinary clusters in order to better benefit the institution, communities, and campus intellectual and knowledge enhancement partners. The designscape map, an information graphic that documents the resources and parties involved, is used to bridge disciplines that work together in order to clarify and enhance partnerships for innovation and knowledge transmission; sharing the design process and application.

Proposed are methods to aid individuals in working outside of their departmental silos and introduce metrics that reward a new generation of innovative multidiscipline thinking. This paper explores the roles of each area and provides suggestions for how to remove the barriers of entry; it also explains the current state of process and application of these methods.

In addition, this paper focuses on exploration, re-definition, and creation of a designscape comprised of interdisciplinary clusters and a group of partners who will collaborate to expand innovation from technological and entrepreneurship perspectives. This allows the application of concepts to be applied to a variety of markets. Successful integration of collaboration is contingent upon the creation of a setting where sound knowledge about how to innovate is shared and the creative entrepreneurial spirit is fostered. The key is the establishment of a place where researchers, students, designers, engineers, and business development specialists can freely discuss their ideas, discover additional tools, create applicable products, and ultimately afford all parties positive results.

Aaron Scott
Southern Illinois University Carbondale, IL

Utilization of designscape ecosystems: *a collaborative project approach that allows a holistic understanding of the stake holders involved in the educational innovation process.*

The development of designscape ecosystems came about during my work with the Southern Illinois University Carbondale (SIUC) Center for Innovation and discussion with colleagues from departments including design, business, marketing, engineering, and technology transfer. Early in the process of understanding SIUC's model for innovation, graphics began to be used by group members as vehicles to enhance the communication of their ideas. These began simple and as new elements emerged the graphics were refined to incorporate the information. This resulted in the graphics become more complex and the visuals better illustrating a holistic macro understanding. These graphics evolved into the creation of designscape ecosystem maps.

In this context, the ecosystem is described as the environments, implicit or spatially defined regions that contain the content being evaluated or observed. It can include the individuals, disciplines, resources, facilities, and general interaction of any and all of these afore mentioned areas. Analysis of the parties and participates is required in order to identifies how they affect each other. The ecosystem allows a view of the entire system, not only the simple, but also complex components. It's a tool used to view the big picture of the design/innovation process and how all the components fit together. When it is graphically illustrated, in its widest most holistic view of factors, it forms the designscape.

The designscape contains the units that create the visualization of the ecosystem; it's an abstract map that illustrates the features and elements that lie within the areas. For example it may show how research generated intellectual property moves through campus. This visualization can illuminate concept plans and opportunities, illustrate pathways of interaction, shared resources, entry points, and other required features. The designscape ecosystem is an information graphic similar to a datascape, datanet, or interaction web, with the exception that it requires both qualitative and quantitative sources of information and an in-depth understanding of the parties involved in order to create the visual elements. It illustrates how specific parties interact with each other in the environment, and is used to interpret and plan for foreseeable needs. The designscape map is the final visual outcome that documents the ecosystem. It is intended to be used as an element enabling better lines of

communication and understanding. This visual bridges disciplines in order to clarify and enhance partnerships for innovation and knowledge transmission. Thereby sharing the creative process and opening the doors for applicable collaborative ventures. When individuals understand their roles they are more likely to properly execute them.

Understanding the roles of each individual and their departments within the innovation process has been an important part of the development of this concept. It was also important to understand the methods of interaction between all of the parties involved, including what the responsibility of the departments within the university. Once these patterns were understood the ideal ecosystems of interaction could be formed.

This process and the creation of the designscape ecosystem map follow a structured creation method that includes planning, the completion of required research, development and creation, early assessment, required levels of prototyping, actualization and assessment of implementation, and assessment of interaction. Experiences with the SIUC Center for Innovation will be used to further illustrate this model and to help explain this concept.

An interdisciplinary collaborative team comprised of individuals from marketing, business, engineering and design was formed in order to develop a proposal for a NSF Partnership for Innovation (PFI) grant. After conducting a preliminary assessment of campus resources, our team came to the conclusion that there was not a complete model for innovation on our campus. There were components, but they were not being linked. For example, research was being generated and then it would not be tested and developed further. We desired a platform that would allow research to move into and beyond the development stage, ultimately producing a final product or system. We completed a mapping of resources, expertise, and current process; and determined that we did not have the ability to take a concept from ideation to market. The general frame work and knowledge was there but we lacked a prototyping and proof of concept fabrication facility. At this point it was discussed that the success of the university innovation platforms lies in their ability to transfer research knowledge into usable applications. Our platform required two essential, and currently missing, components to complete the ecosystem: an “innovation-fabrication learning lab” (IFLL) and a consortium of partners who will collaborate in the lab to expand innovation from technological, innovation, and entrepreneurship perspectives. This new lab would bring together faculty and students from design (both industrial and

graphic), marketing, business, and engineering to solve real-world product development problems for industry.

During the initial planning of our proposed platform, it was observed with-in the few collaborative groups that were independently forming around campus, people naturally gravitated into multidisciplinary teams, and that interdisciplinary clusters were formed based upon need and members willingness to participate. It was also observed that once established the clusters are more selective and new members were invited based upon need and consideration of ability to aid in obtaining specific objectives. Harry West in the Oct 2007 Business Week magazine stated “In a new, multi-skilled approach, traditional design tactics are wedded to the needs of business. Schools should embrace the synergy.”

We began to look at existing models of innovation from the University of Illinois, Stanford, MIT, and others. They were studied for relevance and application methods they incorporated. The main issue with the application of many of the current platforms related to the difficulty and expense required to obtain and support the required components. Ours like many other smaller research institutions did not have the financial support to accomplish their levels of development, nor did we feel their scope was necessary to achieve success.

The points gained from the observations and literary reviews concluded that getting concepts moved from ideation to market viability is difficult, and that collaboration is challenging regardless of resources, but it is possible. There are many pitfalls and issues that can derail the process. One such issue is related to initial participation and interest. Currently, within the university models observed and participated in there was offered little incentive for individuals to interact outside their departments. This lack of incentive was resulting in a silo effect. "Inside higher education, it's hard to talk about a college's impact on the world's great problems without getting im-mersed in a conversation about institutional structure and faculty rewards. The silo mentality and viciousness of academic infighting in higher education are legendary. Discussions of innovation and how to attack big problems often bring up questions about how the college should be organized, whether the new program ought to report to a dean or the provost, or if the leader should be a center director or a department chair etc. Unfortunately, many of the traditional ways that institutions have tried to avoid a silo mentality do not work. The conventional responses are fundamentally flawed." (Thorp)

Thorp and Goldstein continued by listing the common ways used to escape the silo mentality. They suggested: creating permanent interdisciplinary structures on campus that would allow parties to collaborate, reorganizing existing units, and encourage temporary combinations as alternatives to permanent structures. They also suggested: focusing on the mission, not external rankings, focus on culture, not structure, and beware of the quick fixes.

We felt an approached to get individuals to move outside their silos was based upon the notion that if given an opportunity and shown the potential people would choose to interact with others outside their departments when there was a clear purpose beneficial to themselves and others. The concept utilized the designscape ecosystem maps to educate and aid in the decision making process to get others to participate, these maps were also used to help explain current and potential levels of interaction. The belief has been that the key to collaboration is to provide the parties involved relevant information and allow them to determine their own course of action. This is based upon the assumption that people will seek after their own best interest. This approach was one of the many attempted at SIUC during planning for the creation of the SIUC PFI ecosystem platform for translating university research into successful products, start-ups, and jobs. This model requires a new generation of innovative thinkers to bridge the gap between invention or concept into a commercially successful product and link research to design work taking place in the classroom where advanced students from all areas can collaborate to develop market feasible products for industry. Figure 1 is the chart used to determine the organization of the SIUC PFI platform.

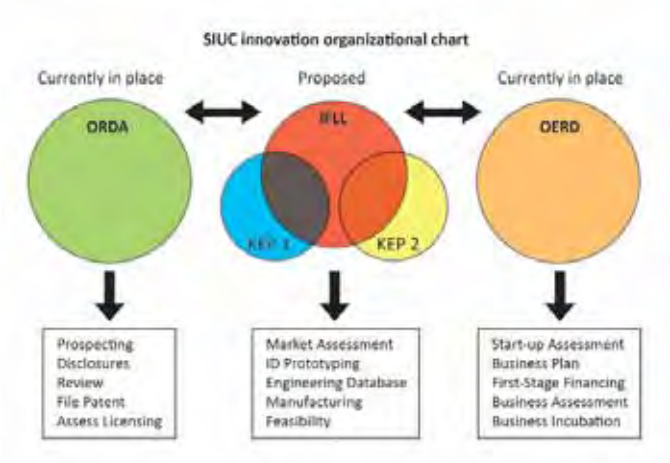

fig. 1 Organization chart

This early designscape graphic help pave the way for the more complex graphics that illustrated the ecosystem. It was used as part of the prototyping of the platform and allowed us to identify our roles and what would be required for platform success. Once the roles were established we turned our attention to understanding the implementation of our innovation process. Figure 2 is one of the graphics developed and used to illustrate how the creation of intellectual property could move through the innovation process.

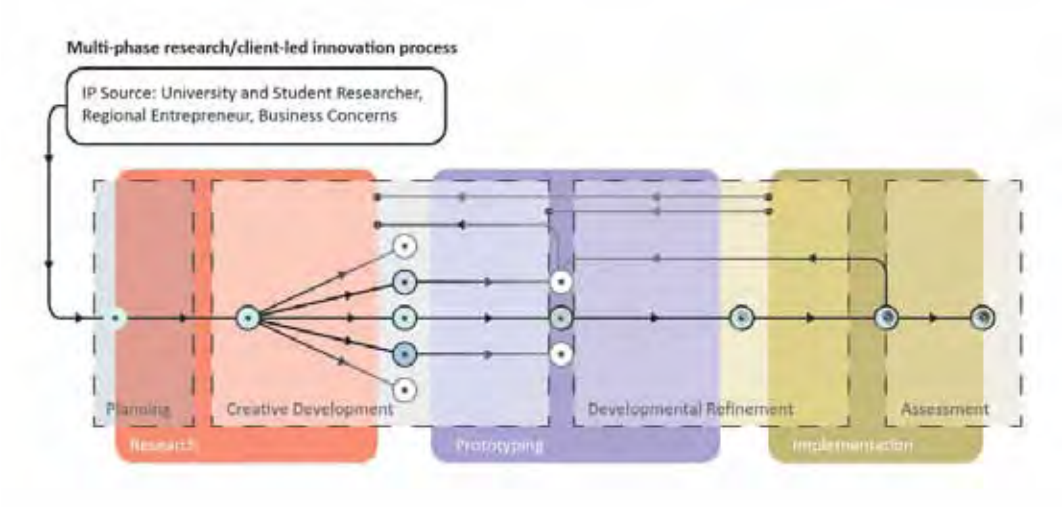

fig. 2 Innovation process example

The combination of these two graphics proved effective in getting individuals desirous to participate. Together they help communicate the process and allowed for a clearer understanding of potential areas for collaboration and interaction. Once this foundational understanding was established the designscape innovation ecosystems map was created. This is shown in figure 3. This information graphic is the combination of all the data and perceptions of how the various listed departments are currently and could potentially work with each other. This graphic was developed using 3D modeling software and allowed for interactive display when presented in group settings. The lines/layers are built on independent layers so graphic elements can be turned off or hidden in order to discuss and understand specific topics and points of interest. This graphic provided the holistic view of the entire ecosystem and the levels of interaction between all departments. It proved instrumental in helping people understand where they could benefit most and the areas for improvement. It allowed the senior personnel of the SIUC platform to come together to share their individual expertise, knowledge, and experience in innovation, research, technology, entrepreneurship, and/or economic development. Each currently works in a different area of the university and is in a position to not only serve as a role model for other

researchers and innovators at SIUC, but with the knowledge-enhancement partners and regional businesses as well. These personnel are the foundation of the innovation enterprise ecosystem and are critical to changing the culture of the University to embrace and integrate innovation throughout the organization. A key responsibility of the senior personnel is knowledge transfer and support of sustaining the innovation enterprise ecosystem for years to come.

In order to create these types of graphic one must begin by identifying the needs. Determine what are the objectives that should be accomplish and identify if there are projects currently in need of further development. We found that many people were waiting to be asked to participate. Collaboration must be a priority in order to more effectively utilize time. Once collaborative methods are established, graphics such as this can be used to more quickly development familiarity with work patterns.

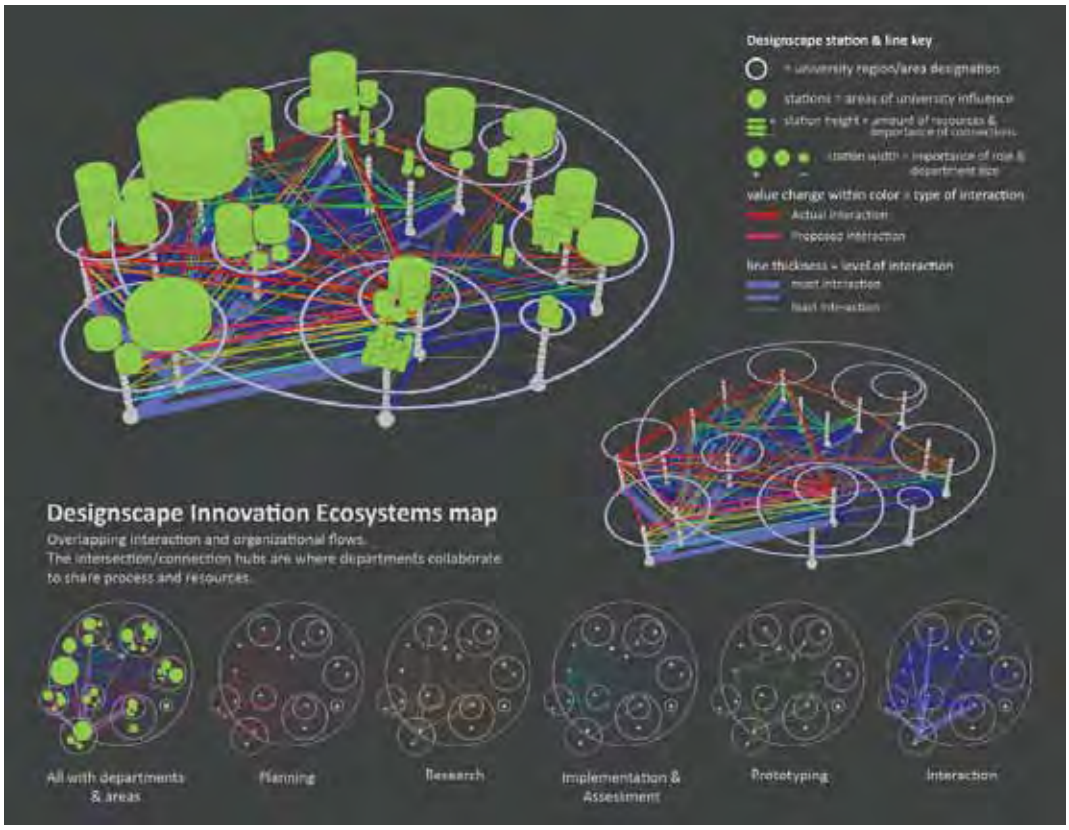

fig. 3 Designscape ecosystem map

Methods for assessment of the success for this type of collaborative project can include: program progress, process evaluation, satisfaction indicators, and impact. Program Progress is defined as the number of projects which have successfully moved through the project learning and design process, culminating in prototype development and enrollment as a pre-venture client with OERD. This can be evaluated via a comparison of planned vs. actual numbers. Process Evaluation is defined as the value of each program component to program clients/inventors. Satisfaction is defined as the fulfillment of expectations for each program component to program clients/inventors as well as to program partners. Impact is defined as immediate and long-term effects, both service and economic, of the program on the university's capability to develop products with strong market demand. Baseline data from the university's previous five fiscal years are used to assess impact of program at completion.

Metrics include: front-end process analysis, preliminary and direct technology and market assessment, economic viability, usability analysis, and user needs assessment. In addition, the satisfaction of the knowledge-enhancement small-business partners can be tracked in comparison with project data from their last five years of business services. Each of the four program evaluation and success measurements will be focused on providing data that can be used to improve the process and strengthen the economic impact of the ecosystem to the region. Data will be compared from the former model of each entity working alone in past years to the impact on the region because of the collaborative synergies that will exist with the ecosystem platform.

We found that individuals wouldn't participate solely based upon knowing the information and seeking after their best interest. They needed to have, and asked for an incentive. We have proposed that the incentive for inventors and researchers to submit concept proposals is the potential selection to work with the consortium team of experts for concept exploration, development, and refinement.

As part of its development, the IFLL will establish a data base of regional innovation and prototyping resources. The IFLL hub provides great time saving benefits as all information and resources will be found in one location. During the initial period these services, utilization of equipment, networking opportunities, and the access to team member will be provided at little or no charge. Innovation partners will have access to the data base, utilization of equipment, and the access to meet with team member to discuss other projects and needs. They will also be able to use the IFLL community for

further networking opportunities and connections. Everyone who applies will receive an initial marketing assessment and technology assessment.

This project is just the beginning of the collaborative projects that will be undertaken once the platform is in place and fully functional. Those who participate now will be considered early adopters and will be able to influence the direction of later projects in which they will have the possibility to establish methods for revenue sharing.

In conclusion, the utilization of designscape ecosystem maps help to facilitate interactions among regional university researchers, student researchers, small business concerns, local entrepreneurs, and team members. This level of collaboration can aid in circumventing many of the barriers and enable the creation of a shared space that will provide one-stop shopping in the complex process of translating innovations into commercially viable products.

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Design is One: Creating a Blended Graduate Curriculum

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Panel Abstract
The changing landscape of people's everyday interactions has blurred the lines between respected design fields giving designers new responsibilities to shape experiences. The skill sets required of graphic, interactive, and digital design are interrelated.

The School of Design at Rochester Institute of Technology has adopted a new strategy toward graduate design education. The panel will discuss the MFA Visual Communication Design program. The panelists will lead an open discussion on strategic curricular planning in creating a blended graduate program that embraces a new ideology to address changes occurring in the professional design field. Panelists will share the curriculum designed to achieve outcomes in critical thinking, global interconnectedness, ethical reasoning, integrative literacy, and innovative and creative thinking.

The panel will address the following questions:
- How do you design a blended graduate curriculum integrating visual design and technology?
- What type of pedagogy is implemented to provide more curricular flexibility and a broader design experience for students?
- How does this new graduate curriculum expand students' experiential learning?
- What are the collective viewpoints of the experience?

"The MFA is the New MBA"—Literally

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UCDA National Design Summit: The State of Design Education
May 25-26, 2011

Abstract
Back in 2008 when I first read these words by Daniel Pink, "The MFA is the new MBA," I immediately understood the impact that this statement would have on the design profession and, in turn, on the future of design education. Three years later they have taken on a whole new meaning, as I am experiencing first hand in my graduate level teaching. For the past two quarters my students and I are utilizing the vaunted "case study" as a pedagogical tool, having dove head first into dozens of pages of data as well as numerous videos to ask new questions and seek innovation through designerly thinking means.

My intention with this paper/presentation is to discuss the increased use of case studies as a tool for design study. With an open mind I began a new road into the teaching of design thinking through the open case studies provided by the Yale School of Management (and the Design Observer). The use of case studies as a means of learning is, historically, something that was typically utilized by students of law and business, but not by designers. So it was with great trepidation (and intrigue) I began this 'experiment'. "What could be learned through the access to raw data and video interviews?", "What connections could we make in relation to design problem solving?", and, "What 'design' outcomes would come of this study?" were all questions that I had going into this endeavor. What I hope to share are some outcomes, successful and otherwise.

Introduction
Contemplating the future of the discipline of design and the education of future designers is something I am sure all design educators grapple with. The questions abound: technology?, concept?, form?, lead or follow industry? Depending on the level of study that you teach, and at what institute, these questions are easily answered, but for me, I am constantly vacillating back and forth in hope that I am giving my students the knowledge that they will need in a tumultuous job environment.

In the summer of 2008 I was introduced to the writing of Daniel Pink through his book *A Whole New Mind*. The content of this set off a firestorm of ideas for me in relation to the practice and the teaching of graphic design. This reading lead me to many others that summer which completely changed my notion of "graphic design". First off, I no longer term what I profess, graphic design, rather, I am more interested in teaching Design. "What is the difference one might as?", well, I think there is a significant difference and it starts with a less convergent mindset. Instead, I am interested in pushing my students to be much more divergent, or holistic, thinkers. Too often the term "graphic design" means making something look good to business leaders and while I am not devaluing aesthetics, I am trying to place a greater value on the visionary thinking process that designers can bring to the table; and what designers bring to the table is far and away more important that mere surface appearances.

"The MFA is the new MBA"

This brings me back to my original thesis: that the use of case studies in the teaching of design, (graphic or otherwise), is part of the future of design pedagogy as it leads to a much more designerly thinking outcome. Mr. Pink made the above statement early on in his book and along with this proclamation he maintains that the conceptual abilities of the designer (artist) is becoming more valuable to businesses. Where once the MBA was seen as the "must have" degree for those entering the business world, Pink states that the thought process possessed by designers will be more valuable to businesses of the future. (Pink, 54-55) This is something supported by noted management "guru" and author, Tom Peters, in his book entitled, *Design*. Both Peters and Pink, and others, call for business leaders to more openly embrace designerly thinking in order to propel their businesses into the future.

With this in mind I began to try and find ways to introduce these concepts to my students. I have become much more interested in cross-disciplinary groups of students as I have seen that this leads to a much more divergent exploration of design "problems". (There is another term I am not very fond of, but that is for another paper.) Along with this cross-disciplinary model I was also interested in students working together in groups, both large and small, to appreciate and value the concept of collaboration. Too many times we teach them to be individuals and while I think there is some value in this pedagogical position, most designers will be tasked to collaborate during their professional careers. Morten Hansen interestingly covers the multiple layers of collaboration, the how's, when's and why's, in his book *Collaboration*. I have utilized this writing to spot when student groups start to put up barriers that begin to break down the interactions within the group. Most of the time I have noted that students "hoard" their knowledge and fail to see that other disciplines offer insight to the specific design direction. This barrier can be worked through after a couple of brainstorming sessions where each party begins to show a trust in the other and that not all "good" ideas come from a specific person/discipline.

Putting it into practice

In the fall of 2010 I began to put together a group that would work together in the winter quarter of 2011. I had come across a case study developed by the Yale School of Management (YSM) and posted to the design blog, Change Observer (part of the Design Observer site). The study was on an Indian solar energy company, SELCO, who's main target market was the rural poor in the state of Karnataka. One of the biggest obstacles was finding a group of students from different disciplines to add to the class. With "collaboration" being on the tip of everyone's tongue, it was hard to believe that this would be such a difficult task, but it was. Having finally found 5 willing students we set off on our task of pouring through the data and videos put together by YSM. Our research did not end there; we began a much broader understanding of India, it's general culture, the cask system, employment, general business practices, energy consumption and distribution, marketing techniques, etc.. Primarily we worked together as a group of 5 but in reality there were 3 independent groups all working with different interests in mind.

As part of our research we reached out to SELCO and arranged a conference call to better help us understand the business model that they had developed. Each group put together a series of questions that pertained to their specific area of interest.

One group was interested in supplementing the SELCO line of clean energy sources, another was interested in increasing SELCO's marketing opportunities and to possibly expand their market beyond Karnataka, while the third group was interested in using the SELCO model to build a local Savannah business. After this initial conversation we maintained our connection to SELCO via e-mail throughout the quarter.

With each groups direction defined they set off to define their audience and understand the culture that they hoped to impact. Each group's process was unique, not only because their interests were so distinctive, but because of the fact that each designer tended to bring their own particular working methodology to the table. It was a great learning experience for each designer given the diversity of the groups overall background. No one had the same approach, and while this was difficult at first, it really added to the overall experience.

One student set up several charrettes. The first one was entitled "Think emotionally. Unite unexpectedly." She used this classroom experience not only to push the bounds of her design thinking and doing, but to explore her interests in teaching. The charrettes were utilized to explore her thoughts and ideas relating to the collaborative experience. She brought together both graduate and undergraduate level students from 4 different majors: Graphic Design, Design Management, Advertising Design, and Broadcast Design. These students came from the U.S., Honduras, Uganda, and India. She also was able to recruit an India native who works in SCAD admissions. It was this person who brought a good deal of insight from outside the design disciplines and assisted in a breakthrough direction.

Each group developed a series of presentations throughout the quarter, each showcasing their process and conceptual development. These included many different research methodologies such as: mind maps, sequencing diagrams, rough business plans and affinity diagrams. They were usually, but not exclusively, presented as digital slide presentations. These presentations were delivered formally three times throughout the quarter as well as roughly on a weekly basis.

And in the end...

Each student group developed very unique outcomes based on a similar starting point. As illustrated in the appendix Group A developed a working prototype for their hydrogen fuel cell stove which would work in relationship to the existing philosophies of SELCO. The cleaner cooking option would alleviate the need for the massive kerosene use and subsidy already in place in India. As was presented on the 26th one can see the working prototype here. (Appendix 1) Group B on the other hand, utilized the SELCO business model to propose a local food distribution business. In doing so, they branded and developed a business plan and have distributed it through the same creative commons license that Design Observer is utilizing. (Appendices 2–4) Group C (made up of a single student) was interested in looking at ways to increase the visibility of SELCO within India beyond their present state. She looked at the ways of marketing within India and abroad to develop a meaning system that could possibly assist SELCO in their next market exploration.

Taking it online

As I mentioned during my presentation, I was in the midst of finishing up the spring quarter where I had tasked my online graduate level Social Awareness group with a similar design exploration. This time I asked them to access the Mayo Clinic case study presented by Change Observer and the Yale School of Management. After a very rough beginning the students really embraced the idea of expanding their notion of design through design thinking models. One student wrote the following:

"Dear Prof. DiGioia,

Thank you so much for a very interesting and challenging quarter! I've enjoyed this class very much and genuinely feel that its (sic) changed the way I approach design and really thinking in general... Isn't that what they say a good law school is supposed to do? Change your thinking? ;)

I really appreciate all of your help, patience, insight and help this quarter! I hope you will stay in touch and hopefully I'll have you in another course in the future!

Really, thanks again its (sic) been an experience that has shaken me out of that questioning period of my role as a designer!

Thanks so much again for all the helpful feedback!"

Given the nature of the online environment, this class took much more work and development than an on ground experience would take. Here I needed to explain everything in a written announcement and usually had to follow that up with a video post or a book reference. What usually can be explained in a half-an-hour took much longer to write out and still, the students had questions. Once past midterm most were on board and understanding what I was looking for from them. The biggest issue that I had from them was the open nature of the design outcomes. They wanted me to tell them what to design. This is an impossibility given the fact that each student was in a different physical location and developing different research directions. They needed to let go of the usual design brief model and seek out the design "problems" based on their own research endeavors. This was quite a new experience for each of them but I am proud of their ability to see it through. Many of the students partnered with local health care providers to improve on such things as Dr – patient relationships, child obesity, cross-cultural understanding, and dealing with mental illness within rural communities. I have presented some of these outcomes in appendices 5–8.

In conclusion

These two experiences have lead me to believe that the use of case studies can be extremely valuable in expanding student understand of the possibilities of Design. To date I have only worked with graduate students, but I feel that with the right group, this could also yield very successful results on the undergraduate level. I have utilized the same thinking in my undergraduate classes but have not used a specific case study as a point of departure.

If one is interested in teaching a more design thinking pedagogy then using a case study is an outstanding place to begin. It will allow you to have a reliable research base to work from and expand upon. A suggestion that I would have if attempting this on the undergraduate level is: use the case study to develop an understanding of a business/organizational model and then project that on a local business/organization. This way the students can really "get on the ground" and do true to life contextual research to design their perceived outcomes. This will also allow the professor a very solid evaluative tool.

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Appendix 1

Appendix 2

Initial Question

How Can We Incentivize Local Food Consumption & Production?

Improving local food production and distribution models is key for environmental sustainability, community heath and a thriving, local agricultural industry.

How do we build a system of positive behavioral incentives that encourage local, healthy eating?

We need to create better incentives for smaller farms and sources of local food production at the local level.

(text via OPEN IDEO)

Appendix 3

The Model

In order for the business to not be overcome by the scope of this project we are proposing to work the progress of the business into a three tier system. Also the space between each system allows the business to address the validity and feasibility of the additions to system proposed by the second and third tier.

Appendix 4

The Business

Down south dinners needs the community to survive on many levels. Not only does it look for them to support and advertise their service but it also needs them to grow. The business needs to build trust from urban Savannah.

Appendix 5

View: Front Entrance

Addition of multilingual touch screen to help both English and non-english speaking visitors find their way

ACE | p 25

Appendix 6


Admisiones
Registrio
Ambultoria
Admissions
Registration
Outpatient
招生
注册
门诊病人
Admisiones
Registrio
Ambultoria
Admissions
Registration
Outpatient
招生
注册
门诊病人
ACE | p 30
View: Main Hallway
Establish a visual directional guides and create a multilingual color system that is easily recognizable. Have main access point in three main languages of English, Spanish and Chinese.

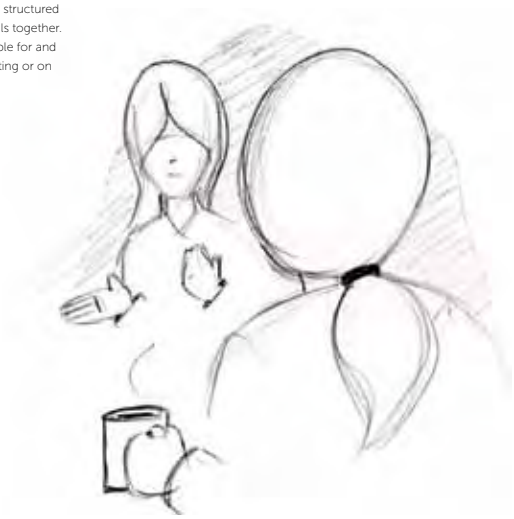
Appendix 7

SUPPORT GROUP

SUPPORT GROUP STORYBOARD

#4. Peer Interaction

Attendees will have time at the end of the meeting to mingle and interact with each other. As the group begins this time will be open free time for attendees to talk. This time may evolve into a more structured time for attendees to pair up and set goals together. Goals that they can hold each accountable for and report back on progress at the next meeting or on the Facebook group.



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Appendix 8

SUPPORT GROUP

SUPPORT GROUP ONLINE

Facebook group page

The Facebook group will be an online resource for patients between the on-site meetings. Participants will have the ability to interact with each other and submit questions to the ICA moderator who administers the page. Links, videos, and other resources will be available as well as the support group progresses.

SPECS: Facebook private group page.

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Things to come: the near future of design and design education

A paper for the UCDA design education summit 2011
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Every year, our graphic design students hold an event in downtown Chicago.
It's a coming-out party, where students display their work, meet with designers,
and make contacts that lead to their first jobs.
At the end of the evening, a 'designer' named Jason approached me.
He had spotted an old greybeard in the crowd (namely me),
and was going to have fun rattling him.

Jason's background was business, but he did web design.
He sourced creative commons graphics and WordPress templates, and modified them.
If he couldn't find what he wanted, he crowdsourced it.
Then he cobbled the whole lot together and resold it to his clients.
'Anything your students can do,' he explained 'I can get for a whole lot cheaper.
Why should I hire one of your students?'

Before I answered, I took a deep breath.
A couple months ago, a partner at motion graphics firm gave a talk at our school.
(Turn on your TV, and you'll see his trailers.) He confided
that his design firm was transitioning into an ad agency with in-house design capabilities.
Why? Ten years ago, when the firm was founded,
there were only a half dozen motion graphics design firms.
Today, there are a perhaps a thousand,
and competitors routinely do spec work that would cost him $100,000 to make.
In order to survive, his firm needs a radically different business plan.

Around the same time, an education designer spoke to our students.
(Help your kids with their homework, and you'll see his textbooks.) He confided
that his design firm was transitioning into a publisher with in-house design capabilities.
Why? Publishers pay considerably less for graphic design than they did ten years ago.
In order to survive, his firm needs a radically different business plan.

'Sounds like you're going into competition with your clients?' I queried.
This is always a risky strategy, but both firms felt it was their best shot. By one estimate,
the graphic design employment fell 25% between 2006 and 2009. [McIlroy]

In part, the economy dictated their business plans, but only in part.
Fundamental change happens in difficult economic times.
The great depression coincided with mechanized farming, hybrid crops, and urbanization.
Today, technology, media, and culture
that are precipitating fundamental changes in design.

The web is maturing

Graphic designers are like popular musicians.
For eighty years, both depended on print–
after all, printing records is a lot like printing books.
We both had a pretty good run,
and are now both experiencing serious disruption.

Recording musicians and graphic designers first appeared around the same time–
the underlying technologies matured in the 1920s.
Print, of course, had been around a long time,
but in that decade offset lithography, halftone screens, and hot type machines
improved to the point where images could be printed affordably.
And in 1922, William Addison Dwiggins coined the term 'graphic design'. [Drucker]

Today, the World Wide Web is maturing much like printing 90 years earlier.
As a design medium, it's a lot different from any before– lending itself to
social networking, blogging, mashups, memes, creative commons licensing,
and crowdsourcing.

Print is aging

The best measure of print design is paper sales.
Exact figures on are difficult to find– the market data is proprietary.
But a Google search reveals a steady trend [Answers.com, Deadtreeedition.blogspot].
Printing's high water mark came in 1999,
ironically due to advertising for dot.com ventures.
Printing sank sharply during the 2000 dot.bomb crash, and never recovered.
Instead it's a downhill roller-coaster.
There have been recoveries, but the rebounds never rose to the old heights.
And sales fell sharply again in 2008.
In the past couple of years, a number of major newspapers have declared bankruptcy,
and *Newsweek* sold for one dollar. Borders Books is also in Chapter 11.
Amazon.com sells more books of the Kindle than the paper kind.
Graduating design students will function in a radically different environment.
One change is based on the nature of digital media.

Digital media are generative

In the general sense, 'generation' refers
to how messages are produced, reproduced, replicated, or emulated. [McCarthy].
We can describe a medium as highly generative
when we can use it to produce messages quickly and efficiently.
According to this definition, writing is highly generative–
for example, Robert Louis Stevenson drafted *Dr. Jekyll and Mr. Hyde* in three days.
Filmmaking is much less generative.
A crew of dozens takes weeks or months to film a movie.

2

The second meaning of the term ‘generation’ refers to compositions
which are produced by computer programs.
In this sense, designers don’t directly create messages–
they write programs and the programs do the rest.

The Web is generative in both senses of the term.
One individual can create and publish a site
with a potential for circulation as great as that of any newspaper.
Famously, the Drudge Report first broke news
of the Clinton–Lewinsky scandal in 1998.
And thousands of web pages are generated from databases,
untouched by the hand of a designer. Amazon.com is a typical example.

Specialization is no longer special

Aldus Manitus is remembered today as a book and type designer.
In his own time, he was known as a scholar of the classics,
and his publishing had a major influence on Renaissance literature.
By the 1920s, graphic design had evolved into an separate specialization
largely due to the complexities of pre-press technology.
El Lissitzky and Làszlò Moholy-Nagy were masters in the darkroom,
but beyond the world of design their impact was limited.

Today, the tool kit is radically different.
Writers, designers, and programmers all sit hunched in front of computer screens.
The separation between these fields results from tradition and education,
not from tools and the skills required to master them.
Manitus would feel right at home.

Design is neither a craft nor a profession

The craft tradition in design is rooted in the Bauhaus.
This school was a product of the German educational system,
organized along the ideas of Frederick the Great.
Frederick envisioned an enlightened society divided into three strict classes.
The highest class was the intelligentsia,
a highly educated elite that provided leadership.
The lowest class was the peasantry whose primary responsibility was food production.
In between were the artisans and craftsmen
whose role was to realize the ideas of the intelligentsia.

The German educational system was structured around these class divisions.
On the highest level, the *Universität* educated the intelligentsia.
Until the twentieth century, study was limited to a few subjects
like theology, classics, philosophy, philology, medicine, and law.
Under that was a system of schools known as *Hochschulen*, providing solid backgrounds
in engineering, agriculture, accounting, and other technical disciplines.

3

This structure resulted in a strict separation between pure and applied knowledge, paralleling the distinctions between social classes. In order to fit within this model, the Bauhaus had to be founded as a *Hochschule*, with a strict emphasis on application. The German word *Formgebung* (literally form-giving) is a synonym for 'design'– implying that designers don't mess with messages.
One central belief of early Modernism–"that an artistic transformation of the human environment would, in itself effect a qualitative improvement of life" [Heskett, 104] arises from the technical school's emphasis on applied knowledge.

The difference between a craft and a profession is significant.
Professionals advise on issues above and beyond the knowledge of the client– ignore your doctor or lawyer at your own peril.
Craftsmen follow your direction– let your carpenter design your kitchen at your own peril.

Graphic design occupies an uncomfortable middle ground between craft and profession.
The guy who pumps out ads for the phone book practices a craft.
The designers that set up Obama's website are pros.
Picture a line with production designers at one end and strategists at the other.
Most of us fall somewhere in-between,
and coming changes will hit different designers differently.

Crowdsourcing will crowd some of us out
Larry Huston is Procter & Gamble's vice president of innovation and knowledge.
In a 2006 *Wired* article [Howe], he describes crowdsourcing as
'...bringing people in from outside and involving them
in this broadly creative, collaborative process.'

Since then, websites like crowdSPRING and 99designs have appeared.
Safe to say, most designers don't see crowdsourcing in quite the same light as Mr. Huston. Steven Heller blogs: 'It takes design a step or three down from being a profession to being a pure service.' [Heller]
Predictably. AIGA has not liberalized its position on spec work. [AIGA]

It's tempting to say that designers see crowdsourcing
the way chickens react to a hawk's shadow. Crowdsourcing, as Heller points out, often doesn't lead to æsthetically pleasing design, yet he maintains that 'whether [crowdsourcing] is good or bad for clients is irrelevant.'

Huh? When clients commission design work, return on investment is paramount.
ROI is something clients are in a much better position to judge than designers.
We don't have enough information to say whether crowdsouring is a good investment, but a simple, back of the envelope calculation tells us it's not great for designers.

4

Anna Nadler, a crowdsource designer, enters 20 contests a month and wins 3 or 4,
earning $200 to $1000 per win. [Business Wizard]
Assuming she wins seven contests every two months,
this equates to an income range of $8.5 - $42k per year.
If the average win pays $600, she earns $25k per year.
You can't pay off your college loan with that kind of money.

On the other hand, many crowdsource designers live in Asian countries,
where you can live quite comfortably for $25k.

Clients may not have good æsthetic judgment,
but they are acutely aware of how much they pay out of pocket.
Crowdsourcing won't threaten our profession,
but it will affect the craft side of our practice.
This adds up to a major issue for educators
because the lower level work provides an entry into profession.
The crowdsourcing market will evolve, but it isn't going away– and neither will sampling.

This subtitle is plagiarized

You sample when you 'repurpose' someone else's creative material.
In my day, this was known as plagiarism, but sampling has gained cultural credibility.
Of course, artists have always sampled. Think of Dada collages from the 1920s.
John Sebastian Bach sampled extensively from his own work as well that of others.

Scanners, and later the Internet,
made sampling easier than creating messages from scratch.
We're trading originality for generation.
People sampled on a scale never before possible,
and sampling became an integral part of digital media.

Throughout the twentieth century, the art and design world valued originality.
Then in the 1980's, DJ's cut records, and lent 'street cred' to the act of sampling.
The switch from originality to sampling is a huge change in public values.
When the Associated Press sued Shepard Fairy
for sampling their photo in his Obama poster,
but no one under 30 questioned Fairey's artistic integrity. The issue was entirely legal.

Copyright or the right to copy?

Napster– the first mass application of distributed computing– changed copyright forever.
And don't worry if Napster is taking a dirt nap. Find whatever you want on YouTube.

But Napster was the watershed. After Napster,
musicians could no longer make a living selling recorded music.
In a similar vein image sites have upended photographers. Designers are next.

5

The end of design?

It sounds counterintuitive, but I believe the outlook is good.
In 1985, electronic publishing hit the design world,
in the form of Apple's Macintosh computer and Adobe PostScript.
I was a student at the time, and many designers–
including a number of my professors– were terrified.
They envisioned secretaries doing design work, and designers filing for bankruptcy.
Something entirely different happened. Design got cheaper, businesses became clients,
and the number of designers increased fivefold.

The economist Eckhard Höffner
compares British and German publishing in the 18th century. [Höffner]
Britain had modern copyright laws beginning in 1710.
At the same time, Germany was a collection of semi-independent states
known as the Holy Roman Empire. Want to plagiarize?
Move to the next town, and set up shop.

During that time, the Germans published five times as many books as the Brits,
and German books were cheaper. A British book cost a week's wages.
A German could buy ten books with his weekly wage.

German writers wrote more books
and– surprisingly– made more money than their English counterparts.
Höffner even claims the lack of copyright and the resulting dissemination of knowledge
was the main reason Germany became an industrial country.

I think we'll see something similar now,
but first we may get *Ragnarøk*– the old Norse apocalypse,
where the gods die in one final battle, the world ends,
and a new world arises from the ashes.
The Austrian economist Peter Strumpeter
refers to this kind of thing as 'creative destruction'.

Old school, craft designers cannot compete with crowdsourcing and creative commons.
In order to survive, we need to think like musicians and develop new economic models.
The Future of Music Coalition [futureofmusic] lists 29 ways
musicians can make money in the new environment.
A short list includes: product endorsements; ads on your website; merchandise sales;
touring; sampling licenses; ringtone sales; song licensing for advertising, TV, movies,
and video games; commissioned works; music lessons; and studio musician.

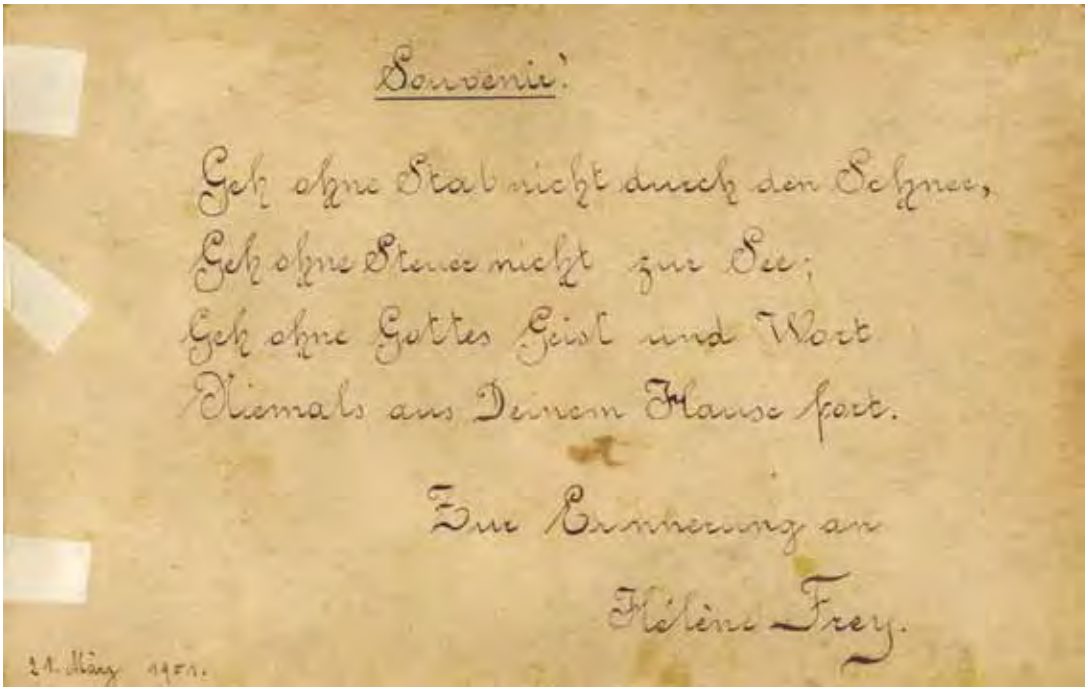
The [David All group], an online branding firm, talks about 'engagers'.
Engagers are people who actively promote brands they hold allegiance to.
What happens when you stop designing official messages,
and start designing snippets for engagers to sample?

6

An engager at work. This unauthorized design concept promotes two companies as well as the designers who produced the mock up. [Black design associates]

King Knut had his courtiers carry his throne to the shore.
He sat on it and commanded the tide to stop. Of course, he walked home wet.
Perhaps we can learn from his example.
What happens when you embrace the things that scare you most?

7



Penmanship is a thing of the past
When my grandmother left school at age 12, her friends signed their autographs.
Here is a page from her book. Few people can do calligraphy like this today,
but 100 years ago school children were good at it.
Our students will never use some of the skills we teach them,
even if it's difficult to identify what will disappear.

Conclusion
What did I tell Jason? I told him our students were still finding jobs
(this year looks much better than the last two),
I said we live in a free country, and it's good that Jason is free to serve his clients.
I allowed that education needs to change with the times,
and I would think about what he told me. And I thanked him for coming.

8

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Letter, Word, Sentence, Paragraph: Publishing the Perfect Typography Book

Denise Bosler
Kutztown University

Abstract

The process of choosing a text for a course can be daunting. Hours are spent pouring over content only to find there's no one book that fulfills the requirements you set up for the course. In my seven years of teaching typography to sophomore level university students, I found many books too scattered in content or too theoretical in practice. I struggled to find a typography book that was both accessible for the beginning level student and fulfilled the theoretical requirements of a rigorous BFA design program. In addition, within the broad selection for books of this subject matter, no book on the market currently breaks down the education of type into a systematic progression of typographic relationships--letters, then words, sentences, paragraphs and pages— the way I choose to organize typography education. As a solution, I authored my own text. My book, being published by HOW books, breaks down the typographic experience in a way that budding designers can understand, utilizing information and methodologies directly from the classroom and infused with real world design experience. Geared toward beginning typographers, students and new professionals, this book is a practical and accessible guide to creating typographic designs that are objectively sound and aesthetically pleasing.. It provides a solid foundation in typography and strengthens a designer's skill set for whatever career focus they may choose. The content is enhanced by interviews with professional designers and galleries of examples to show the explained content in use.

This paper presentation will explore the creative development for the book content— both text and imagery— and the nonfiction publishing process.

Resurfacing Graphics

Patty K. Wongpakdee
New York Institute of Technology

Abstract
"Resurfacing Graphics" explores the subject of unconventional design, with the purpose of engaging the viewer to experience the graphics beyond paper's passive surface. Unconventional designs serve to reinvigorate people, whose senses are dulled by the typical, printed graphics, which bombard them each day. Today's cutting-edge designers, illustrators and artists utilize graphics in a unique manner that allows for tactile interaction. Such works serve as valuable teaching models and encourage students to do the following:
1) examine and research other approaches of design communications;
2) investigate the transdiciplines of art and technology;
3) utilize new mediums to stretch the boundaries of artistic endeavor, and
4) begin to appreciate that this approach can have a positive effect on the environment.

This paper examines how visuals communicators are "Resurfacing Graphics" by using atypical surfaces and materials such as textile, wood, ceramics and even water. Such non-traditional transmissions of visual language serve to demonstrate student's overreliance on paper as an outdated medium. With this exposure, students can become forward-thinking, eco-friendly, creative leaders by expanding their creative breadth and continuing the perpetual exploration for new ways to make their mark.

Geometry and Design Composition

Kimberly Elam
Ringling College of Art and Design

Abstract

Ask design students a question that involves basic math and geometry and you will be met by a room full of pained glazed expressions and dead silence. Ask them about the golden section and if you're lucky one or two will say something vague about the Parthenon that they learned in an art history survey course. Question them further about root rectangle proportions and you will feel a hostility that is palpable.

Too often as a design professional and educator I have seen excellent conceptual ideas suffer during the process of realization, because the designer did not understand the visual principles of geometric composition. These principles include an understanding of classic proportioning systems such as the golden section and root rectangles, ratios, interrelationships of form, and regulating lines. **This presentation will visually explain the principles of geometric composition through an insightful visual analysis of contemporary industrial design, graphic design, and architecture.** Classic proportioning systems will be revealed as they were employed in the architecture of Le Corbusier and Meis van der Rohe, in the industrial design of Eero Saarinen and Charles Eames, and in the graphic design of A. M. Cassandre and Josef Müller- Brockmann.

The purpose of this presentation is not to quantify aesthetics through geometry but rather to reveal visual relationships that have foundations in cognitive psychology as well as mathematics. Its purpose is to make the case for geometry as basic design content in order to lend insight into the design process and give visual coherence to design through visual structure. What geometry offers the creative idea is a process of composition, a means of interrelationship of form, and a method of visual balance. It is a methodology of bringing the elements together as a cohesive whole.

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latitude, longitude, altitude: the elevate design project

introduction

LISTEN poster, 3d

In my creative research, I have recently focused on exploring volume as a means to emphasize a message. Type and image are actively investigated as opportunities in graphic design, but it seems that volume is generally overlooked as an expressive element. Initially inspired by a project completed in graduate school, as well as a personal interest in industrial design and architecture, I have pursued this direction over the past five years.

Early three-dimensional posters explored fold edges as grid lines, which could aid in hiding or exposing parts of the poster plane—subsequently altering the message. Hinged surfaces instigated flexible interaction with space, enabling a poster to appear disjointed from a wall, nestle in the corner of a room, or curl in on itself to balance delicately on one point. Such projects ensured that I was especially aware of a material's qualities and structure throughout the creative process. In viewing the work, new considerations became very important—such as direction of approach, opportunities to tangibly interact, and reliance on a period of time to full absorb the elements within the dimensionality.

elevate design: the question

elevate poster, flat

My theory that tactile, material and spatial experimentation holds great potential—for the maker and the viewer—evolved over time, and inspired the elevate project. I feel this represents my discoveries in a concise, physical, and inquisitive undertaking. The endeavor began with the design and production of a poster, which was distributed to an international pool of designers, artists and architects.

The poster is meant to serve as a catalyst for designers and artists to bring dimensionality to the flat plane. In developing the poster, the design process was an interesting challenge, because of the interactive outcome I hoped for. I attempted to make the poster an intriguing and complete piece on its own, while leaving space for the addition of surface variation and volume. I did not want to limit a participant's response. I embedded symbols of dimensionality, and hints towards possible ways to manipulate the plane. And I tried to take advantage of the intricate ability of lasercutting, while maintaining the structure of the paper sheet. A repetitive line pattern covers the back of the poster, which emphasizes any directional change of surface (while also relating to the moire effect in the front photograph).

The directives of the project are integrated within the lines, and written to allow room for interpretation:
a poster does not need to be flat // please take this opportunity to alter the plane investigate the latent spatial possibilities that this sheet of paper embodies

1 / discover ways to introduce dimension + disrupt the surface // fold / bend / tear / cut / deconstruct / reconstruct / etc

2 / photograph it (full or cropped) in a considered environment // 2000 x 3000 pixels / rgb / 300dpi

3 / share your observations with a brief phrase concerning this experience

4 / send your image + text to me at salchow@msu.edu // include your name + creative discipline + place photo was taken

5 / view the collective exhibition of our tactile experiments and volumetric forms at elevatedesign.org

Guided by one's own disciplinary concepts and personal knowledge, the varied approaches to the volumetric poster have each been unique and inventive. 78 architects, graphic, industrial & apparel designers, paper engineers, landscape architects and fine artists each altered a poster by introducing volume. Participants "responded" with documentary photographs of, and statements about their explorations, enabling the exhibition at elevatedesign.org to become an enlightening interdisciplinary collaboration.

elevate design: the answers

After contacting many creatives who I knew directly (and some who I noticed and respected from afar), I anxiously awaited their responses. The submitted statements proved to be a rich part of the project, and added unexpected depth and perspective to the collection. The full text can be found on the website, and selected excerpts are below:

gordon salchow / graphic designer / cincinnati

ELEVATE DESIGN: Art is about investigation without external expectations. Design is about investigation with obligations. Elevated design functions; but it does so with conceptual poignancy, an experimental edge, social responsibility, and aesthetic poeticism while design and art become indistinguishable. This project touches on such potential and it reminds us that creative work is partially inspired by previous endeavors or encounters. Here, the final experience is a two-dimensional photograph of a three-dimensional piece, so a specific light and shadow documentation becomes integral to the product. My dimensional modification expresses content and form by responding to the preexisting image and die-cuts' grid.

anne ghory-goodman + dale shidler / graphic designers / wilwaukee

We began with the idea that {ideally for us} a poster should communicate a message and not just dimensionality. It was a conundrum. How could we take this beautiful, but rather abstract traditional vehicle of visual communication and push and prod it toward a more accessible understanding. The idea of "Elevating Communication" became our goal. Stepping back we realized we just needed to take a step toward the edge of the cliff, let go of our traditional bias and leap into the assignment.

We tried to take in all the elements so beautifully incorporated into the design —the fragile die-cuts, the imagery, the words, the delicate textures, and the layers—and give them greater exposure through manipulating the way these things interacted with one another. Working as a team, we said, "What if we cut, or roll, or fold, or..." In the end, we used the opportunity to have a photographed result to explore the hierarchy of meaning created by light and shadow.

///

richard pratt / graphic designer / sacramento

Elevate immediately brought to mind the photography class I was a teaching assistant for in college. I helped Prof. Franz Werner teach a class on Photographics where students created layered images in studio using clear sheets of plastic. Much more organic than Photoshop (and predating it by decades) the play in depth of field and structured levels of design create a nice spatial play perfect for this project. That was a great summer, and though this doesn't match the quality or complexity of Franz's work, I've always enjoyed the optical play the technique creates. It was a great excuse to explore it once again.

///

cait + c.e.b. reas / apparel + new media designers / los angeles

We were interested in treating the poster like a graphic fabric. We tried to come up with as many possible layouts as the poster dimensions would allow. This resulted in a dozen studies all using the same shift dress silhouette. We used this basic silhouette because we wanted the graphic elements to create an optical architecture on the body. We chose to have tabs on each dress to invoke memories of paper dolls; to encourage play and sorting.

///

rebecca lambers / couture / ann arbor

Dressing the body is what I do—so I understood fairly quickly after seeing the poster that I'd make a half pattern. I picked it up several different times before I came up with this rendition—moving it around on the form, looking at both sides. I wanted to use it as entirely as possible, without adding anything visible to the poster itself, make use of the printed design presented by Kelly.

///

golnaz armin / designer / portland, oregon

don't disturb the surface,
let the rice seeds grow through the cracks,
they are there and not there,
but you can imagine the sprouts rising soon

///

james craig / author, typography / holmes, new york

An interesting experience.

I have no experience designing in 3-dimensions therefore this project was a little intimidating. So I did what most designers do with a generous deadline, I set it aside while I thought about it.

Finally, after a week or two my conscious got to me so I dug out my old art supplies: drawing board to cut on, Exacto knife, and some masking tape.

Having only one original to work on was also intimidating, what if...? Anyway, forging ahead with a rather weak concept I made a few timid cuts and got just what I expected, rather timid results. Time for coffee, and more thought...

Later, I decided to check the website to see what the others were up to. Wow! Did some of those designers have a shredding machine? Was this computer-aided design? If so, how can my old 1970 Exacto knife compete with that?

Anyway, back to the drawing board with new resolve. I realized I was designing inside a box, time to escape. Cut, cut, fold, unfold, cut, fold some more, and cut...can't uncut but I can patch. More cuts and more folds, et voila!

OK, so it's not an award-winner, but what do you expect from an 80-year old, semi-retired, graphic designer?

PS. I would like to think that the original is much better than the photograph.

grace vandervliet / art historian / ann arbor

i am inspired by my seven month old daughter, who hyperventilates when she sees a tower of any sort. her need to build and tear down speaks to our innate desire to create and destroy.

///

kevin mcginnis / game interface designer / boston

The act of change is difficult sometimes. The physical act of crumbling up a poster was a morally difficult thing to do. As a poster collector for many years I feel an obligation to keep all posters in pristine condition because as I have experienced, a bent corner can be devastating. However, I decided to break from my morals by breaking all the fiber within the paper stock (very soft, like a Shamwow) thus unlocking the poster's ability to fold itself over elevated legs. The back drop of hardwood floors I thought added to the commentary about strength and processing of materials. That floor has 3 coats of polyurethane making it shinier and more resistant to man made "folding". There are other subtexts to read into here, that's always the fun part to figure out so I wont ruin the rest with words.

///

andrew maniotes / graphic designer / ypsilanti, michigan

well designed poster mailed in tube full of beautiful lines + precision die cuts
no idea how to make it dimensional only get one copy don't fuck it up
xerox for practice try fold overs and such they all suck ass
look at web page holy crap Matt and Teresa elegant solutions on the first day
compelling hand photos remind me of Dada finger pointers
cut this up collage style cuts are "nice" but it still looks like kelly's design with "nice" cuts that still "nicely" sucks get it done
messier ripping felt damn good toss in chaos get away from kelly's design
destroy the damn thing elevate = elegant + "nice" mine messy pain in the ass
EVIL

hands look witchy knobby when cut concentrate on fingers
dada pointer... satanic hand... fuck it flip 'em off nothing subtle about you anyways.

///

junko sugimoto / artist / brooklyn

I had no idea what should I create with the poster when I received.
I cut and held the entire piece and tried to make 3dimensional something.
It was just before lunch break when I working on this project.
I was hungry and couldn't stop thinking about food.
So, I was inspired by crab food that I've been eager to eat since last month.

///

ingrid siliakus / paper artist / amsterdam

Due to the nature of my work, "elevate" is a familiar word to me. This was an interesting project because of various reasons. Exceptions aside, I do not work with printed paper, and looking at the final piece, I just love the interaction between both disciplines. It encourages me to do this more often. I think the image and the colors are beautiful. I especially like the darker side of the print, since it makes the interaction between surface and three-dimension more interesting in my view. About the paper: paper to me has a character of its own that asks for cooperation. It is a challenge to find this cooperation with each separate paper stock I work with, as was the case with this stock. Usually I have a kind of plan when I am working on a design, and in this project it was fun to flow freely, so to speak.

///

matt shlian / paper engineer / ann arbor

I approach the material without a clear visual goal in mind. The work appears meticulously planned out, but its root is in happenstance. There is a willful ignorance to my work: If I can plan it out ahead of time I have no reason for making it. I create folded paper work so I can begin to understand it. With this project I pleated the sheet in a way where it becomes both flexible (in one direction) and rigid (in another). In this way we can take a two dimensional material and explore/elevate its properties as it transitions between plane and volume.

///

violise lunn / designer / copenhagen

I have crumbled, smashed and glued the poster and out came a shoe

///

shalotte sugathan / graphic designer / andhra pradesh, india

The third dimension is an exciting challenge in graphic design work which mostly tends to be restricted to two dimension. Kelly's poster provided just the right amount of boundaries and possibilities to explore this aspect of dimension. My way of introducing dimension was to weave a cross-sectional grid of latitudes and longitudes across the poster - words that were die-cut on the poster. This grid (in my mind) was a physical emergence of the diagonal lines that already lined the poster on the back.

///

rebecca klein ganz / graphic designer / atlanta

Cut down, folded and bound, this poster becomes a book. Physically, anyway. In its two-dimensional state it certainly tells a story. Books are special however. They are simultaneously two-dimensional and three-dimensional. They create visual and physical rhythms for a viewer. This piece displays a symbiosis across dimensions and elevates the concept of the poster.

///

richard sweeney / paper artist / west yorkshire, uk

Using the laser-cut grid on the poster as a guide, I cut straight, regular lines through the paper, then bent the sheet around to create volume. The linear graphics highlight the deformation—both surfaces of the paper are exposed—and I let colour, light and shadow guide the composition of the photographs.

///

elle jeong eun kim / graphic designer / brooklyn

This piece is a small extension from my current work that incorporates shadow, space and typography. I am drawn to the ephemeral quality, the sense of mystery and unknown that I get from the shadow. You can see them but you cannot touch them. It is present and absent at the same time. It is interesting how when the light hits the object, the transformation is manifested in the shadow. Things distort and change. What was once there is not there anymore. It is just like an echo that is about to disappear into thin air.

///

hans schellhas / graphic designer / cincinnati

I began by following the lines—cutting and deconstructing the poster. The carefully considered fragments led to shattering and dissonance. It needed more volume. With a breath I set it in flight. Elevate! The multiple image photograph records its kinetic path.

aaron feldman / landscape architect / washington dc

Front becomes Back becomes Front again. Stripes tumble forward, collecting momentum, speed and everything else that lies in their path.

///

brooke chornyak / graphic designer / raleigh, north carolina

This undertaking was intimidating knowing that I only had one copy yet, joyfully liberating to be away from my computer. I approached the project as an exercise in trusting the intuitive making process and tuning into the conversation had with materials. I've been reading, Nigel Cross's book *Designerly Ways of Knowing* he writes, "designers rely upon sketching, drawing and modeling as aids to the generation of solutions and to the very process of thinking about the problem. The undertaking involves, a reflective conversation with the situation, the designer shapes the situation in accordance with his initial appreciation of it; the situation 'talks back', and he responds to the back talk."

I approached the poster with my x-acto knife and a small plan but not a completed vision. I found a quote by Malcolm McCullough who asks "what good are computers except perhaps for mundane documentation, you cannot even touch your work?" I took parts of those words and startedcutting and then sewing the letters so they became dimensional, bent and twisted. In the end I created chaos with all the letterforms stitched into various corners of the paper. One image isn't enough to explain most of these pieces, but I was pleasantly surprised when I took the poster outside and saw all the shadows and light you could create by bending and twisting.

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rebecca tegtmeyer / graphic designer / lansing, michigan

Thoughts about process: I quickly learned that 2D sketching wasn't the way to begin exploring for this challenge. After a few sketching attempts I began to manipulate scrap paper into various structures. I first went towards a curved approach, thinking it would be the opposite of what one would think of when working with a flat paper surface. I also knew that I wanted my reconstructed poster to hang freely from the ceiling, not bound to any structure. Knowing this, I wanted to create something that would be visually interesting from all points of view. After creating several 3D sketches based on the curved approach, I shifted to a more linear manipulation of the paper, working with folds only. I ended the first sketch phase with two different explorations, the curve and the fold. I then remade these two sketches at full size so that I can get the exact measurements of the curves and folds recorded for my final approach. I learned another lesson, working with different types of paper effects the results. This full size sketch round was done with brown packing paper which is lighter and more flexible than the poster the final was to be created from.

After creating both the curve and the fold solutions, I found the curve solution worked best for the context in which I wanted the form to be placed in. It hung freely from the ceiling and was dynamic in that it continued to move in a circular motion, whereas the folded form remained stationary. This enables the viewer to see the 3D form from all angles. The curved form also played off the linear design of the poster better than the fold solution. It brought the reverse line pattern forward with the front design of the poster, the fold approach kept the two sides of the poster separate from each other.

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jerry kuyper / brand identity consultant / westport, connecticut

The poster had such richness and complexity in the design I sought a simple means to add dimension.

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sophie nicolay / graphic designer / brooklyn

I decided to follow the diagonal lines printed on the poster as a guide, cutting the poster into thin strips. I then re-assembled the poster by connecting each piece, end to end, into one long, continuous strip. The process of cutting the poster into strips was methodical and controlled, but the resulting three dimensional form is organic and chaotic.

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hannah boom / graphic designer / des moines, iowa

Working on the "elevate project" was a challenge for me because I normally am not thinking or working with 3-dimensional things. But with the opportunity to just be able to play, I think I was able to free myself a little bit and not force myself to consciously think about creating something 3-dimensional. I ended up cutting the poster into long strips and weaving them together because I enjoy having a hands on experience with paper. I find the new interplay of the shapes and patterns created to be quite interesting.

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jody graff / graphic designer / philadelphia

My initial reaction to this project was that it was a wonderful invitation with many possible executions. I chose to focus on the concept of communication, the dialogue between the designer and the audience, as well as the element

of surprise that occurs in any communication. I utilized the printed rules and die-cuts that existed in the designed poster, added a few cuts and folds of my own, and wove it together in varying ways to have each side interact with, and affect, the other. When photographing the poster, an additional design element created by shadows emerged. In some ways the image resembled an architectural form or bridge structure. I preferred this particular angle because of the inclusion of the hand, reflecting that communication is a connection between people.

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andrew shea / graphic designer / brooklyn

I exaggerated the scale and dimensionality of "ELEVATE" by cutting out the word, soaking it in water, and sticking it to a window in my studio so that it lined up with the top of a building. I discovered several happy accidents while photographing it, and even caught myself humming "stairway to heaven."

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muffin bernstein / artist/photographer/sculptor / new orleans

30.004762, -90.089766, 4ft tall, Fluttering butterflies on Primrose plants.

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molo design / design + production studio / vancouver

We received the poster rolled up in yellow tissue paper and placed in a cardboard tube. Our intention is to perform some foaming tests with this paper. We want to reconfigure the current paper structure into another more volumetric, lightweight structure using bubbles. This became part of a larger paper pulp research project that we are working on with Mark Martinez and James Olson, materials science Engineers from the University of British Columbia. First, we removed poster from tube, separated the tape from the tube, then separated mailing tube, tissue paper and poster... We took a small sample section from the poster and performed a fiber analysis with a "Fiber Quality Analyzer". The Fiber Quality Analyzer machine was actually designed by James Olson, one of the engineers that we are collaborating with on paper pulp experiments, the first version was made in 1992 from LEGO. The Fiber Analyzer uses polarized light to capture image of particles, the particles are aligned in a narrow stream with water that the camera can focus on. The test shows that the paper is made from hardwood pulp (possibly aspen, poplar or eucalyptus) and that the fiber is relatively short. Short fiber generally produces weak bonds (although other factors such as surface area of bonds will affect strength.) This gives us an idea: maybe the cardboard mailing tube contains longer fibers? If so, we could use some of these as reinforcing for the shorter poster fibers. We begin taking the mailer apart, and in doing so we notice that it is made from thinner

layers of unbleached kraft paper glued together with starch to form a thicker laminate. We decide to test the cardboard mailing tube layers separately. The testing shows that the outer layers are made up of short fibers (for a tighter weave - better printing, not "dusty", smoother) and the inner layers are made up of longer fibers (for strength.) The inner layer fibers have an average length of 1.77 mm (perhaps a northern coniferous tree). As a reference point cotton fibers tend to be about 1mm and hemp about 4mm. We are able to re-pulp the cardboard tube in a "British Disintegrator" and then separate the fiber into the different lengths using a "Bauer Separator." We perform some mixture and forming tests using another kind of short fiber paper (recycled office paper), before we start trying to make foam with the poster paper and tube. We pulp some test paper and mix it with water to create a 1% suspension. We foam a number of test mixes in the "Normal Sheet Maker." We use a glass beaker as a form for test mix 4 (water settles to bottom and foam sits on top). We tried different drying techniques including an Isotemp Oven at 105 degrees C for 1 hour which resulted in a fluffy foamed paper structure (very little strength.) Strength in paper-making relies primarily on hydrogen bonds and the capillary action that pulls the fibers together to form these bonds. The next tests will focus on achieving stronger bonds through forming and drying processes.

what have i learned from elevate design?

I appreciate the contrast in the work—within the text and image collection there are examples of humor, science, poetry, motion, stillness, human emotion, and conceptual, material and photographic dexterity. Each individual approached the project from a different direction, guided by their own personal knowledge and past experiences. Many expressed the enjoyment of working by hand, the sense of play, and freedom. They also commented on the discomfort in altering/deconstructing an existing poster, which is generally handled carefully. There was fear of messing up the one copy, pressure to create a quality piece amongst peers, and the unusual challenge to work three-dimensionally.

I'm surprised that I cannot recognize any clear differentiation in responses based on a person's creative discipline (with the exception of paper artists and engineers, who consistently seem especially sensitive to the structural opportunities and limitations of specific stocks). Rather, I've found each piece to be unique and personal. The parameters were loose enough to allow open experimentation, and I'm glad that the participants capitalized on that freedom. The variety and exploratory nature of the submissions has been inspiring, and the statements have added context and thoughtful reflection.

This has demonstrated to me that there is unlimited opportunity within a process, even when the starting point is a constant. I would expect that as the project continues, responses will continue to vary greatly.

At a point in time where user experience is being explored and tactile interaction is being challenged, it is my hope that this project has ignited a dialogue across several disciplines, while demonstrating an opportunity relatively untapped in the field of graphic design. It pushes beyond traditional boundaries within the discipline—commonly a digital screen or two-dimensional plane. Given its invitational and participatory nature, I hope that sharing this initiative will inspire related activity amongst my peers. If nothing else, it has offered a creative tactile experience that is becoming increasingly sparse in our digital society. As Janet Abrams writes in *Craft: A Return to the Hand* in metropolismag.com 30, "Making by hand puts you in touch with duration and offers an antidote to our cultural obsession with the immediate, the instant. It brings you face-to-face with gravity and the fascinating, often obdurate, nature of physical matter." I have discovered ways to bring this into my graphic design practice, and I now challenge myself to focus on tactile awareness, while implementing the senses of sight and touch simultaneously in the design process.

I truly appreciate all the creative thinkers and makers who have participated in this experiemental, collaborative project. Their generous contributions have provided the depth and richness that make this an enlightening exploration.

The Case Study of An Interdisciplinary Approach to Promote Creativity in the Undergraduate Design Education in Canada

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Abstract

Creativity is a key factor in a well-rounded design process, whether it is within the university classroom or in a professional field. It is argued that creativity is one of the main components of an improved education model. Although difficult to measure or quantify, there are many established theoretical and practical methods for promoting creativity in design pedagogy on the undergraduate level in Canada and worldwide. Design as a discipline is constantly evolving and adapting to a variety of new developing technologies, methods, and ideas. Therefore, well-established methods of teaching design should be continuously researched, questioned, reconsidered, and improved.

Using an interdisciplinary approach to promote and encourage creativity is a relatively new and untested method with a lot of great potential for advancing teaching practices in design. The interdisciplinary approach has been practiced on the a post-secondary level for many years internationally, yet mainly in social sciences and humanities. It has also been gradually introduced to a number of post-secondary design programs in Canada, although it has not been solidly integrated into the curricula thus far. Researching, exploring, and testing this method should greatly benefit post-secondary design education.

This research study defines, identifies, and establishes links between creativity and an interdisciplinary approach in undergraduate design education. The study is designed to define which specific methods and techniques are the most applicable in design programs across Canada. It will also identify the importance of the current interdisciplinary approach in design and how it is being practically used in design classrooms. The fundamental goal of this proposed research study is to find out how the integration of interdisciplinary approach in design can effectively encourage creativity in the design classroom at the undergraduate level.

Creativity is a key factor in a well-rounded design process, whether it is within the university classroom or in a professional field. It is argued that creativity and innovation are the key components to an improved future education model. Although difficult to measure or quantify, there are many established theoretical and practical methods for promoting creativity in design pedagogy on the undergraduate level. This research study investigates how creativity can be encouraged through an interdisciplinary approach by using Canadian schools as an example.

The interdisciplinary approach to promote and encourage creativity is a relatively new and untested method with a lot of potential for advancing teaching practices in design. This approach has been practiced on the post-secondary level for many years internationally, but only in selected programs. It has also been gradually integrated into a number of post-secondary design programs in Canada although it has not been officially integrated into the post-secondary curriculum yet. Researching, exploring, and testing this method, in addition to finding links to creativity, should also greatly benefit post-secondary design education.

Although creativity in design classrooms and an interdisciplinary approach in educational systems are two different areas to explore, I would like to link them together. I will first identify what creativity and an interdisciplinary approach are as independent areas of research, and then I will analyze the established connection between the two based on the data sample collected for this research study.

Data Sample

As part of this research I am first inviting design educators – from 86 Canadian institutions that offer design programs – to participate in a survey. The anonymous survey is designed to define which methodologies of promoting creativity are used across the country. In addition to providing valuable insight from educators, the survey also identifies individuals who will be interested in participating in future interviews. I am recruiting various design programs ranging from four-year Bachelor Diploma to under one-year Design Certificate programs. Since there are a lot of schools that offer visual communication design, the institutions that are invited to participate are those that are officially recognized by the Society of Graphic Designers of Canada. I am in the process of involving 420 educators and since their number is still growing, the data sample presented here is based on 20 survey participants. So far 65 percent of the data collected is from four-year design diploma degree educators and the remaining 35 percent represent three-, two-, and one-year design diploma degrees, as well as one-year design foundations certificate programs. There is an exception within the Quebec educational system that cannot fall under a category

of a four-year design diploma degree. Students in the province of Quebec who intend to pursue post-secondary education must first attend a college called *Collège d'enseignement général et professionnel* (*CEGEP*), which literally translates as 'College of General and Vocational Education', before enrolling in any Quebec university. The programs that offer a complete Bachelors degree, that would be equal to a regular four-year degree in other provinces, in Quebec are only three years long.[1] However, this stipulation does not interfere with the objectives of this study.

Creativity

Creativity is difficult to define and characterizations generally vary from one researcher to another, but having multiple definitions gives researchers a better perspective of what creativity is. Lucas claims that, "Creativity is a state of mind in which all of our intelligences are working together. It involves seeing, thinking and innovating."[2] This quote also demonstrates that creativity is the combination of many intellects and it is not its own independent intelligence. The mental process of creativity is hard to identify, but "we know creativity when we see it."[3]

The most apparent undergraduate disciplines that require students to be creative are fine arts and arts. However, the majority of schools in developed countries are stressing the importance of creativity in their general educational system, including arts and fine arts disciplines. "In the industrial nations, where technological and manufacturing jobs are being outsourced to other countries, there is a need for new workers who are creative and innovative."[4] For instance, in England, researchers have put creativity on the agenda as a central element in the education by claiming that "no system can be world-class without valuing and integrating creativity in teaching and learning."[5] In 2006, UNESCO claimed that "Creativity is our hope" during the "Arts in Education" world conference.[6]

Creativity has often been regarded as a talent associated with novelty and uniqueness.[7] Only since the late 19th and early 20th centuries have researchers began to develop the thought that creativity is not given, but can be encouraged, trained, and taught. While accepting that creativity can be learned, there are still some people who are generally more creative than others.[8] Even individuals with great technical talent and knowledge can be notably uncreative.[9] Aside from investigating learning processes of being creative, the main challenge of current research is to explore how creativity can be taught.

[1] "Collège d'enseignement général et professionnel (CEGEP)," www.thecanadianencyclopedia.com
[2] Saebo, Aud Berggraf, Laura McCammon and Larry O'Farrell, *Creative Teaching – Teaching Creativity*, (Teaching Creativity and Creative Teaching, 2006), 207.
[3] Ibid., 207.
[4] Ibid., 205.
[5] Ibid., 205.
[6] Ibid., 205.
[7] Ranjan Apara, and Narayanan Srivasan. *Dissimilarity in Creative Categorization*, (The Journal of Creative Behavior. 44, no. 2, 2010), 71.
[8] Bettina Von Stamm, *Chapter 1: What are Innovation, Creativity and Design?* (Managing Innovation, Design and Creativity, John Wiley and Sons, 2008), 8.

"Creativity can be encouraged, not forced."[1] There are no definite methods that are proven to promote creativity to all participants. There are many principles and methods in undergraduate design education, but they can be classified roughly into four main categories: motivation, identification, fostering, and collaboration. The first principle involves encouraging students and should give them more confidence while engaging their sense of possibility. The second one focuses on helping students to identify their own strengths and weaknesses in different areas. The third principle is to foster a creative potential and enhance creativity through the process of being creative. The final principle is a co-creative process where students can create with each other or their teachers.[2]

Teaching creatively does not necessarily mean that it will promote creativity. Teaching creatively occurs when the process of learning becomes more exciting, engaging, and effective because teachers use imaginative unconventional approaches. Teaching *for* creativity happens when various pedagogical methods are targeted to promote students' own creative thinking.[3] The main challenge occurs when it becomes almost impossible to teach educators how to be creative because teaching creativity is like an art form that you need to foster. Therefore, a creative teacher is no guarantee for creative teaching.[4]

According to the data from my survey, the most popular method used in Canadian design classrooms is brainstorming. The next most common method is drawing or sketching, followed by mood-boards or collages. The least common method is to use a mind mapping tool. The methods listed above were explicitly presented in the survey. In addition, the survey takers were encouraged to provide other methods they felt were valuable. One common method suggested from the survey is research in design. Furthermore, about 20 percent of the participants mentioned short presentations, collaborative and independent projects, and both individual and group critiques. Some other methods identified by five percent of design educators include conceptual development, user testing, prototyping, visual research, analysis of existing projects, process mapping, and the reading and application of critical theory to experimental projects. Additional methods identified by individual participants are role playing, games, "free discussion", "blue sky approach", "nothing is wrong", "your opinion is valued", "this is the opportunity to test your voice", and interpretive dance.

[1] Bettina Von Stamm, *Chapter 1: What are Innovation, Creativity and Design?* (Managing Innovation, Design and Creativity, John Wiley and Sons, 2008), 3.
[2] Saebo, Aud Berggraf, Laura McCammon and Larry O'Farrell, *Creative Teaching – Teaching Creativity*, (Teaching Creativity and Creative Teaching, 2006), 210.
[3] Ibid., 210.
[4] Ibid., 209.

Interdisciplinary Approach

Many design programs try to incorporate an interdisciplinary approach into their curriculum, but there is still a lack of training on complex issues, such as behavior sciences, technology, the scientific method, experimental design, and business. Don Norman believes that this system must change: "We need new kinds of designers, people who can work across disciplines, who understand human beings, business, technology..."[1] He also believes that we need a new form of design education "with more rigor, more science, and more attention to social and behavioral sciences, to modern technology."[2]

Design as a field is interdisciplinary in its nature. In design schools, students are asked to become short-term experts on the topic assigned in their studio time. However, this research study examines further possibilities of moving beyond traditional and historical studio-based curriculum. For the purpose of this research, an interdisciplinary approach is defined as a curriculum structure in which the faculty integrates information, techniques, concepts, and theories from various disciplines and other fields of study to advance students' capacity to understand issues and propose new solutions that extend beyond the scope of traditional visual communication design studies.[3] So for this study an interdisciplinary approach refers to involving disciplines outside of visual communication design programs – including other areas, disciplines, professions and real clients – to participate in the design process.

According to the data collected so far, 85 percent of survey participants said that their program incorporates an interdisciplinary approach into its curriculum. All participants also fundamentally believe that an interdisciplinary approach is beneficial to learning. The wide spectrum of answers provided by design educators can be summarized into five main categories:

1. Students improve conceptual and critical thinking

An interdisciplinary approach gives students a greater breadth of tools with which to communicate. Students become better thinkers, conceptually and technically, when they are pushed in diverse directions. The ability to analyze and conceptualize is as important as technical skill.

2. Students have a better perspective to design as an interdisciplinary subject

Design as a discipline lies at the boundaries of diverse disciplines, so an interdisciplinary approach in design education is extremely beneficial in developing a holistic understanding of design. Incorporating interdisciplinary thinking, theory, and skills, which are completely transferable in the educational system, gives graduating students an opportunity to move into a range of disciplines in design. It also provides them with a wider understanding of

[1] Donald Norman, *Why Design Education Must Change*, (Core 77 Design Mazagine and Resource, 2010).
[2] Ibid.
[3] Diana Rhoten, *Interdisciplinary Education at Liberal Arts Institutions*, (Teagle Foundation White Paper, 2006), http://www.pkal.org/documents/IDEducationAtLiberalArtsInstitutionsRhoten.cfm.

the role of design in problem solving, and gives more focus on the process as opposed to specific solutions. As a result, students understand better that the nature of design practice is interdisciplinary.

3. Students develop skills that are transferable across disciplines.
Students gain a broad exposure to materials from art and design, interactive technology and programming, cognition, art, social sciences, media and games – they experience an education that goes beyond one focused solely on practical art and design education. Additionally, students generally have a chance to brainstorm solutions with other disciplines and get a broader perspective on how design relates to the context of the greater community.

4. Students become better designers.
An interdisciplinary approach is very helpful in creating good designers. In other words, to "design" is to "create an experience" and the better the designer understands the human experience, the better the output. Creating experiences is different from gaining the skill set that young designers learn at school (which is quite the same wherever one studies). Students can perfect theirs skills at typography, colour theory, layout, and expand their knowledge on design history and theory, etc., but what will distinguish them as creative and good designers is additional learning outside of their discipline.

5. Students can be more motivated working on interdisciplinary projects.
The interdisciplinary approach can also be more motivating to students to carry out projects. Students learn different ways of thinking and how to work more efficiently both with others and independently to create effective design work.

The Link between Creativity and Interdisciplinary Approach

Creativity is hard to measure or quantify, but it is possible to identify which methods provoke new unconventional ideas in students. Collaboration in general, whether interdisciplinary or discipline-defined, is often seen as a condition for creativity and innovation. According to Pasi Sahlberg, "Only rarely is one individual able to come up with original ideas that have value without interacting and influence from other people."[1] Collaborating and being exposed to a wider range of disciplines can produce even better results.

The main challenge of this research study is to identify whether students are generally more creative and innovative while tackling interdisciplinary projects as opposed to projects that are limited to design only. The simple and yet complex question that I ask design educators in the

[1] Pasi Sahlberg, *The Role of Education in Promoting Creativity: Potential Barriers and Enabling Factors*, (Measuring Creativity. Luxemburg: OPOCE, 2010), p.343.

ongoing survey is, "Do you think students are generally more creative while working on the interdisciplinary projects?" Although the majority of respondents claim that students are indeed more creative, some design educators have doubts. All the answers provided by design educators up to date can be summarized into four main categories.

1. Interdisciplinary approach promotes creativity by reducing imitation
With regard to encouraging students to actively engage in broad critical and contextual thinking and problem solving, ongoing evidence suggests that 'interdisciplinarity' best supports that engagement. (The term 'interdicisplinarity', which refers to 'interdisciplinary approach' was suggested by three of the anonymous design educator participants.)

2. Interdisciplinary approach provokes more experimentation
Students seem to work in a more experimental fashion when involved in interdisciplinary projects. They are able to focus their work in a more conceptual way, allowing form to follow idea rather than vice-versa.

3. Interdisciplinary approach encourages students to go beyond their discipline, thus creating unexpected results
Often students stay in their comfort zone if the project is very limited and can only be applied to one specific discipline. Most interesting results often happen when students go outside of their chosen field. They can see solutions to problems that those who are limited to the field pass-by without even noticing. The use of interdisciplinary projects encourages students to explore other worlds and merge them into original and unique projects.

4. Interdisciplinary approach helps students to determine their own area of interest
Approaching a project with a process incorporating interdisciplinary research and visual experimentation can offer more avenues for students to find personal engagement with the project, inserting more of their own experiences and interests. This engagement often seems to result in enhanced creativity.

There are a few design educators who expressed their doubts towards the link between interdisciplinary approach and creativity. Their doubts raise new questions about the nature of interdisciplinary approach, in particular its use and its link to creativity.

1. Interdisciplinary approach can promote creativity only if the nature of the project requires creativity.
Students are creative if the nature of the project requires creativity. The more "wicked" the

problem, the more varied the processes required to address the issue. A traditional "mannerist" graphic design education has no place in the teaching of concept development, and does not serve the current needs of Canadian industry or society.

2. Interdisciplinary approach promotes more thought than creativity.
Students are not necessarily more creative but certainly more thoughtful, while working on the interdisciplinary projects. Young students think very narrowly. Putting them in touch with other disciplines broadens their awareness, understanding, and the breadth of creative options.

3. Other learning factors have as much influence as the presence of an 'interdisciplinarity' in any given project.
The definition of creativity is highly subjective. For example, one student's solution to a coding program could be extremely creative, while another solution could be mundane. Factors such as individual differences, group dynamics (for team work), classroom climate, previous experience, tools at hand as well as the nature of the problem all contribute.

4. It is very hard to comment on student's creativity.
Student's creativity is an internal state that is beyond sight. Educators can only comment on the outcome of student work. This is a complex process and many more variables than interdisciplinary approach are involved.

Conclusion

This research study defines, identifies, and establishes links between creativity and an interdisciplinary approach in undergraduate design education. The study is designed to define which specific methods and techniques are the most applicable, reliable, and successful in design programs across Canada. Although this study is ongoing the link between creativity and an interdisciplinary approach is very strong. The next step is to continue to explore the methods, collect educator's viewpoints, and test the results on users. The fundamental goal of this proposed research study is to find out how the integration of an interdisciplinary approach in design can effectively encourage creativity in the design classroom at the undergraduate level.

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Creativity and Innovation in Design Education

ABSTRACT

The designer of the twenty-first century requires the ability to solve complex problems, beyond producing artifacts, thinking critically and creatively. As design educators, we've seen our students struggle with basic ideation and project exploration. In courses designed to foster self-initiative, unframed problems cause difficulty as students often hit a roadblock in their process, unable to analyze their work and explore various trajectories. Students settle on one outcome without entertaining other possible design strategies. The problem often stems from their process and inability to think critically, quickly and to prototype ideas. They often want to discuss an idea at length without simply making. As educators we emphasis process continuously, but how do we inquire about the student translation of creative process?

This paper presents a case study involving junior-level visual communication design students at Kent State University in The School of Visual Communication Design. As a class, we explored creativity, design process and finding inspiration. Students completed two exercises designed to encourage creative thinking while gaining important knowledge and skill sets pertaining to the design field.

Creativity and Innovation in Design Education

DESIGN AS CREATIVE PROCESS

As design educators, we work with students daily. We watch as they grow and overcome numerous obstacles and eventually blossom into fruitful designers. At the beginning, they struggle to wrap their minds around the word "design." They ask the standard questions: "What does *design* mean, what does a *designer* do, will I be a *designer*?" We find students often have a narrow definition of what it means to be a designer: "a designer makes things (insert object here) and is creative." The object list begins simply: a poster, a book, an album cover. Eventually their list of artifacts grows to encompass interface design, information, branding and packaging. As their professors and mentors, we aim to expand upon this definition. Shifting the student focus from the object and putting the value on their design process and strategy can be challenging.

The word design is both a noun and a verb. (Lawson, 3) All too often, more emphasis is placed on design as a noun, referring to the artifact a designer creates. The public view of a designer as a maker of objects further highlights the end product and not the process. As the design field is evolving, the term "design thinking" has emerged and professional design work focuses on strategy, process and research. We often find ourselves questioning student interpretation of creative process as we observe the absence of ideation, brainstorming and my personal favorite, sketches. We concluded that many of our students did not understand their own process. Understanding the creative design process is essential to the success of a project and to the professional growth of young designers as they learn how to proceed and when to conclude a given design task.

This paper presents a case study involving junior-level visual communication design students at Kent State University in The School of Visual Communication Design. With nearly 80 juniors in design courses, comprised of four sections, we explored creativity, design process and inspiration. Students completed a two-part exercise designed to encourage self-reflection and creative thinking while gaining important knowledge and skills pertaining to the design field.

AN EXERCISE IN SELF-REFLECTION // PART 1

Students were asked to map and explain their design creative process by reflecting on a recent class project. They analyzed their personal process documenting strategy, timing, research, problems encountered, ideation, brainstorming and finding inspiration. Students were asked to create posters that translated their experience. The entire exercise was completed within two weeks. This brief period forced students to work quickly and efficiently, not losing time questioning the movement of each individual pixel and other minutia. Students had to make decisions, execute ideas and be quick visual thinkers.

The rationale for the exercise was to engage the students in personal reflection. This is very different than traditional design projects, which usually focus on a client, an artifact and an end user. One of the main outcomes of using reflective methods in the classroom is learning. Reflection enhances learning and productiveness, vital goals of the education process. (Russell, 49) Jack Mezirow, an educator and researcher made the following statement about critical reflection, "Reflection may enable individuals to change their habits of expectation and, as a result, develop more accurate perceptions, avoid premature cognitive commitments, and achieve greater flexibility and creativity" (Mezirow). In encouraging students to reflect and map their creative process, our goal was for them to gain a deeper insight of their working habits. Only when they fully understood their process, could they improve upon it.

The class was directed to use several hands on approaches. They began by analyzing their creative process using various methods such as sketching, lists and concept mapping as tools for brainstorming (fig. 1). By using post-It® notes they were able to easily rearrange and shuffle information, organize data into categories, and create hierarchy. We incorporated small group critiques among students, which allowed for a deeper reflection as they explained their methods to their peers (fig. 2). Working in small groups encouraged peer-to-peer learning and developed moments of collaboration. In addition, students had individual meetings with their professor, posted work in progress to the class blog and in-class critiques. Students presented their final maps to the class in a large group critique. The posters allowed students to see their process shortcomings and what they could improve upon in order to be more innovative and efficient designers (fig. 3-6.)

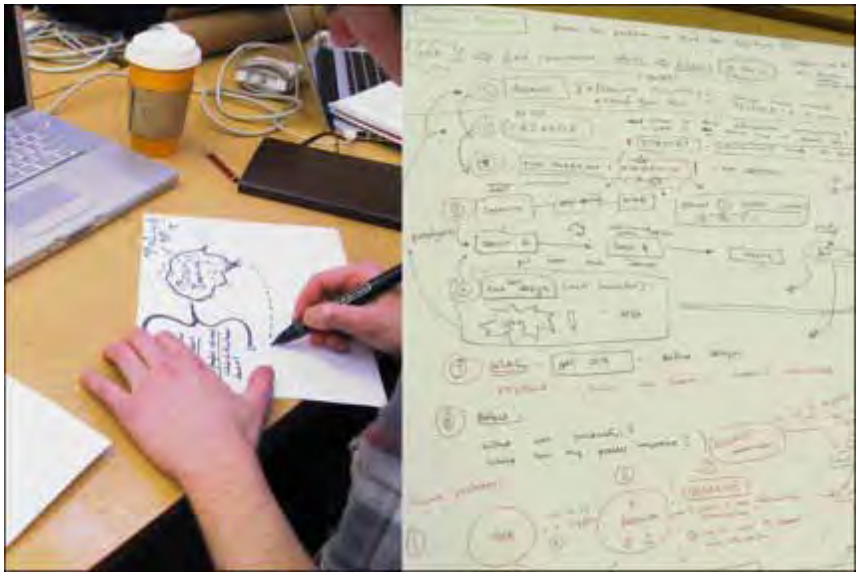

Figure 1 - Example of sketching and concept mapping

Figure 2 - Example of using post-It® to arrange and shuffle information.

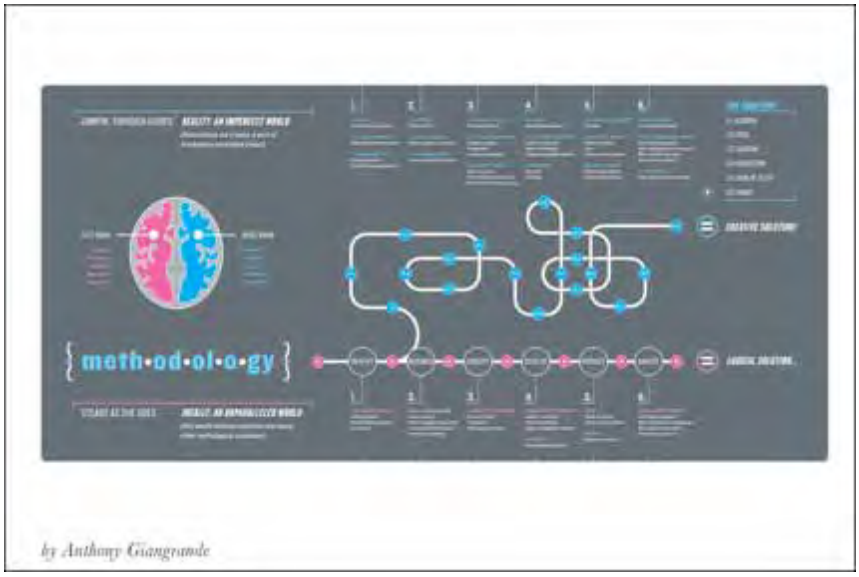

Figure 3 - Example of Process Poster

Figure 4 - Example of Process Poster

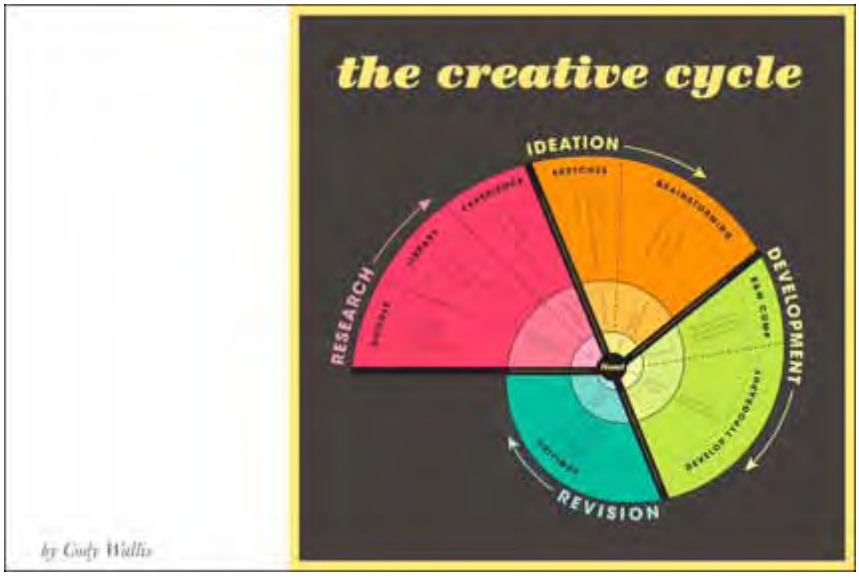

Figure 5 - Example of Process Poster

Figure 6 - Example of Process Poster

RESPONDING AND PROTOTYPING // PART 2

After reflecting upon their creative process, students were asked to create a tool that aided in their process. In order to expand student's thinking beyond a traditional print-based solution a digital artifact was assigned. Students were asked to respond to one of the following questions:

- How can a tool aid in inspiration?
- How can a tool help me to find additional information?
- How can I ideate and innovate longer?
- How can I share my ideas with others?

This exercise was also completed over two weeks. Solutions ranged from smartphone applications, websites, online community forums to software plug-ins. Taking user interaction into consideration students built prototypes and demonstrations showcasing the functionality of their tool (fig. 7 & 8). Many students executed a video that walked a user through a scenario which demonstrated the functionality and usability, while others created interactive PDF's that allowed interactive exploration. Some students thought up lofty and inventive ideas, reminiscent of Minority Report such as special glasses that recorded process, sent reminder messages, and captured visual inspiration (fig. 9). The second half of the exercise explored their desire to interfere and disrupt the creative process in a productive manner.

Figure 7 - Example of Digital Tool (stop motion sequence)

Figure 8 - Example of Digital Tool (animated demonstration)

Figure 9 - Example of Digital Tool (static layout)

The student learning was assessed through anonymous surveys which included a Likert scale and short answer questions. Sixty-three surveys were completed for a response rate of 84%. Survey evidence strongly supports the positive feedback we received from students in the classroom. Ranking their answers from 1 (strongly disagree) to 5 (strongly agree) 77% of students responded with a 4 (agree) or 5 to the statement, "Reflecting on my creative process was helpful and useful for future projects."

One of the short answer questions asked, "Please explain what you learned in completing exercises #4 and #5? Responses included,

> *"I was able to learn where my process was lacking. Project 5 (tool) opened my mind to more practical applications of a concept—which is exciting!"*
> *"My design process is flawed, but now I can work on what I need to improve on."*
> *"It forced me to really reflect on my process, something I have never done before."*

Many responses to "What was your favorite part about completing these exercises?" included "making it personal" and "self-evaluation" reaffirming the value of a self-reflection project.

When asked if these exercises should be used in the future 68% of students responded yes. 20% of students answered yes to the process poster and no to the tool, resulting in 89% in favor of the process poster. These projects were positively accepted by the students with only a small percentage (7%) of students not recommending the projects for the future.

Students articulated that more time was needed for completing the tool. Many students were unable to move forward at the beginning of the project, having a hard time grasping how the "tool" would be utilized. Confusion stemmed from the lack of familiarity with developing a digital solution. Some students expressed interest in having more digital projects within the curriculum stating, *"with the new advanced interactive technology, I think it would be great if there was a class or more projects devoted to designing for these formats"* and *"the program needs to focus more on web design."* When asked what could be improved upon, 20% of the responses stated they would like this exercise earlier in the semester or earlier in the program. This change is being considered, but as this is a reflective project, its obvious that some design experience is needed in order to produce such personal and contemplative artifact.

ADDITIONAL RESOURCES AND SUPPLEMENTAL MATERIAL

Students were assigned readings and videos addressing creativity, design thinking and methodology. Several examples were shared in class. We began with the work of Hugh Dubberly, of Dubberly Design, focusing on his book titled, *How do you design?* The book is a reflection of various techniques and tactics designers use in the field. In presenting these examples he promotes debate about design and development processes. Working in collaboration with Jack Chung, Shelley Evenson and Paul Pangaro, Dubberly designed a concept map illustrating the creative process.

Next students were presented with a video from the 2008 Serious Play conference. Tim Brown, CEO of the innovation and design firm IDEO, spoke on creativity and play. He stated that fear of being embarrassed in showing our ideas is what causes us to be conservative in our thinking. During his talk, the audience completed the 30 circles exercise, designed for quick, creative thinking. The concept is simple, the participant are presented with a sheet of paper showing empty circles. They have one minute to develop as many circles into an object as possible, the aim is quantity not quality. To begin our classroom discussion on ideation and exploration the students completed this exercise. Dialogue ensued about how their self-editing and fear of being wrong prevented some of the students from filling in the circles. Throughout the semester many students hit a barrier in their process. Unable to analyze their work and explore various trajectories, students often settled on one outcome without entertaining other design strategies. By bringing these issues to the forefront, investigating their working methods, we aimed to overcome their insecurities and difficulties with ideation.

CONCLUSION

After watching our students struggle with basic ideation and project exploration, we sought out the root of the problem and explored process as a group. Students studied their personal design creative process in order to become better designers. The process maps were an exercise in self-reflection and allowed students to create a personal project. The digital tool successfully broadened their creative thinking and problem solving skills as they explored new mediums. Incorporating creative thinking and self-reflective exercises into design pedagogy is critical for todays design students.

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Reimagining the dialogue between user and designer

Maia Wright and Rose Newton, Texas State University–San Marcos

INTRODUCTION

The state of design education is in flux as we strive to incorporate interaction design into our curricula, and to integrate the paradigms and strategies of new media into our existing pedagogy. The terms "interaction" and "user experience" are familiar in the context of screen and web applications, but students should be encouraged to think in these terms regardless of the medium in which they are working, whether the project is on-screen or off.

Marshall McLuhan warned in *The Medium is the Massage* that our culture was "striving to force the new media to do the work of the old." This continues to describe our struggle between new media and old paradigms to this day; for instance, we read digital books with faux paper pages even though it does not make sense as we slide our fingers across the one-dimensional glassy screen of an e-reader device. We stubbornly hold on to old, familiar formats, even when it results in half-baked design solutions, because those old technologies were actually very good at providing satisfying user experiences, when we experienced them in their original context.

What we propose is to turn McLuhan's warning on its head: Let us encourage our students to force the *old* media to do the work of the *new*—in other words, to create projects in traditional media that invite interaction and provide a compelling user experience. As design educators we have the opportunity to capitalize on our students' fluency in interactive media, in order to push them to apply their native intuition for user-centered design to both new and old media.

We will present several case studies of student projects that pose design problems whose results instigate a conversation with the audience, rather than delivering a one-sided monologue. These kinds of assignments require students to think in terms of creating an experience, not an inert object. The interactive interface may be a screen, or it may take the form of an environment, a printed poster, or a typeface design. Each medium offers an interface between content and user that can be reimagined to engage the user in a meaningful interactive experience.

There is a certain inertia in traditional print design courses that leads to traditional results: the production of passive and inert design artifacts. This paper is a resistance against this inertia, and an argument to go beyond the design artifact as a stopping point—instead, to understand the final objective of a project as the ongoing exchange between the design and its user. If we rearrange the letters of the word *inert,* we find the prefix *inter-*, which denotes a relationship between two parties (user and designer). We will structure the presentation of our case studies along the lines of several *inter-* verbs, which describe the interactive approaches in which we

encourage our students to engage: Intersect, Interpret, Interact, Interplay, Interject, Interface, and Intertwine.

INTERSECT

This upper level design project involved the student selection of a DIY project from the website MAKE. A key aspect of the design for the poster was to allude to the MAKE project without showing the final outcome. Additionally, a QR code that directed the user to the MAKE project webpage needed to be incorporated into the design. The goal of the design was to entice and prompt the user to scan the code to learn more about the image. The static poster would then be used to "intersect" the printed piece with an online component.

In student Amber Jones' solution for the "$5 Cracker Box Amp" (fig. 1.1), she chose to focus on the element of sound. She combined the visual cues of a guitar amplifier with the dial settings for sounds created while eating a cracker (fig. 1.2).

Figure 1.1. Make Project $5 Cracker Box Amp instructions.

Figure 1.2. Make Project $5 Cracker Box Amp, Amber Jones

Student Ryan Lewis' solution for the "Surprise Top Hat" (fig. 2.1) explored the visual twist on an iconic image. In this case, Abraham Lincoln's iconic top hat was replaced with a rabbit. Through this swap he wanted to imply a sense of surprise and curiosity to the relationship of Lincoln's image and the rabbit (fig. 2.2).

Figure 2.1. Make Project Surprise Top Hat instructions

Figure 2.2. Make Project Surprise Top Hat, Ryan Lewis

Again working with visual cues, student Kelsey Spencer's solution to "Electronic origami" (fig. 3.1) was to combine the traditional diagrammatic elements of origami folding steps with subtle hints to electronics through the line depiction in the diagram (fig. 3.2).

Figure 3.1. Make Project Electronic Origami instructions

Figure 3.2. Make Project Electronic Origami, Kelsey Spencer

INTERPRET

This is a project from a graduate seminar, which prompted students to create a typographic system in order to translate a spoken dialogue into visual language. This student, April Wright, chose a scene from the Tennessee Williams play, *A Streetcar Named Desire*. Her process began with a thorough interpretation of the text, analyzing the character traits of Blanche and Stanley (fig. 4.1). She then developed typographic voices for the two characters (fig. 4.2).

A Streetcar Named Desire
Tennesse Williams
1947

Character Analysis

	BLANCHE	STANLEY
Gender	extreme femininity	extreme masculinity
Name	DuBois (soft sounds)	Kowalski (hard sounds)
Heritage	French	Polish
Socioeconomic Status	aristocrat	blue collar
Clothes	jewels, furs	tee-shirts, bowling jacket
Colors	pastels	bold primary
Astrological Sign	Virgo- the virgin	Capricorn- the goat
Speech	deceitful	straightforward
Light	soft, paper lantern, candle	harsh, bare lightbulb
Physicality	restrained	unrestrained
Animal Likeness	moth	pig
Outlook	surrealist	realist

Figure 4.1. Character analysis of Blanche Dubois and Stanley Kowalski. April Wright.

The baby won't come before morning so they told me to go home and get a little shut-eye.

Does that mean we are to be alone in here?

Yep. Just me and you, Blanche. Unless you got somebody hid under the bed. What've you got on those fine feathers for?

Oh, that's right. You left before my wire came.

You got a wire?

I received a telegram from an old admirer of mine.

Anything good?

I think so. An invitation.

What to? A fireman's ball?

A cruise of the Caribbean on a yacht!

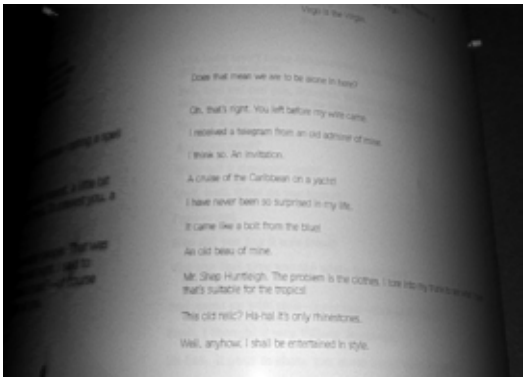
Well, well. What do you know?

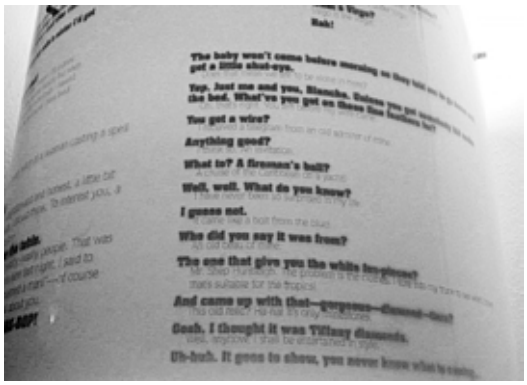
I have never been so surprised in my life.

Figure 4.2. Typographic voices for Stanley and Blanche. April Wright.

Now the question was, what form should this dialogue take? The student had noticed a recurring metaphor of light throughout the play. When Blanche arrives at the house, the bare light bulb connotes the working-class milieu; Blanche covers the bare bulb with a paper lantern, which not only softens her surroundings, but also changes the light in which people see her, allowing her to project a persona of youth and elegance. When Stanley tears off the paper shade in the climactic scene, he asserts his raw, brute force and also dismantles the façade of lies that Blanche has built up around herself.

The student chose to display the text on a screen—not a computer screen, but a lampshade. Blanche's lines were printed on the outside surface of the shade, and Stanley's on the inside. The resulting piece is an interactive object: when the light bulb is turned off, the viewer can read only Blanche's lines, illuminated by the ambient light in the room (fig. 4.3). In order to reveal Stanley's half of the dialogue, the viewer must turn on the harsh light bulb, rendering both voices visible (fig. 4.4).





Figures 4.3 (left) and 4.4 (right). The final piece, with light bulb turned off and on. April Wright.

INTERACT

This is another project from the same graduate seminar. In this case, the student, David Amrock, chose to work with a scene from Henrik Ibsen's *A Doll's House*. In this dialogue, Nora is speaking with her husband Torvald, and begins to assert herself in their relationship for the first time. The student designed a typeface with a complementary sans serif (Nora) and serif (Torvald) (fig. 5.1). Throughout the piece, the typeface responds to two variables: as the volume increases, the color becomes more intense; and as the person speaking becomes more assertive, the strokes of the letterforms grow thicker, and vice versa (fig. 5.2).

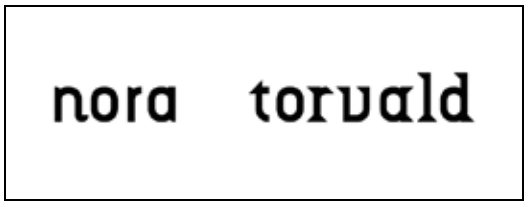


Figure 5.1. Typeface designs for Nora and Torvald. David Amrock.

Figure 5.2. Typographic system showing change of color for volume, and change of stroke weight for dominance. David Amrock.

For the final format, the student chose to present the dialogue as an interactive pdf. This would allow the reader to advance from screen to screen at his own reading pace, as opposed to a movie format in which the reader would be a passive viewer (and the speed of the text may be too fast or slow, depending on the individual). However, there was a certain rhythm to the spoken text that the visual piece needed to convey. In order to capture the pauses between phrases, the student inserted blank screens in the sequence. So although the reader controls the pace, there are beats of silence in the appropriate places to indicate the pauses; just as rests define the melody in a musical piece, these pauses set the mood for the dialogue around them (fig. 5.3).

Figure 5.3. Sequence of screens, showing blank screen to indicate pause. David Amrock.

INTERPLAY

Inspired by the aspect of "play" and the need for the user to "play" with the design piece was at the forefront of this upper level design project. The LEGO Architecture Series seemed to fit naturally as subject matter for a poster that prompted the user to "play". The students selected one of the models from the series to create a poster that would involve: folds, die-cuts, perforations or other elements that prompted physical interactivity with the user.

In student Adrianne Gutierrez's solution for The Guggenheim Museum, she chose to consider the physical aspects of the building itself. The user is initially introduced to a poster that has perforated arrows (fig. 6.1). As the user tears the arrows away from the poster more information is revealed about the building. After the arrow is completely revealed the user then can tuck the arrowhead into a slot on the right side of the poster (fig 6.2). After all of the arrows have been torn and tucked away, the abstracted profile of the museum is created (fig. 6.3).

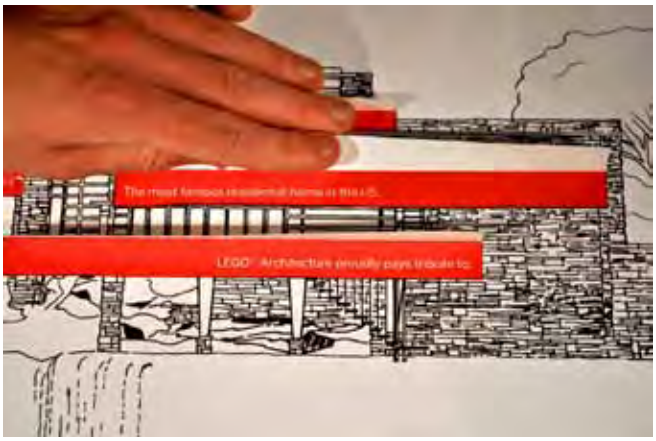
Figure 6.1. Lego Architecture Series Guggenheim Museum, Adrianne Gutierrez

Figure 6.2. User interaction with perforated elements, Lego Architecture Series Guggenheim Museum, Adrianne Gutierrez

Figure 6.3. Finished piece after all perforated elements have been revealed. Lego Architecture Series Guggenheim Museum, Adrianne Gutierrez

For the building Fallingwater, student Amber Jones emphasized the horizontal elements in the building. She chose to create subtle interaction that emphasized the horizontal banding nature of the building (fig. 7.1). Once all the flaps are revealed, the building's bands are then highlighted with jutting folds and a bold red underlay (fig. 7.2).

Figure 7.1. Lego Architecture Series Fallingwater, Amber Jones



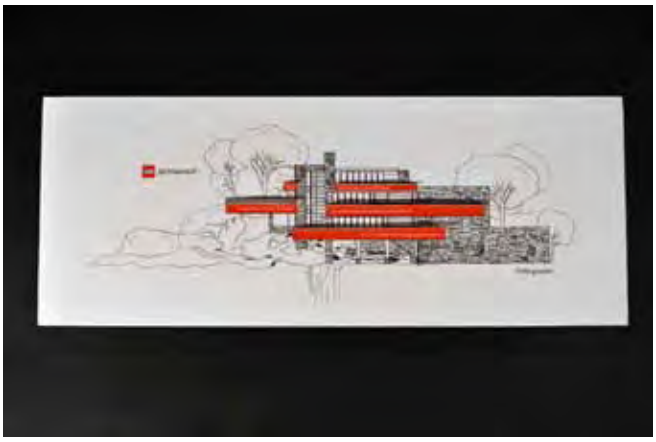


Figure 7.2. Completed reveal of Lego Architecture Series Fallingwater, Amber Jones

In student Stephen Sosa's solution for The Guggenheim he also chose to focus on the exterior characteristics of the building. The user is met with a poster that has simple white bands, but as he pulls and raises the bands slightly off page the curvature of the building is revealed (fig. 8.1).

Figure 8.1. Lego Architecture Series Guggenheim, Stephen Sosa

INTERJECT

This project was created in a graduate seminar; the students were asked to choose an existing museum exhibition, and create a new typographic identity for the exhibition and then adapt that identity to various applications in the museum space. This student, Stephanie Hall, chose an exhibition of the PostSecret postcards. This show represents an ongoing mail-art project by Frank Warren, which consists of people mailing him anonymous postcards with a secret written on them, which he in

turn scans and posts on a blog. A selection of the postcards was chosen according to the themes of life, death, and God, in order to create a traveling exhibit. The student developed a typographic identity for the exhibition, based on the traditional script found on the back of vintage postcards (fig. 9.1).

Figure 9.1. Typographic identity for PostSecret exhibition. Stephanie Hall.

The identity was then expanded to a series of banners promoting the exhibition. The accompanying text is taken directly from the postcards themselves, interjecting very private confessions into the public sphere. Following the curatorial vision for the show, each banner addressed one of the themes: life, death, and God (fig. 9.2).

Figure 9.2. Banner designs for PostSecret exhibition. Stephanie Hall.

As for the space of the gallery itself, the student was also interested in interjecting an element of the personal and private into the public museum space. Museum visitors are accustomed to the unspoken rules that govern our interaction with the art, and forbid us to touch it or approach it too closely. Figure 9.3 illustrates the actual PostSecret exhibition at the Indianapolis Museum of Contemporary Art; note the invisible boundary between the viewing public and the postcards displayed on the wall. In order to break down this boundary, the student envisioned that the wall text for the exhibition title would not be manufactured from the usual vinyl, but

would instead be made into a chalkboard. Pieces of chalk would be provided, so that visitors to the exhibition could write their own secrets on the wall (fig. 9.4). Her intent was that the people viewing the exhibition could experience the same catharsis of anonymously unburdening themselves of a secret, which is the crux of the entire PostSecret project.

Figure 9.3. Photograph of museum visitors viewing the actual PostSecret exhibition at the Indianapolis Museum of Contemporary Art.

Figure 9.4. Wall text design for PostSecret exhibition, transforming the exhibition title into a chalkboard where visitors can leave their own secrets. Stephanie Hall.

INTERFACE

For this same graduate project, another student, David Morley, chose to invent an exhibition for the permanent collection at the Museum for the American Printing

House for the Blind. The challenge was to create a space that was welcoming and accessible to blind and sighted visitors alike. Since the exhibition would contain the history of Braille printing technologies, he began by investigating Braille and its visual properties as a typographic system. The characters are defined by turning dots "on" or "off" on a six-dot grid, so it is governed by a strict geometric logic (fig. 10.1). By sliding one of the dots around within the six-dot grid, the student drew the letters of the Roman alphabet, bound by the same frame as the Braille letters (fig. 10.2). When superimposed on top of one another, the result is a hybrid Braille/Roman typeface that can be read by hand or by sight (fig. 10.3).

Figures 10.1 (left) and 10.2 (right). Typographic explorations of Braille and Roman alphabet. David Morley.

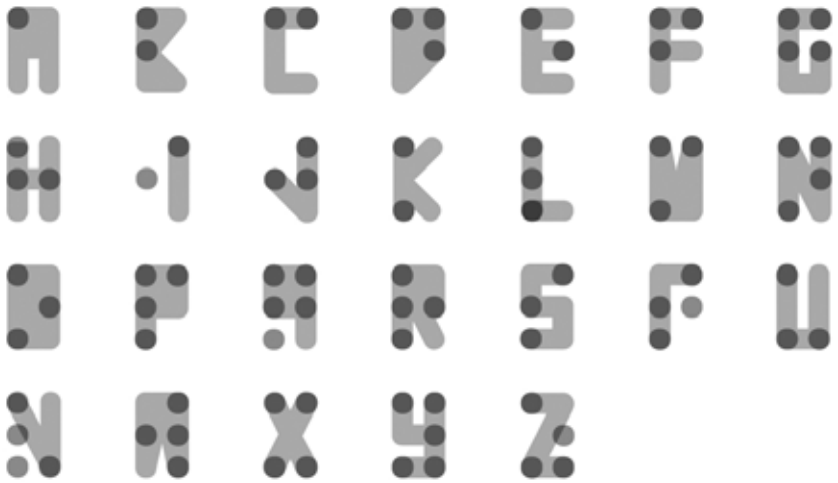


Figure 10.3. Typeface design combining Braille and Roman alphabets. David Morley.

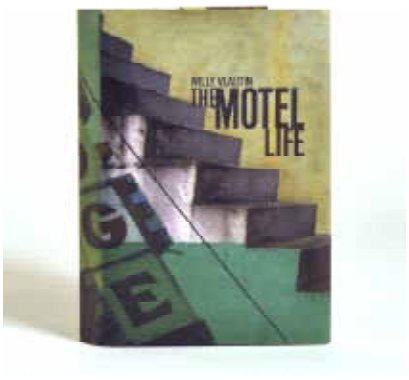
The student used his original typeface design to create the wall text for the exhibition, with the visible letters painted on the wall and the Braille dots rendered dimensionally (fig. 10.4). This solution presents the exhibition title to blind and sighted visitors equally, without privileging one writing system above the other. This project brought to light the fact that a typeface itself is a user interface: a visual system that mediates between the content of the text and the reader.

Figure 10.4. Interactive wall title for a proposed exhibition at the Museum for the American Printing House for the Blind. David Morley.

INTERTWINE

In this project, emphasis was placed on the multipurpose potential of a poster. The upper level students were tasked to create a book jacket that served as a poster when unfolded. The students were asked to consider the storyline, mood and characters for the design of their jackets and poster. They were encouraged to investigate a slow reveal of characters and settings without giving away the plot.

In student Jenny Powell's interpretation of *The Motel Life* she focused on conveying the grimy and dingy aspects of the characters state of life (fig. 11.1). She incorporated a subtle die-cut stair on the cover that when completely unfolded into a poster created a strong visual edge (fig. 11.2).



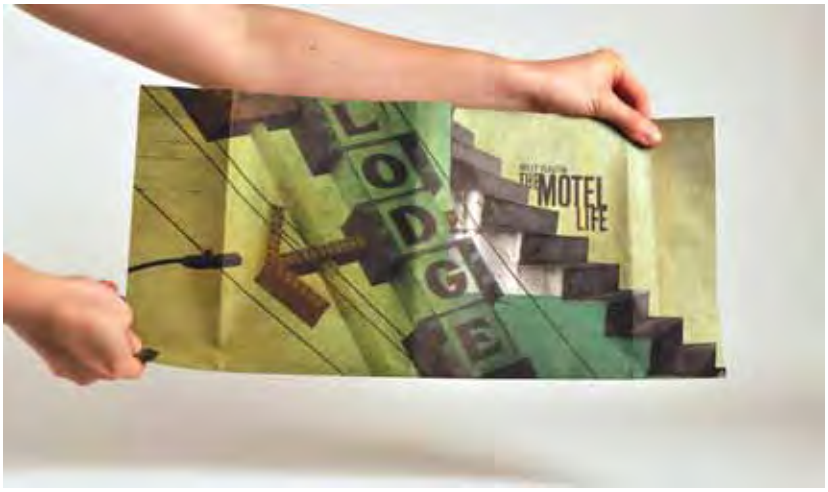


Figure 11.1. *The Motel Life* jacket, Jenny Powell

Figure 11.2. *The Motel Life* jacket poster revealed, Jenny Powell

The design goal in student Holly McCastlain's version of *Fear and Loathing in Las Vegas* was to have the jacket feel like a suitcase that was being opened as the unfolding occurred (fig. 12.1). In the final poster she created a two-sided image. On one side the suitcase exterior is revealed with the title (fig. 12.2). On the flip side she depicted the contents of the suitcase, a gun (fig. 12.3).

Figure 12.1. ***Fear and Loathing in Las Vegas*** **jacket, Holly McCastlain**

Figure 12.2. ***Fear and Loathing in Las Vegas*** **jacket full poster side one, Holly McCastlain**

Figure 12.3. ***Fear and Loathing in Las Vegas*** **jacket full poster side two, Holly McCastlain**

In student Adrianne Gutierrez's interpretation of *A Rose for Emily*, emphasis was placed on the plot twist of the story. In the story, the reader finds out that the main character is living with the body of her husband. The cover depicts the main character in bed with an empty side on the left (fig. 13.1). As the jacket is unfolded the "covers" begin to reveal a secondary image (fig. 13.2). Finally, when the jacket is completely unfolded you see both figures lying in the bed (fig. 13.3).

Figure 13.1. *A Rose for Emily* jacket, Adrianne Gutierrez

Figure 13.2. *A Rose for Emily* jacket revealing hidden image, Adrianne Gutierrez

Figure 13.3. *A Rose for Emily* jacket full poster, Adrianne Gutierrez

CONCLUSION

"The performance should make clear to the listener that the hearing of the piece is his own action—that the music, so to speak, is his, rather than the composer's."

—John Cage, on *4'33"*

John Cage understood that the life of the work is not in the work itself, but in the user's experience of the work. His piece 4'33" predated Barthes' essay on the Death of the Author by 15 years, but both spoke to this idea that the author/composer cannot claim to be the final authority on the meaning of his work; the meaning resides in the interpretation of the user. There has been no proclamation of the Death of the Designer, but this is because the designer has never stood in a position of authority from which she had to be toppled; it is not the designer's name that is printed on the covers of the books or albums we design. Because of this history of working in relative obscurity, we should be no strangers to Barthes' claim that the meaning of a work "... is not in its origin, it is in its destination: the reader [user]."

The traditional design project geared toward an inert design artifact narrows the opportunities for investigation, discovery, and dialogue. Crafting assignments that instead lead to the design of interactive interfaces demands that students expand their definition of their role as a designer. They are not simply producing an object, but collaborating with their users in creating a provocative and compelling interaction. This teaches students that they are not designing for themselves, but for the user—that design is not about making *things*; it is about creating experiences.

Out of Touch.

Design Education Strategies to Connect with Generation Me

Andrea Quam, *Lecturer of Graphic Design*
Iowa State University

Everyone belongs to a generation. Some embrace this idea while others prefer not to be lumped with their age mates. There is a long-standing debate regarding the effectiveness of generational research. Much of the research has been deemed as speculation and accumulation of mere qualitative data with no actual proof of true differences between generations. Who we are as individuals is due in large part to the culture we experienced during our formative years. This idea is the basis for generational research. Generational research is not meant to stereotype the generations. It is intended to show what people from certain generations are like on average. Generational studies show strong consistencies of the whole, but of course there will always be exceptions to the rule.

Today's college classrooms are primarily composed of two generations: The Baby Boomers and The Millennials (also known as Generation Me). The Baby Boomers are typically the instructors and The Millennials, the students. The Baby Boomers in the United States are typically categorized as those who were born between 1946 and 1964. This puts the typical boomer between 46 and 64 years old in 2011. There are about 75 million boomers in the U.S.; representing about 29% of the U.S. population. The 1960s is typically attributed as the decade that defined the boomers. The music, events, and the social changes made a permanent impression on many boomers. However, there were so many changes in the sixties that how old an individual was during the decade greatly affected their worldview. This generation is often labeled the first 'Me Generation.' Trendy pursuits of self-fulfillment, feminism and railing against conformity were defining cultural hallmarks that evolved while many 'Me Generation' Boomers were adolescents or young adults.

However, many argue those inhabiting today's college classrooms, as students, are the real 'Me Generation.' Called the Net Generation, or Millennials, this generation is broadly defined as those born in the 70s, 80s and 1990s. Some narrow it to those born between 1977 and 1999. However you divide it, this nicely encapsulates a group of people born after the concept of 'self-focus' entered the cultural mainstream. This generation has never known a world that put duty before self. Reliable birth control, legalized abortion and a shift toward parenthood as a choice rather than obligation make this generation the most 'wanted' generation of children in American history. *(Twenge, p. 4–5)*

Jean M. Twenge, Ph. D. explores this generation in detail in her book, *Generation Me*. This book presents the results of twelve studies on generational differences, based on data from 1.3 million young Americans. During her doctorate research at the University of Michigan, Twenge discovered this data by reviewing questionnaires that measure personality traits and attitudes. These questionnaires had been used thousands of times since the 1950's, 1960s and 1970s, and most people who filled them out were college students and school children. Because the questions had not changed on the questionnaires, she has been able to compare scores and see exactly how young people's personalities and attitudes have changed. Her book is unique because it summarizes large amounts of psychological data collected at various times— across generations. She also includes ample references to popular culture, including television, movies, music, magazines and advertising. These

attributes create the visual archives of our culture for which graphic designers play a leading role in creating.

In the spirit of full disclosure, I personally must confess to being a member of Generation Me. I am at the older edge of it—too old to have any tattoos or piercings other than ears, but young enough to have experienced school programs focused on building self-esteem and the introduction of computers in grade school. I am also a college instructor. I recently began my career in the field of design education after ten years of professional practice in graphic design and several years of graduate school. I can clearly recall my first months of teaching in which I realized the student population was drastically different from that of my undergraduate days. I was puzzled. Was it my new role as instructor— being on the 'other side of the desk'—that made the attitudes of my design students seem so drastically different from those of myself and my peers in the same role? I had also returned to the program where I received my undergraduate degree, so the demographic of students and structure of the program was not drastically different. But I quickly observed major differences in my students. The students did not seem to have the same seriousness and approach to education my classmates and I had. For example, students' classroom attendance was an issue. As a result, departmental attendance polices were put in place. As a student I remember my roommates and I attending class through illnesses as well as other ailments—we dare not miss a class! We did what was asked of us to the letter. If we were instructed to have '100 sketches by Wednesday,' we would certainly groan and grumble, but all 100 would be done by Wednesday. We did not expect our instructors to respond instantaneously to a query. If we had a question we figured it out on our own, talked to other students or addressed it with the instructor during office hours or next class. We did not send an e-mail to our instructor and expect and immediate response. Now students question attendance policies. Medical excuse notes for students suffering from anxiety or depression are becoming frequent. Questioning the knowledge and authority of the instructor is second nature for this group of students.

There *has* been a shift in the personalities and perceptions of today's students. We are addressing a new and different type of student. Our job is to try and understand them and create curriculum that answers their needs and best prepares them for one of the most challenging and competitive economic environment graduates have ever faced. It's not an easy task. If we look at this problem from a design perspective, it's as if we were assigned the task of designing and trying to communicate with an audience foreign to us. How would we approach such a design challenge? We could begin by researching and trying to understand the demographic we are trying to reach, trying to decipher their perspective. We would not attempt to change them or get them to respond to what we deem suitable.

The challenging perspectives and world-views of this generation are not their 'fault.' Instead, young people of today should be seen as products of their culture, a culture that teaches them primacy of the individual at virtually every step, and it's a culture that was in place before they were even born. Asking students of today to adopt personalities and attitudes of a previous time is like asking an adult American to instantly become a nationality completely foreign to them. It simply does not work. Morris Massey, a popular researcher and speaker on generations, put it this way. "The gut-level value systems are, in fact, dramatically different between the generations… The focus should not be so much on how to change other people to conform to our standards, our values. Rather we must learn how to accept and understand other people in their own right, acknowledging the validity of

their values, their behavior." As Massey points out and research supports, our value systems are set in childhood and don't change much thereafter. *(Twenge, p. 8)*

Many psychologists have begun researching and trying to understand this generation. The fore mentioned Jean M. Twenge, Ph. D. is one of the leading researchers in this area. Through studies and ensuing research, Twenge has begun to discover the trends, personalities and perspectives that are common to Generation Me. Twenge's research has shown Generation Me has been told they were special from childhood through television, movies, school programs, etc. creating a change on their world-view. The focus on 'self' is different from the viewpoints of past generations. Boomers focused on introspection and self-absorption. Generation Me is not self-absorbed, but rather self-important. It is taken for granted they are independent, special individuals so they need not really think about it. *(Twenge, p. 4)*

This is not the same, Dr. Twenge clarifies, as saying they are spoiled—that would imply they always receive what they want. Although some parents are too indulgent, many in this generation must overcome difficult challenges their elders never had to face. While families could achieve middle-class status on the earnings of one high school-educated person, it now takes two college-educated earners to achieve the same standard of living. Many teens feel the world demands perfection in everything and are cracking under the pressure. Twenge also clarifies this generation is not selfish. Youth volunteering has risen in the last decade. This generation finds fulfillment in helping others—as long as it does not conflict with their own goals. They want to make a difference, but they want to do it in their own way. They believe people should follow their dreams and not be held back by societal expectations. But these high expectations, combined with an increasingly competitive world, have led to a darker flip side. Generation Me blames other people for their problems and they sink into anxiety and depression.

The accelerated pace of recent technological and cultural change makes it more important than ever to keep up with generational trends. A profound shift in generational dynamics is now occurring. Since the 1960's, Baby Boomers have dominated our culture. For the past 50 years, marketing and product trends have been tailored to their life development. However, the Gen Me population has begun to overwhelm the Baby Boomers and businesses are beginning to shift their marketing towards them and away from the Boomers. Generation Me is now the consumers everyone wants to reach—the lucrative 18-35 age group.

It is important to note there are differing views from Twenge's on this generation. In Neil Howe and William Strauss's book, *Millennials Rising,* they believe those born since 1982 will usher in a return to duty, civic responsibility and teamwork. They feel this generation will resemble the generation who won World War II. However, this team's theories are based on qualitative data and do not have the quantitative data to back up their perspective. Instead Twenge's quantitative data has found, through personality tests, today's young people have been consistently taught to put their own needs first and to focus on feeling good about themselves. This is not an attitude conducive to following social rules or favoring the group's needs over the individuals as Howe and Strauss propose. They also argue today's young people are optimistic. This is true for children and adolescents who have absorbed the cheerful aphorisms so common today ("You can be anything you want to be"). However their childhood's of constant praise, self-esteem boosting and unrealistic expectations does not prepare them for an increasingly competitive workplace and the current economic squeeze.

Twenge describes this situation as 'Adulthood Shock.' After a childhood of buoyancy, Gen Me is working harder to get less. This generation enters a world in which finding and keeping jobs is a challenge, basic necessities such as housing and health care are exorbitant. The reality of adulthood shock is the scene we are beginning to see play out in today's college classrooms. This could be another reason for some of the challenges we face with students in the classroom today.

So what is an instructor to do? The first step is to try and understand the Gen Me audience in our classroom. They have a different outlook on life because the times that shaped Generation Me are very different from older generations. They can't be blamed for absorbing the culture around them. Their attitudes are not wrong—just different. Trying to understand their worldview will help any instructor connect more readily with Gen Me students. To help this effort, consider how old your students were on 9/11. While many of us can remember where we were and what we were doing when we heard of the first plane hitting the World Trade Center, many of our students cannot—because they were only 10 years old.

The strong sense of entitlement we are beginning to see in our students is a natural outcome of the self-esteem movement. And it has been acquired through 18 years of upbringing. We cannot change this, but we can understand this means we will have to be prepared to explain very clearly that success and privileges will not happen overnight. Many employers express frustration with the expectations new Gen Me employees have for salaries and promotions.

As instructors of Generation Me, we can begin to play a role in better preparing them for the reality of life. Introducing them to the idea of perseverance, and that rewards are not immediate will help them succeed in the workplace and as designers. With my students, I have seen this play out in the reluctance to invest in solid process work for design projects. Building a series of checks and balances into the process work helps them learn the perseverance and self-control needed to create fully developed, thought-out design solutions.

Students in today's classrooms have the liberty of exploring the possibilities for a design much more quickly because of technology, but they do NOT have it easy. Before you become frustrated with them, consider the economy they will be entering. This is a generation that has been praised and had their expectations built up, only to be faced with some very harsh realities upon entering adulthood. This is often what we are witnessing play out in our classrooms.

With these considerations in mind we might begin to look at our curriculum and consider how we might tailor it to this new generation's frame of mind. We need to teach students about career paths in Design at an earlier level. The field of design is changing dramatically and our students are approaching it with great anxiety. The earlier we can begin to educate them regarding their opportunities, students can get help to develop an education plan that will help them achieve their career goals. Job placement offices and college career services can only spend so much time with students. Sophomore level career courses should cover career opportunities, graduate schools and job search skills. Ideally these classes would feature guest appearances by alumni. This would help ease anxiety caused by high expectations while helping students to develop more realistic views of professional practice.

At Iowa State University we have a very structured, tightly sequenced curriculum in graphic design. But in this year's (2011) senior studio—which typically focuses primarily on their portfolio—we also had an opportunity to look at our curriculum and see where there were gaps in fulfilling the needs of our graduating Gen Me seniors. Professors Roger Baer, Cheri Ure, Alan Mickelson and myself introduced two new projects to the seniors this year. These projects were a departure from typical curriculum in our program and began to address some Gen Me attributes.

The first project focused on social consciousness. We wanted the students to realize the power of design and truly focus on audience beyond themselves. Similar to community service projects, this approach provided an opportunity to teach 'the intangibles', such as respect for others, understanding of privilege and empathy for those less fortunate. These are valuable lessons for a generation who was raised on self-focus.

We also noticed our students were not as strong in their problem solving skills as they could be. They did not have the self-control and perseverance to invest in the process that they should have. Impatience and the need for instant gratification is a hallmark of Generation Me. In the second project we focused on process and design thinking rather than a solution or the creation of an artifact for their portfolio. Students worked in teams to select the problem they were going to investigate. They worked in for a week and a half on investigating the problem they had discovered. We introduced them to IDEO's method of problem investigation and provided them with relevant readings. The end result was a presentation of their problem and an explanation of the process of investigation they used to frame it. We emphasized they were not to come up with a solution, but to investigate and research only the problem and frame the approach to it using 'design thinking.' Interestingly enough several teams felt compelled to provide a solution regardless. It was very telling to see these were the groups who did not have the depth of design thought and research in their presentation. This illustrates the characteristic of Generation Me to desire the end result and instant reward rather than focus on self-control and perseverance. This is a hard lesson for anyone to learn, but it is one essential to ensure strong design solutions.

Finding common ground and connecting with members of our own generation is relatively easy. Having lived through the same formative points of reference, we tend to share a feeling of connectedness. But with members of another generation, connecting can be much more difficult. The same factors that bind one generation drive another apart. As we move forward, Generation Me is moving beyond our classrooms and into the workforce. Understanding and adapting to this generation's world-view and their ways of working is becoming more than a good idea—it is becoming essential to the viability and prosperity of our society.

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What is the role of interaction within a graphic design curriculum?

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Abstract
If a student came to your graphic design department and said they wanted to be a web designer, where would you send them? Perhaps the beginning of the answer to that question would be to define the terms 'web design', 'interaction' and 'graphic design' as they pertain to your department. Within the discipline of design, where the boundaries between specialties are becoming increasingly blurry, how can a curriculum be broadened to achieve realistic goals and outcomes in areas of knowledge that are not traditionally covered by that curriculum? How can these happen without encroaching upon the original owners and teachers of that knowledge? How should non-traditional subject matters be approached within departments that don't usually teach them? This paper will examine the above questions and use the intersection of graphic and interaction design as the exemplar, arguing for the inclusion of non-traditional subject matter and attempting to offer potential thinking for the design school of 2015 and beyond.

Student Bookmakers: Pre- and Post-Digital

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Abstract
iBooks and electronic media offer design adjustments to the text of a book according to the reader's preference of typeface, point size, color, and alignment. The new generation of iBooks (Nook color) has advanced to allow the reader to arrange text and images on the screen page – once again as the reader prefers. The reader has become a designer of their page format in the digital book structure. The reader now personalizes the context before and during the experience of actually reading. How much of an advantage, or distraction, is this opportunity for the reader? Returning to the pre-iBook scenario of words and images on paper pages bound in the traditional book structure, it is worth reviewing how the verbal and visual components were created. The progression from pre-digital creation and production to post-digital publication software and media reveals how the methods and materials affect the design, printing, and binding as well as the interpretation of the content. Of particular interest in this review is the studio setting of undergraduate book arts students and a thirty-year archive of student work. It is possible to compare and contrast students' pre- digital hands-on artistry with students' post-digital skills as well as discern how reproducible methods of production impact the students' creativity and interpretation of the content. Examples of student bookworks will be shown during this presentation to demonstrate how the art of bookmaking withstands reader-formatted iBook technology.

Translating Design Text

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Introduction

What constitutes academic "research" in graphic design is an ongoing, essential, and unresolved debate. We may state that a rough outline exists but little that's definitive. What I will address in this paper is one of my primary activities: translation. I wish to presents my complaint about such an important research area going unnoticed. I will also look at the arrogant attitude of the Western academia as a way of attempting to call attention to the largely unexplored research area of translating graphic design texts.

While we seem to be comfortable (at last) to assert that design theory and history is crucial for both academic study and practice, it's still a matter of anxiety for those of us for whom English is our second language. Unlike your linguistic complacency, some people in this world don't understand English very well. So, what? Does it bother you? Does it matter to your students? The answer should be yes. It should concern you if recognize the major contributions on today's graphic design discourse from graphic designers from non-English speaking countries.

It is reasonable to say that English is the world language and one must be able to speak and write it in some degree to be involved in the international design discourse. As an academic and practitioner now, and a student in the past, I cannot agree more on this statement. I have been communicating with my students and colleagues in English on a daily basis. However, a different problem arises when I conduct what I consider serious academic research. As you know, there are many readings that an academic should be familiar with to be considered knowledgeable about the contemporary state of design discourse. But as a designer who spent his first in 30 years Korea, it took about five years for me to get "up to speed" on design literature.

Not only must I struggle with the sophisticated language but also the absence of the practice's historical background. Well-known writings and concepts such as "The Crystal Goblet", "First Things First Manifesto," "Modernism" and "Post-Modernism" was not part of my knowledge until I started the CalArts MFA program in 2004. I knew about psychedelic music but wasn't familiar with its attendant graphics. I encountered reproductions of David Carson's and Neville Brody's work, but never read about them. No doubt that Emigre or Cranbrook didn't reach me.

There are a few things I was familiar with. Toward the end of my undergraduate study, I had quite a good understanding about the "New Typography" movement. Thanks to the early

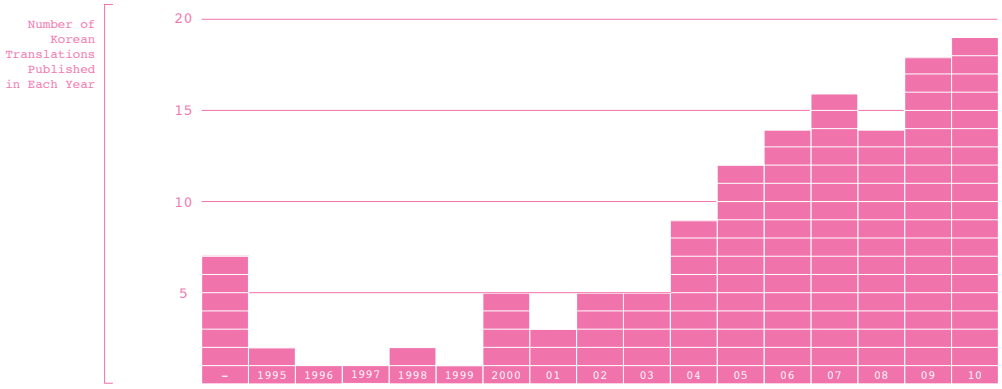
translating work of designer Ahn Sang Soo, I was able to read the Korean translation of Asymmetric Typography written by Jan Tschichold. But though the book has information on early 19th's European typography, it couldn't bring me to the further research because it was one of a few translated graphic design theory books by that time.

It is difficult for most of you—native members of Western graphic design culture—to comprehend how much of design discourse is based in that shared heritage. And to be aware of the disadvantage placed upon designers and students from outside that culture. When I started my graduate study, I struggled to catch up what has been shared amongst my colleagues. My faculty and fellow students also struggled to educate me. When I look back upon those days, had a chance to read at least basic contemporary perspectives before I come to U.S., my contribution to the class research could be better.

Crack in our intellectual society

This argument can be countered by my lack of effort to read English-written text. If that is what's in your mind, let me relate what my old mentor said to me after I told him of my dramatic military experience. I almost killed myself from not quite knowing how to work a rifle. After carefully listening to my story, the wise man said: "There must be something wrong with the weapon design." Rather than questioning yourself, you should doubt the system surrounding you instead of keep blaming yourself desperately.

With the graph shown below, you can roughly see the number of Korean translations published each year in design area.



Reference: Bandi & Luni's Bookstore, Art and Pop Culture / Design / Understanding Design, Design Theory, Criticism, History

As you see, there never have been enough Korean translations of design texts compared to English editions. Design Observer's "Books Received" section presents 159 books about design and visual culture published only in 2010. Hennessey + Ingalls sells 413 volumes published in 2010 under its "Graphic Design" category. Even though both lists are limited to graphic design category, they far outnumber the total number of Korean translations in the entire design category.

One can hardly view the state of contemporary graphic design discourse excluding the influence of designers from Korea, China, Japan, Russia, Holland, France and other countries. Demographically, non-English-speaking designers are a large part of our practice. Art Director's Club 90th Annual Awards selected 335 winning teams and individuals. More than 30% of them are from the countries where English plays no crucial role*. Area 2 includes 61 of 100 total selections. The population of design students' is even more international. Output 2010 presented awards to 66 students from non-English speaking country while only 16 winners are from English speaking country. Adobe Design Achievement listed 118 semi-finalists from those countries out of 303 total.

All the books and awards mentioned above—besides Output—were organized by groups based in the United States. It shows that graphic design's scope is not limited to English speaking world—and never has been). The strong current of the Asian graphic design can also be noted on bookstore shelves. Asian Graphics Now (Taschen) is an excellent portfolio book of designers from Korea, China, Japan, and other Asian countries. Tokyolife: Art and Design (Rizzoli) presents wide range of selected artists and designers from Tokyo. 3030 New Graphic Design in China (3030 Press) introduces young Chinese graphic designers' work. These books are up-to-date, comprehensive references of young designers in Asia. However, regardless of how glamorous the trophies and glossy the prints, it's rare for books about Asian designers to include any statements written by the designers—their individual thoughts go unspoken. All the text in "Asian graphic design book" is either captions or critic's introductions. As presented, Asian design is no more than a collective, cosmetic trend for western designers—and vice versa.

Struggling translators

The differences in language closes out intellectual exchange between the two design cultures. Thus the significance of translation as a way of exchanging ideas is unquestionable. The remaining question is: who is going to take the burden on their shoulder?

The reason why there have been few graphic design translations in Korea is obvious. First, it's hard to find a qualified translator that's also knowledgeable about the graphic design field. Second, those meeting these criteria receive little compensation for their efforts.

Translating a specialized text requires highly specialized knowledge and talent. To become a qualified translator in Graphic design area one must possesses three qualities: Basic

understanding in general design history and contemporary theory; a decent writing skill; a command of two languages.

Many of the graphic design texts we have today were written for design magazines, trade journals and design conferences. Due to the nature of media and its audience, the texts are profession-oriented and regularly feature its terminology. Attempting to rewrite them in a foreign language without being fully familiar with such terms as "functionalism", "modern furniture", "grotesque," and "Swiss typography" is as dangerous as going across Interstate 78 blindfolded.

What is more, those few capable individuals are provided scant motivation to be engaged in this task. The professional rewards are few. The non-English written book market is relatively small. Only Korean designers would purchase a Korean translation. It's the same story for Japan and China. Moreover, books dealing with such specialized subject matter are less likely to see profit from sales.

Graphic Designers with full-time commercial practices to maintain will find no time to engage in this extensive writing project even if they possess an aptitude for it. At this point, we must count on bi-lingual graphic design academics. Unfortunately, academia is not supporting translation activity either. Tenure and promotion committees are often suspicious about the contribution that translating makes to the advancement of a field's discourse. Unlike authoring a book, translation is not regarded as the generation of knowledge by the faculty member. My art historian colleague Robert Wojtowicz—a published author and Associate Dean for Research and Graduate Studies at Old Dominion University—put the issue to me clearly in a recent e-mail:

> *I don't believe that translation publication is given much attention during the promotion and tenure process unless there is significant material added to the original by the translator, such as an introduction or annotations.*

Indeed, writing a few pages of an introduction is considered to my academic credit. But the hundreds pages of translation is not. So while faculty recognizes the importance of translation activity, they decline to pursue it after discovering the lack of support in academia. They rightly regard it as a distraction from what their main tasks should be: publishing their own writings or curating exhibitions. This distinction respecting original authorship is only justified if graphic design research is regarded as relevant only to the author's culture. This view obviously is unproductive for the future of graphic design study as a scholarly research area.

Creative and scholarly research

Although translation work isn't highly regarded as academic research, we might agree that it is a creative and scholarly study requiring significant research—nearly or as much as writing the original text. As mentioned above, to translate a graphic design text, one must be knowledgeable about the field's history and theory. Almost all design text is based on a

profound cultural discourse of its place and time. Without understanding the context that the text is situated in, nuances of detail, and precise connotation will be lost. What may be worse than no translation is a mistranslation.

Not only does translation require research to be immediately effective, it prompts wider and additional research. My second translation project, Looking Closer 3, guided me onto a deeper inquiry into 20th century graphic design. Every essay either demanded or inspired me to investigate beyond the immediate references. Terms, names, dates, and their hidden meanings required clarification so I might properly explain them to Korean readers lacking the Western cultural background. Among these 55 essays, The Age of Plunder by Jon Savage challenged me most to conduct a extensive amount of research about of British pop culture figures from 20's to 80's including 84 proper names of media, TV shows, films, celebrities, style, pop records and their sleeve designs.

Since graphic design text translation hasn't been highly regarded as a research subject in academic society, there are no reliable methodologies or principles established. Due to their inherent differences, translating English text into Korean raises various exceptional occasions. Defining essential forms and making right cases of design text translation is another research assignment given to the translators. Min Choi documents this investigation in his introduction to Korean translation of Modern Typography: an Essay in Critical History by Robin Kinross published in 2009.

> *It might be argued that translating "modern" into "현대", not into "근대" or "모던" offends against the past translation custom. However, in my view, the term "근대" tends to set some time distance between the readers and the state of contents. This distant is not quite the thing particularly for this book claiming the nowness modernity. Unlike in English, the phonetic nuance of "modern" signifies excessively special and inherent phenomenon in Korean. [. . .]*

As Min Choi notes, words relationship in Korean and English is not a one to one correspondence—and it gets even more complicated in the text about speciality. The regulation is still lacking about notating punctuation marks in translation text. In the same introduction, Min Choi also notes his own principles of using parenthesis, colon, semi-colon, ampersand, hyphen and quotation mark in Korean translation whose usages of these marks are quite different from English writing. In the field broad, established standard regulation of translating design text in terms of both semantic and technical aspect will help translators save their effort and reduce the risk of misinterpretation.

Conclusion: Call for attention

Only in recent years—nearly fifteen since the arrival of Asymmetric Typography's Korean translation—have several similarly meaningful translation volumes been published in Korea. There are still not enough translated texts to connect practitioners and theorists in East and West. But, looking at the bright side, the demand for reading English-written text about graphic design is greater than ever. The bilingual designers available are working

hard to meet this demand. However, this movement will not grow as a flourishing research area without adequate reward and support within design schools. As long as translation is seen as a lesser academic area, we cannot ask faculty to sacrifice themselves and their jobs.

To bring this paper to a conclusion, I would like to enlist the attention of graphic design educators and largely the entire design academia in United States to this unremarked but vital research subject. We must realize that translating design text benefits students, designers, theorists, and historians on both sides of language groups. If graphic design education is truly concerned with being cross-cultural, global, spreading ideas to a wide range of people, and bringing new opinions and perspectives across the contemporary design field, translating academic texts from English to other languages should be regarded as such a important task. It is one that builds an ideological bridge between the groups of world design society—including them in the contemporary design discourse.

When you return to your institutions, please encourage your international students to translate the class reading materials into their native languages. Those students already possess two properties to be a qualified translator: basic understanding in history and theory, and a command of two languages. Reading English text, from my experience, is never easy for a student from a non-English speaking country (it's often difficult for the native English speakers!). If you ask them to translate readings, it will cost lots of their time. Please encourage and reward them. It definitely is worth doing as it is the only way for them to understand the deeper meaning of the texts. And who knows? Someday, one of them might end up with adding one more volume to the list of graphic design book translations. I would love to see that happen.

Thanks to Kenneth FitzGerald, Professor of Graphic Design in Old Dominion University, who was willing to edit this paper, and to Robert Wojtowicz, Ph.D., Professor of Art History in Old Diominion University, who allowed me to quote his email mentioned in the middle of "Struggling translators" section.

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* Kachru's Three Circles of English model classifies the world countries into three groups. The "Inner Circle" consists of countries where it is now used as a primary language. The "Outer Circle" has countries where English is being used officially but not as the first language. And the "Expanding Circle" encompasses countries where English plays no crucial role but it is widely used as a medium of international communication.

Engaged Designers Designing to Engage

The Case for Engagement

In graduate school I remember Sy Sillman (Joseph Albers' partner) relating that Albers complained to students that they should be doing search, not research. Getting students to research is a challenge alone, so how do we make the design education experience more empowering for students, more confidence- and skill-building, while also increasing the positive experience for an intended audience? We recently thought that our design was up-to-date if it paid attention to both client and audience needs, fell into a genre and medium appropriate for the topic, and if it was delivered with legible typography and a dose of visual excitement. It seemed enough to ask, and there is already so much to master in terms of theory, history, software and design methods. However, responding to briefs can become baseline in terms of a design thinking challenge for students and for the greater good of our world.

Teaching design is a living, changing, tricky design problem that requires continual assessment. In my evaluation of how well we were doing, I found that there were shortcomings that were not reflected in the portfolio necessarily, but really bothersome. You might recognize a few of these in the millennium students of today. Commitment seemed shallow, with a preference on the part of students to be handed content rather than to seek it out or author it. Though we stressed design aesthetic appropriate to the audience, a tendency to go for the cool trends was always lurking. Craftsmanship was becoming less careful, and that extended to lack of care in proofreading, and even to taking short cuts in the design process. Even though so much was required in terms of the expanded field that now encompassed web and social media beyond print, students seemed falsely confident in their mastery of technology just because they were users of it. They seemed to be willing to let some things go, and to be only partially engaged in the projects.

We really want design education to prepare students to seek out the questions not yet asked, to do the groundwork to approach a self-authored project recursively and with team strength. The goals of such projects should be ambitious, setting out to affect behavior change or to anticipate needs of a viewer immune to the barrage of messages incurred on a daily path. We determined that both the research and the fabrication parts of the process should become more hands-on, taking students out of the classroom and off the computer to facilitate a holistic view and increase experimentation.

The stakes are higher than getting our students jobs. They need to become the leaders of the next generation of thinkers, because they will either help correct some real problems in our world or contribute to them. For example, the Center on Budget and Policy Priorities reported in May that the US has the worst income inequality among the 24 nations making up the Organizations for Economic Cooperation and Development—also worse than Ethiopia[1]. The enormously widening gap in income inequality in the US is accompanied by a power and communication crevasse.

[1] Garafalo, 2011.

With last year's supreme court decision to allow corporations to contribute unlimited amounts to political campaigns, we may never see another candidate elected who does not owe them. The EPA, Public television and radio, and the nascent Consumer Advocacy department headed by Elizabeth Warren are teetering on being de funded as too expensive, while tax rates are preserved for the richest 2% making 80% of all US income. This means no protection of our air, water, or financial human rights is perceived by congress as a fair trade-off for lowering our deficit. The most scary fact is that these things are not being noticed by the general public or our students and future leaders.

The public is not only largely is unaware of these issues, but equally unready to hear messages that might help them survive diseases, find community, or live better. Like our students, they are technology savvy, but use it to reinforce their current views, interests and habits.

Dean Kamen, an industrial designer with over 400 patents, saw the stunningly poor statistics of US high school dropout rates and achievement scores, and founded a robotics competition as a way of innovating a change in US teen culture. It has snowballed to include 250,000 students by using play and sports culture to engage them in science[2]. Changing our culture is a worthy design goal.

Maybe we can't think that big, but we must think large enough and take risks to show payoff and to begin some dreams about design as a calling. In his book, *The Happiness Hypothesis,* Jonathan Haidt, a social psychologist from the University of Virginia and TED speaker, defines a calling as something you feel born to do, and something that feels like vital engagement[3]. His studies in social psychology show that people who feel vitally engaged are among the happiest in every culture..

So, how do we add that ingredient of engagement to projects and to outcomes for an audience?

Engaging Students

There are many models for the design process, including a number that are summarized by this one developed by Hugh Dubberly and Shelley Evensen[4] in 2009 for the Alberta College of Art and Design's Creative Process Institute (fig. 1). It begins with the triad of Observe>Make>Reflect, that can cycle until the best prototype is found. I would like to zero in on a component of Make" that has to do with "being in the flow", In her book, *Flow: The Psychology of Optimal Experience,* Mihaly Csikzentmihalyi describes it as a much desired state in which we feel the making is so beautiful and effortless that we don't need to eat or sleep (as opposed when we don't have time to eat or sleep). Dubberly provides this chart[5] that shows flow connected to thoughts that balance ability and challenge which works oth for the designer and the audience learning new things (fig 2.).

That is the siren which drew us to design in the first place and which, according to psychologist Dr. Csikzentmihalyi, happens when our skills are well matched to the task at hand. We need to make sure skills of reaching, stepping out of comfort zones, and following the design process, become carriers of flow, not the boring parts that have to be completed before the Design phase happens.

Being engaged increases the fulfillment and the energy available for every stage of the design process. It enhances the conversation and the bond between designer and client. It can help push through inertia into action that creates motivation.

[2]Kamen, 2011.
[3]Haidt, 2006.
[4]Dubberly, 2009.
[5]Dubberly, 2009.

fig. 1

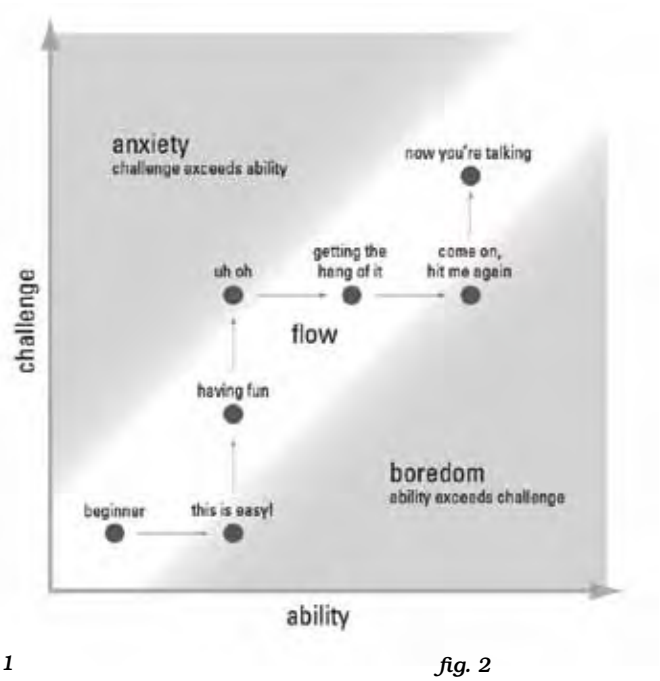

fig. 2

One model of the design process we like comes from *The Universal Traveler* by Bagnall and Koberg: ACCEPT>RESEARCH/ANALYSIS>DEFINE>IDEATE>IMPLEMENT>EVALUATE[6]. I particularly like that the first step is a personal one—Acceptance. It asks "What's in it for me? What's in it for others? Do I have time to do it justice?" Taking the time to own the project even when its an assignment, can give the designer an engaged starting point so that the research will be done with energy and more thoroughly than when we skip it.

In the research and analysis phase, we are also engaged by already having found empathy with the user or client message. And we look for ourselves in the persona while noting differences. The persona is very valuable for making the transfer of engagement from the designer to the audience.

At WVU, we see this attention to engagement a bit differently in each level of the design curriculum, but at each level, we use connection to the real world through client involvement, so that a sense of something larger than yourself is part of the process. We gradually increase the level of complexity and responsibility, attempting to build on successes to drive risk-taking in unfamiliar territory, without moving away from the possibility of "being in the flow"

Engagement in the first-year

Our first year is the sophomore year, as in most programs that share a freshmen experience among all art and design majors. There is much how-to material, from software to seeing composition, to achieving craft and paying attention to directions. It can be tedious and confusing. We do two things to increase engagement in this year. We demand mastery of some skills and vocabulary, and we also show its application almost immediately, so that students can see the difference between what they did before the instruction and after.

[6]Koberg, 2003.

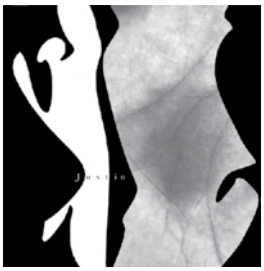

fig. 3

One of the first projects is a Swiss problem that focuses on understanding ideas within an abstract contour line. It has many rules, that when followed, create a lot of energy and focal points within a composition (fig. 3). I won't belabor it here because I didn't invent it and I know at least every school that Rob Roy Kelly touched uses it. It teaches a tremendous amount of vocabulary, and they find it painful until they get it.

Once students can articulate ideas within an contour line, we go immediately into applying it. In researching an identity for a real client, and using the tension curve vocabulary to bring simplification, contrast and energy to the form, they must remain true to the essence of the object. Gestalt principles are required of it as well. This year, the Appalachian Stewardship Foundation was the client, whose charge was to fund remediation projects for the environment in the region of West Virginia where we live at the rate of $500,000 per year (fig. 4). That felt worthy.

Symbol design was a senior class when I was in school. I want students to know early why its important to help people through design. It has helped elevate the comic and tattoo ambitions some bring to college. 100 ideas before drawing up symbols keeps the process real. The fun of taking a good symbol into various applications does also, and makes logic out of hierarchy. Students give an individual presentation to the client.

fig. 4

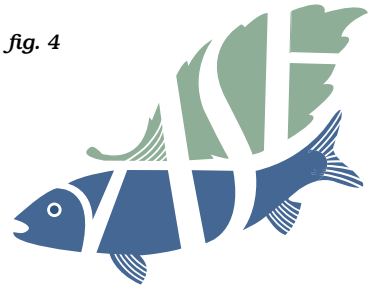

fig. 5

fig. 6

Another student's symbol was chosen for the Presbyterian Child Development Center in his first semester in the program. He had an absence problem and had a B- average to this point. After this project, he never missed a class the rest of the year and is much more competitive in class. He found flow.

It's not without play. Once we decided that going to the rest room in our own building should be less boring and more personalized (fig 6).

fig. 7

Simultaneously with the drawing project, we are making symbols with letter forms and studying the development of fonts. What we usually do with the letter combination project is to develop it as a basis for a visiting artist lecture poster. After the letter symbol has been developed, a hierarchy of information is added in a type arrangement that responds to the module. The poster is four feet high, teaching scale and how to understand proportions out of the computer. The best one of four is selected for each artist and the students vote. The selected poster is printed and greets hundreds of visitors the week of the event. Engagement can come from exposure and responsibility.

The second semester, we up the ante, covering every event on the College of Creative Arts Calendar in Art, Music, Theatre and Dance, and allowing every student to have a poster displayed (fig 7). These are not initials, but we keep the rules tight in that the whole poster has to be created only with typography to interpret the event.

Sometimes we respond to what's in front of us as a problem. We ordered some very ergonomic chairs that felt very good, but had a design flaw that was not resolved by having the manufacturer send 20 replacements supposedly fixing the problem of the backs tearing out. They did not. Discovering that the plastic back frames were easy to drill through, each student was asked to propose an alternate solution to the chair back situation. Some loved it. Some protested that this wasn't graphic design. But we garnered about five really nice solutions that personalized our space and proved that they could do it regardless (fig 8).

fig. 8

Engagement in the junior level includes viewers

The second year uses more design theory, works with typography in more advanced problems, adding sequence and dimension and digs more deeply into the process. Engagement happens through still working with real clients on more complex projects as principles are mastered, and stressing that *empathy* factor. We also keep looking at models of designers doing important things. And finally, we make sure there is play and humor in the mix.

One of the ways we endeavor to engage our audience is by recognizing that no matter how powerful we think a design may be, there may be very good reasons that it won't be acknowledged as such by an audience. We look at theories of contemporary psychologists to try and target an audience where they are in a moment of readiness to hear something new.

Two I will talk about here are Jonathan Haidt, who has alerted us to studies on value systems held differently by different demographic groups, and James O. Prochaska, who breaks behavior change into stages, and teaches us that one size does not fit all when trying to promote change of behavior or of predisposed judgement[7]. The six stages of change that successful self-changers go through in order to achieve permanent behavior modification have been known to the medical community for twenty years from Prochaska's work (fig. 9). One can only move one step at a time, but design messages often try to alert you to a problem and ask you to change all at once—ending up preaching to the choir and not being heard at all by those who could most benefit.

What is useful for designers, is that Prochaska's work also gives helpful processes for someone attempting each level of change. If we imagine a persona who is in that stage, we can design to that, helping them achieve that next level, rather than heaping on guilt or some negative message that will turn them off or make them give up without trying.

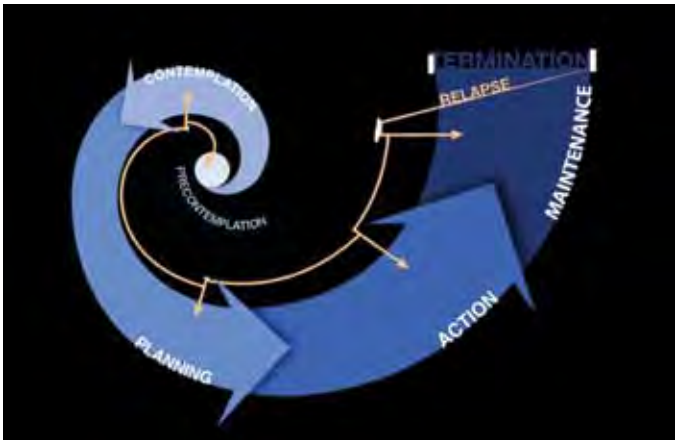

fig. 9

[7]Prochaska, 2002.

Jonathan Haidt teaches us that different demographic groups have different moral foundations (not totally surprising). But he amazing thing about it, is that it explained to me for the first time why powerful messages of justice don't change peoples behavior.[8] As it turns out, liberals and conservatives are wired really differently, but it's the liberals (often the designers) who don't get it. Liberals, by and large, base their values on two moral foundations: fairness and reciprocity (the golden rule) and harm/care (does it hurt or help people)? Conservatives don't deny these values. But they add to them three others that liberals don't use at all. These are respect for authority, loyalty to an in-group, and the idea of purity or sanctity. Conservatives may see the first two values trumped by others, or at least they may be only are two-fifths of their decision-making influences.

Add to that scenario the fact that most people now get their news from sources that agree with their values, and that there are very few sources for news that are objective, because of ratings. Ratings don't make truth, however. *Good* magazine posted an infographic this month that tracked the accuracy of pundits from both extremes. While the liberals were generally more accurate, the popularity of the inaccurate from both sides showed how difficult it is for a concerned individual to find the truth.

This becomes critical in an election where few people vote and fewer vote informed, and fewer yet know that their sources are accurate. In the 2008 election, we targeted University students who were unlikely to vote. We developed personas in each stage of readiness to vote and also targeting different foundations of morality. This chart shows the variety of combinations we were targeting. Our goal was to get them to vote informed and to give them accurate sources for finding out facts about the candidates. We tried to identify issues that would matter to students who thought the election would not affect them at all. Or we appealed to their sense of loyalty or independence. One, with the tag line "your first time should be special" used humor and the newfound freedoms and responsibilities of college life to equate the seriousness of voting with the risks of hurting yourself or others with sex not thought through (fig 11).

fig. 11

fig. 12

[8]Haidt, 2007.

A second message focused on thinking for yourself and getting one up on your parents (fig 12). Often, students vote like their parents even though they don't agree with them on other things, in part, because they haven't taken the time to read up on candidates positions. The best part of this campaign, however, was an overarching strategy of asking the student body to vote on these posters by text messaging, which made the students look at them longer in order to judge them. That played on the fact that many more of them will vote for American idol than will vote in an election. And it may have allowed students to move up more than one notch on their behavior change course.

Play is engaging

This brings us to the play factor in terms of engagement. Play and humor can engage and also disarm. It can make students willing to work harder to achieve that effect of creating fun for someone else. One very playful assignment that also requires research and copy writing for instance, is a 'zine project that cannot be done with the computer. Using the computer and hand processes, a montage is made to reflect the idea of undergraduate research for an actual state annual report cover.

fig. 13

In our web design class, engagement in research and writing happens when students are given ownership through the design and upkeep of their own blog. The web course puts the process in perspective with a real client that makes the site map and card sorting exercises take on importance.

Another place to add play comes in taking the Sheperd Fairey approach to shaking up the masses with a personal observation in a site-specific piece (fig 13). It engages the viewer in the same way that finding an anomaly or crazy juxtaposition would. It is a very personal connection between artist and reader that only those taking time to notice would share. And sometimes play means just getting off the screen and enjoying new materials and the magic of making an object that hides its construction secrets in the book arts course.

fig. 14

Another way of generating engagement is with trusting them to take on a bigger project with a lot at stake. Twice we have worked for the West Virginia Humanities Council to develop a traveling exhibit from scratch, responding to a basic script. Four teams developed models and layouts. The selected team of four carried it through to production, researching rights to photos, finding a recording studio for sound, the most reliable equipment for travel, selecting the shipping containers and structure, and making everything pack into a minivan. This one won a national award while doing it (fig 14). This used the same spirit of sports discipline as the Robotics Competition, but without the odds of defeat.

When Enough is Enough or When a Lifetime Opportunity is just Free Labor

Claudia Scaff
University of North Florida

Abstract

When new or established local companies want to market their new products and services, they are likely to find themselves shopping for the most promising solution to their design needs. The options usually are: going to an ad agency, a design studio, hiring a free-lance designer or contact the local academic institutions to find an intern. When comparing their options, finding a talented design student who can do the job as an intern is an attractive choice, since an intern may well be less expensive than an agency or studio. To attract good candidates, companies commonly state that what they are offering is a lifetime opportunity: the student will benefit from the experience, the work produced will enrich their portfolio, and a possible job opportunity after graduation is a likely outcome.

This presentation will discuss the challenges of dealing with business owners who approach education institutions to find design assistance in the form of interns. Furthermore, it will suggest strategies that will help discern when the proposed opportunity is just a way for them to find free labor, shop for quotes, or when it is a real lifetime opportunity.

Kelly Leslie
Associate Professor of Visual Communications
University of Arizona, Tucson AZ

Smart Design/Smart Devices: *The new delivery of established principles*

Already outselling the desktop in the 1st Quarter of 2011, smart devices are handling the delivery of more visual information than ever before. They will dominate how we read, communicate, and gather information more than websites and print design combined in just a short number of years. How will this change effect Visual Communication Design curricula? In the mid 90s, we saw schools begin to add web design classes to their curricula and many programs made web/digital design a separate major or a sister program of graphic design. But with most colleges and universities currently facing cutbacks and increased tuition, expanding programs with additional classes, faculty, or additional semesters for students has become increasingly prohibitive. So, how do we address these imminent changes in the design profession as we prepare our students for careers in design without increasing our budgets?

Smart devices are heralding a new era for designers that offers many possibilities and opportunities for the future of Visual Communication. With these opportunities we are reminded of how technological advances move way more quickly than academia. How can we as design educators keep our programs vital and current when what is current is constantly in flux? I will look at my own school (the University of Arizona) and share with you some of the steps we are taking to address these changes in order to strengthen our existing curriculum.

Background

With only one mandatory beginning web design class, projects coming out of our program are 80–85% print based. There are optional animation and motion design classes as well. We are a portfolio admittance program accepting 18–20 students in each the Illustration and Design tracks under Visual Communications every Spring semester. Access to technology for us is currently compromised with limited lab spaces and increasing demand for access to those spaces from other divisions and schools in the College of Fine Arts. We have no laptop policy and unfortunately still see a divide in the computer experience of freshman entering the School of Art. In general the UA School of Art curriculum lacks the classes that explore how images are being disseminated via digital devices and the relationship of that delivery to art and design.

Our recent discussions about moving our program forward included considering whether our curriculum should become more specialized by defining a narrow focus that would deeply investigate a particular area of design. Another approach would be to become broader, giving students the experience of exploring multiple approaches to design in a more liberal arts way. And, seeing value in both approaches, we would like to give students the opportunity to choose either experience

From the her *New Contexts/New Practices* presentation at the 2010 AIGA Educators Conference, Meredith Davis suggests "If we build curricula around formats, we are likely to find ourselves unable

to respond quickly to changing conditions, when new formats replace old or when the scope of the problem expands. And if we tie the teaching of form to decontextualized exercises, we risk being only about abstract principles..." Ellen Lupton in her essay *Re-skilling the Art Student* posits "...technical training belongs right near the top [of design education] because without technique, students are limited to primitive ways of realizing their work. So many of the art forms that have helped define the 20th century require a high level of technical proficiency: film, photography, video, design, architecture, animation. And yet faculty often looks down upon the teaching of technique." " ...technical skills are what many of our students want..." I am compelled by both of these statement and want to see our program balance the teaching of both skills and creative problem solving.

Assessment

A good place to start is to look at our alumni and see how they are utilizing the skills they have acquired from earning their BFA degree. We have alumni out in the field return to judge our Annual Juried Viscom exhibition where they also give presentations on their own work. Over the years, I've noticed these presentations changing. I am intrigued and impressed with how many of our grads are navigating their careers and positioning themselves as creative professionals. As case in point I will look at this year's visiting alumni:

Case Studies

Sophie Clarke has been out in the field for 8 years. She started as an exhibit designer at The Natural History Museum in LA, but has recently changed jobs and now works as a designer for Barbara Barry where she designs high end interior design textiles and objects. Her people skills, attention to detail, and great sense of composition are all contributors in her success in securing her ideal new job. We also see with Sophie [as in all our successful grads] the ability to clearly show the progression of an idea via drawing – by hand or computer.

Mike Buffington is a more recent graduate of our Illustration track where while a student he involved himself with several community based projects that stressed collaborating in teams with other designers, artists, and the community as well. Mike recently received his MFA from the Royal College of Art and their IDE [Innovation Design Engineering] program in London. He has been hired to create their new branding identity across multiple applications. Mike too is able to map out his ideas in a clear concise way through drawing and prototypes. His ability to work in teams in has allowed him to utilize his design thinking as a collaborative tool that transcends graphic design spilling into his other areas of interest.

These are just 2 recent alumni who have visited campus. But our alumni are in grad programs, principals of their own design agencies, working in the gaming industry, web design professionals, lead designers for the FBI. We have, and continue to have a good track record of our grads succeeding. But in short, what we are seeing with our more recent grads is that how and where they are finding their careers is more diverse. [Ellie Havey] a May 2011 grad is thrilled with being hired to design store displays for *Anthropologie*. I believe this suggests that at the core of our design curriculum are the established design principles that transcend specific niches of design. It also suggests that students, as

engaged as they are with their own mobile devices, are interested in making and experiencing design in non-digital ways. Our recent inclusion of a letterpress studio and bookmaking classes has been a popular elective for our Viscom students.

Defining an approach

Revisiting the competencies listed in the AIGA's "Defining the Designer of 2015 initiative" provides a good starting point to establish goals. Note that what the AIGA as suggested as the most important competency for future designers, is the understanding of form and meaning. These core principles of design: *hierarchy, typography, aesthetics, composition, and construction of meaningful images* are paramount. But we also see at number 5 *"Understanding of and ability to utilize tools and technology"* And so the challenge continues to be making the objectives of competency #1 while addressing how tools and technology can be used to meet those objectives.

1. *Ability to create and develop visual response to communication problems, including understanding of hierarchy, typography, aesthetics, composition and construction of meaningful images*

2. *Ability to solve communication problems including identifying the problem, researching, analysis, solution generating, prototyping, user testing and outcome evaluation*

3. *Broad understanding of issues related to the cognitive, social, cultural, technological and economic contexts for design*

4. *Ability to respond to audience contexts recognizing physical, cognitive, cultural and social human factors that shape design decisions*

5. *Understanding of and ability to utilize tools and technology*

When we look closer at points 2, 3, and 4 we can begin analyze how smart devices fit into the context of design discourse.

Considerations

- Student Analysis of how, where, and why people use smart devices
- Thoughtful Consumption and Creation
- Inspiration vs Distractions
- Multiple ways to teach interaction design (web design/ smart devices, way finding, packaging etc.)
- Multiple ways to teach time-based projects (animation, books, motion, multi-page content)
- Utilize existing technologies in the delivery of information (practice what you preach) be engaged
- Teams/collaboration (instructors, students, communities)
- Repetition of principles across media

Small Changes

In academia change takes time. But small changes that can be implemented easily and quickly can make significant contributions to the progress of a design program. These small tweakings of current curricula can support achieving more of the competencies of the AIGA Initiative including teaching students how to design for a future that includes more content rich digital forms of design. Some of the changes we are currently implementing without additional funding include:

- Multi-part projects that utilize the same research/content (editorial design for print/tablets)
- Crossover projects shared between classes/instructors
- Sensitivity to Responsive Web Design
- Collaboration with Community Professionals
- Integrated Critique/Studio time/Lab time
- Mandatory Internships
- Internship Opportunities within the/University that provide advanced experience in Web design
- Focus on Objectives vs. Projects
- Sharing Resources

Possibilities

Smart devices effect all aspects of visual design. They are heralding a revolution that offers many new and unique possibilities for the designer, storyteller, and image maker. Designers need to develop the skills and participate in how this technology can be used to promote better experiences. It is important that we teach our students the value of collaboration and how they can contribute to defining how communication via these smart devices will ultimately influence language, interaction, and discourse in general. And it is important that we too as educators continually engage with technology, so that our collective future and the future of design, holds limitless possibility.

An Instructor Chooses the Assignments

Kinga Wlodarska
Central Connecticut
State University

Abstract
An instructor chooses the assignments given to students with a careful eye towards exercising the student's capacity to learn, to embed certain character-building virtues. The dual purpose of such assignments links foundational skills—the core principles of design—with creative skills, allowing the student to aspire to a higher aim than merely producing the next bit of trendy 'eye candy.'

Graphic design is a powerful tool used to communicate diverse messages. It has the power to mold opinions, change perceptions, modify identity, and motivate novel solutions to difficult problems. As professionals we are aware of the extraordinary potential of design; we have an ultimate responsibility to the next generation of students. As educators we mold design habits, shaping design sensibilities for the next century. We have an ethical responsibility towards students, in creating, designing, producing responsible design.

I ask my students to consider where the future of design is heading. Do designers act altruistically or selfishly? Are these choices reflected in the kinds of design and in the clientele it is produced for? Is it enough to do good design or should we investigate how design can contribute to the "good" in the world. Where are we heading in the future? How has design helped to mold that future? I invite my students to collect and discuss examples of works that exhibit the best principles of design. Their research inspires and motivates their own work, as they learn how design can effect social change and public interest. They have come back with design methods that genuinely improve existing public service campaigns, and create new campaigns. When you create design with heart, it means you have designers with hearts guiding their brains. Design with heart is intelligent design. It is a change of heart and mind that produces great graphic design.

Ink on the Brain: Teaching Print in a Post-Print World

Todd Duren
Spring Hill College

Abstract

In her introduction to the 1955 Pelican edition of Steinberg's *Five Hundred Years of Printing,* Beatrice Ward describes the "cleft" between manuscript and print cultures, and wonders [quaintly, it seems to us now] if broadcast media might be the next chapter in the media story. As we educate a new generation of students 56 years later who read more online than in print clearly we have crossed a new divide.

We Facebook. We tweet and blog. We Google and Moodle. But as educators, designers, and creators of artifacts, are we losing relevance in all that clicking and dragging? It is more important than ever to reach students where and how they live: in a "post-print" world. Given that, why and how do we teach art, graphic design and design history?

Print made scholarship possible five-and-a-half centuries ago, but now appears to be in danger of becoming irrelevant. As educators, we work not just to download data into our students' brains, but to explain relevance, generate excitement, and engage scholarship. Print may hold the key to how we do that. We may all teach web-delivered content soon, using Kindle- ready textbooks, but students can still learn from artifacts.

This paper will examine this question, offering strategies to leverage technology for student writing and research, while exciting students by using the most under-utilized resource available on campus: the library.

And even now, as printed books are gradually replaced by e-books, we cannot escape print culture. We have ink on the brain.

Design, Visualization and the Third Dimension

Eleanor Thornton
Central Connecticut State University

Wujan Wang
Central Connecticut State University

Thomas Zummer
Central Connecticut State University
and
Europäische Universität für Interdisziplinare Studien, Saas-Fe, Switzerland

Mike Metz
About.com

Panel

The phrase 'thinking outside the box' is familiar enough at this point to be considered a cliché, yet that is what a great many designers continue to do: in spite of the admonishments to be innovative and creative, they will most readily work within the pre-defined parameters and protocols indicated by software applications or the most commonplace practices in the field. For example, character design, whether derived from cartoons or gaming, manga or animé, all looks pretty much the same—more and more elaborations on increasingly minor differences. These are examples of 'out of the box' design, the sort of digital solutions to design problems that are predictable, conservative, sometimes even a bit boring. With such powerful (digital media) tools why don't designers explore more? Invent more? Do more? The four professionals on this panel all have extensive backgrounds in the design field as well as pedagogical experience as teachers and instructors both aesthetically and conceptually, as well as in terms of technology. The question of what to do with these remarkable technologies, how to use them to "think through design" is a very real, and pressing, concern in the contemporary design field(s). What is the role of 3D modeling in Graphic/Information Design? How can programs like *Maya, Auto-Cad, Alias Lightwave, 3D Studio Max, Blender,* etc., be used to complement, supplement or work in concert with other graphic design concerns? What distinctive attributes do they bring to design? What attributes of design address 3D? From motion graphics, trailers and title sequences in movies to archive navigation and database visualization the interaction between 3D and graphic/information design is extensive and profound. Curiously it is rarely addressed. This panel will "think outside" this particular box to address the future of Design, Visualization and 3D.

A Teaching Paradigm in Design Studio: Engaging Student's Inspiration from Art and Architecture

Jihyun Song
Iowa State University

Cigdem Akkurt
Iowa State University

Lee Cagley
Iowa State University

Poster

The works of art and architecture not only aesthetically inspire interior designers, but also play a pivotal role in initializing, developing, and finalizing design concepts to a creative solution. The artists, architects, and interior designers are all concerned with aesthetics and volumetric qualities that contribute to communicating visual messages. In order to foster student's learning experiences, educators are challenged to connect the boundaries of art, design, and architecture. The purpose of this presentation is to demonstrate how interior design students have conceived the relationships among art, design, and architecture in the early stages of design education. Understanding of the differences and commonalities will lead to the distinction and mastery in their own major of Interior Design.

Content analysis is employed to analyze student's projects, collected from a sophomore design studio. As a framework for content analysis, two major design projects in their first interior design studio are used to document beginning design student's problem solving skills through the design process, benefitting from art and architecture. Selected projects focus on examining students' learning from other disciplines during the design process. The integration of art and architecture reinforces their creativity and aesthetic judgment in visual format. Each project requires students to enable the process of documenting their ideas and objectives through writing, sketching, and model making. Final design solutions are examined to evaluate the quality of projects corresponding to the original artwork of the artist, and the architecture of the chosen architect.

The selected projects give students insight and inspiration to work effectively in the context of the interior design discipline while building a knowledge block across art, architecture, and interior design. Emphasis on the research of artists and architects provides an intellectual learning base that motivates and prepares beginning students in the creation of meaningful interiors.

Crowdsourcing & Spec Work, nay or yah!

Jane Milkie
Northern Michigan University

Poster

Encouraging students to participate in competition and interaction with clients before they graduate is a good thing, right? Well of course it is if they are not being exploited and if they are not undermining their own value as designers by participating in either spec work or crowdsourcing without fully knowing the pitfalls.

This poster will present ideas about Crowdsourcing (the practice whereby a client requests design from multiple designers in the form of say a contest, thereby only paying the winner for work selected from the pool) or Spec Work, also where a client may seek unpaid work from one or more designers, and negotiate fees only if the work meets objectives.

Unseasoned designers might opt for these avenues of building recognition for their abilities and designs, however it may foster in the client a lack of understanding about the value of an individual designer and the value of good design as a complex process. It does not follow a pattern of relationship building where collaboration can flourish and quality design results.

What then are some practices that might lend experience to students while they develop as professionals? Pro Bono work for non-profit organizations could be a valuable place to develop client relationships. Design contests that serve non-profits are also a viable option. Service Learning partnerships that develop between a learning institution and community organization could also provide opportunities.

If an individual pursues challenges, finds competition engaging, finds too that motivation is inspired through problem solving, most professional associations hold contests or forums as well. Topics vary and are often a wonderful place for students to submit work to and in doing so the work collectively adds to the discipline in a way that fosters growth and the exchange of ideas.

The Design History Screensaver

Leif Allmendinger
Northern Illinois University

Poster

The graphic design history screensaver is a freeware application intended for undergraduate graphic design students. The purposes of this poster are twofold:

1 To form a community of beta testers, and encourage user feedback.
2 To encourage faculty to contribute to the collection

The graphic design history screensaver is an experiment in passive learning, i.e. the acquisition of knowledge without active effort. It behaves like any other screensaver, only it displays examples of graphic design history as well as captions identifying the designer, title of work, country, movement and year.

As a student, I was always frustrated by my very limited exposure to design history. The arts and crafts movement, futurism, constructivism, Swiss grids, served as reference points in my studio classes, but I had never seen nor heard of this work.

The goal of this project is to familiarize students (especially beginners) to a canon of design work, giving them some familiarity with the work they encounter in their graphic design history class. Iconic designs can also function as 'landmarks' in studio discussions.

Curating a collection of design images for students always raises questions. What works and movements are significant, which are dispensable? This screensaver cleverly dodges the issue. It's driven an .xml file, allowing an instructor to easily add to or alter the collection. A community of users could easily pool information, and a database of 500-1000 slides could easily be supported.

Canons and passive learning, of course, have their limitations, and the screensaver is intended only as a supplement. A beta version has been running on my computer for the last six weeks, so I can guarantee that it will be downloadable at the conference.

Creating Meaning in Design for Social Issues

Sherilyn J. McElroy
Illinois Wesleyan University

Poster

For years many of us have been adding social issue projects to our design curriculum. I've done the same with mixed results, and have tried to determine how to optimize student engagement. I would like to present design projects from two different classes working with content provided by university peace fellow students. In an attempt to create more meaning in student work I've tried several methodologies ranging from factual research to personal experience.

In a third level design class I added a project as a result of attending an inspiring student talk about the university's Peace Fellow Program, a program open to students interested in commitment and dedication to peace and social justice. I invited the student to present stories from her internship at the Council of Hemispheric Affairs. She was responsible for the intake of stories from children who had been separated from their families, either by deportation or otherwise. She came to class and told compelling stories of ten children. (She changed names and some de- tails to uphold confidentiality issues.) The students were assigned a 48 page fictional book based on fact. Titled, "Ten Stories" students were responsible for writing the stories paraphrased from the oral presentation and finding visual material to support their stories.

Next week another Peace Fellow will be coming to class to share her experiences in South Africa. She'll be discussing issues of human rights. The students in the class will complete a 48 page book so that I can compare results with the last class to determine if student engagement is enhanced by peer storytelling. I plan on sharing work from both classes with my colleagues.

A Helpful Intersection: Design and Creative Writing

Maria Fabrizio
University of South Carolina

Poster

Design students often struggle to understand their creative process in the first years of their education. When students do not understand their process, they often have trouble giving helpful feedback to other students in critique situations. This struggle can lead to a cyclical classroom critique issue, where the instructor's input is the only one articulated and digested. When students can produce meaningful, well-thought feedback to one another they not only fuel the classroom design to a higher level of aesthetic understanding but they also begin to learn how they will one day explain and present to clients.

The critique problem begins with the individual student finding ways to disconnect from their current project and learn to reflect, in a meaningful way. Design students think visually, so it seems obvious to have the student begin to examine their work by re-sketching, collaging or de-construct their work, but since design students think visually, they think in descriptive adjectives. There is a distinct intersection between visual thinkers and creative writers. Designers need to be able to describe their work in a clear, interesting and persuasive way, the same is true for writers describing a scene or a conversation. Creative writers often have an intuitive understanding of the visual arts and designers often understand how to see things and describe things in beautiful prose, if the words have been encouraged to manifest.

This poster will explain how if students are encouraged to start writing about their process, to keep a journal, to note their habits, and reflect on how their decisions relate emotionally, then they can find beautiful and intentional ways of talking about the work. This poster will show that this method of examining their process can be translated into more meaningful classroom conversations and eventually more successful design projects.

Defining and Dealing with Academic Honesty/Dishonesty in the Design Curriculum

Carol Fillip
Rochester Institute of Technology

Poster

Academic honesty/dishonesty is increasingly becoming a hot topic for administrators and professors alike—particularly as a result of the ease in which students can access information.

This poster presentation explores the issues in dealing with academic honesty/dishonesty in the design curriculum and exemplifies the best practices that will aid in establishing a climate in which high standards of design may flourish.

As this researcher has found, very often it is easier to identify plagiarism in a writing class, for example, than in a design class. Furthermore, academic dishonesty is typically more clearly defined and understood by students when taking a writing class as opposed to a design class. What is also problematic is the way in which many institutions handle academic misconduct violations. For example: Are there inconsistencies within departments and colleges? Is data collected on the number and severity of offenses? Are students who have multiple offences tracked? Are records stored and retained? What are the penalties (if any) imposed for a violation(s)?

Perspectives on plagiarism and intellectual property are presented in this poster and visual plagiarism is defined. The following questions are examples of what will be addressed: When does inspiration become plagiarism? As design educators, how do we approach the misuse of clip art and the appropriation of graphics that come freely with software? How do we explain to students the appropriate use of source materials?

Last, models from colleges and universities regarding academic honesty are examined, offering suggestions and methodologies. A range of topics include: institutional academic misconduct policies, sanctions for students found guilty of academic dishonesty and discipline models (centralized, decentralized and hybrid models) used in institutions for managing academic misconduct.

The Secret Species: Constructive Playtime

Marius Valdes
University of South Carolina

Poster

In 2010, I set out to create a character based design project that would allow me to play, experiment, and develop new fine art that would also inform and impact my skills as an illustrator, graphic designer, and educator. My goal was to create new character-based original works that would communicate the importance of art and the imagination. However, as a junior faculty member, it was also important that my creative activities further my pursuit of tenure and promotion.

For this project I created a set of one hundred small clay characters called "The Secret Species." They served as my muse for eight weeks as I created stories, paintings, drawings, comics, silk-screened packaging, hand- rendered typography, and posters. This creative endeavor culminated with an exhibition of these new works in a gallery exhibition with an interactive opening reception that generated original art works by the audience.

Each of my one hundred figures was given to the audience in exchange for their own hand rendered portrait of the character they received. People of different ages, races, and backgrounds sat together at tables creating. The audience's art produced was collected into a visual archive to be distributed in print and online. As this ongoing project continues to evolve, new aspects being explored include a picture book and workshop for children, a graphic novel, and PDA application.

This project serves as a way of keeping my own work and research fresh and interesting as I experiment with developing characters that communicate meaningful ideas and by using new mediums and formats that I have not worked in before.

This poster will document The Secret Species project and discuss the importance of self-initiated projects, constructive playtime, working towards tenure, and finding ways to evolve and grow as an educator.

Collaboration, Cooperation and Competition in Multidisciplinary Learning Experiences

Lorrie Frear
Rochester Institute of Technology

Poster

This poster will explore a multidisciplinary collaborative learning experience conducted by various departments and colleges within this university. A Packaging Design course comprised of a group of 59 fourth year graphic designers, industrial designers and packaging science students will be used as an example. The course includes market and materials research, concept generation, visual audits of products, virtual and physical prototyping, analysis and evaluative processes and concludes with competitive presentations to competition sponsors representing major international corporations. The sponsor, faculty and external packaging experts determine the three winning solutions from the six participating teams based on an evaluation rubric provided to students.

To begin the process, faculty select teams according to skill set differentiation and interpersonal compatibility. Students in the multidisciplinary teams then receive the detailed brief from the client with specific objectives and an evaluation rubric to guide the hierarchy of concerns. Teams begin the research and brainstorming process and determine roles and responsibilities for the project. Competitive product audits and use of Mintel and other databases are used to obtain marketing information. The Walmart Scorecard is used by the packaging science students to evaluate material selection, sustainability issues, packing, shipping and inventory concerns, as the graphic design and industrial design students explore branding, marketing and visual communication issues, form and human factors studies, and other related concerns. Teams meet regularly with all participating faculty for input and feedback. The final digital presentations to the sponsor communicate the new packaging proposals with physical prototypes and virtual prototypes created with SolidWorks Software. Each presentation is 15 minutes in length.

The competition is just three weeks in length, making the experience intense and similar to professional expectations.

This is just one project in the ten week course. The course is intense, challenging, engaging, rigorous and rewarding. In the end, all students have gained a great deal of experience with interpersonal communication, collaboration, compromise, and mutual respect that will be invaluable as they prepare to enter the design professions. In addition, they have "real world" projects to include in their portfolios and contact with the sponsors. Students also benefit from the input and feedback provided by the faculty from the other two disciplines; something that would not happen in a traditional classroom experience.

In the end, all collaborations require the investment and commitment of all parties in order to be successful. As in any educational experience, positive energy is dependent upon group dynamics and committed leadership. This type of experience is invaluable to our students as they enter the workforce, where teamwork and collaboration are required in order to get final solutions to market.

Beyond Gaming: New Aspects of 3d Modeling

Poster

A curated display of current and new uses of 3D modeling in graphic and information design, scientific, architectural, and artistic practices. Posters, storyboards, and a single flatscreen display will present aspects of 3D applications in graphic/information design and visualization.

Eleanor Thornton
Central Connecticut State University

Wujun Wang
Central Connecticut State University

Thomas Zummer
Central Connecticut State University

How can programs like *Maya, Auto-Cad, Alias Lightwave, 3D Studio Max, Blender,* etc., be used to complement, supplement, or work in concert with other graphic design concerns? What distinctive attributes do they bring to design? What attributes of design address 3D? How can they go beyond gaming applications and character design? From scientific models, to motion graphics, trailers and title sequences in movies to archive navigation and database visualization the interaction between 3D and graphic/information design is extensive and profound. Curiously it is rarely addressed. The question of what to do with these remarkable technologies, how to use them to "think through design" is a very real, and pressing, concern in the contemporary design field(s). The poster presentation will foreground advanced student works, operating at the juncture between pedagogical and professional applications of 3D technologies. The works are bold, inventive, refreshing in their taking up the question of what to do with 3D.

Interacting with Local History: A Mobile App for the 19th Century

Amy Papaelias
SUNY New Paltz

Poster

What do 21st century students and 19th century carpet weavers have in common? When the university museum exhibited a collection of locally made coverlets (bed coverings), an interesting opportunity emerged to bridge 19th century technical advances in weaving with the rise of mobile device applications in the 21st century.

Graphic Design students enrolled in "Interaction Design" were challenged to create a mobile app that allows museum visitors to create their own coverlet designs. Students were encouraged to consider the original coverlet manufacturing process and how principles of pattern and repetition could shape the functionality and user- interface of the game.

The results of this project are currently serving as visual and structural guidelines for a team of Computer Science students working on developing applications for Android mobile devices.

When the project was presented to local historians and weavers, we were all pleased to discover many parallels between the processes engaged by design students in the development of the mobile application and the 19th century coverlet designers' and weavers' processes for creating the coverlets' intricate patterns.

This project engaged Graphic Design students in a collaborative process that accessed a variety of campus and community resources. By working with curators at the university museum, weaving historians and a local historical society, students experienced a truly "interactive" design project.

This presentation would present some examples of completed student projects, as well as their research, ideation and concept development.

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