Head, Heart and Hand: A Senior Project

{Abstract}
How can a senior capstone project in an undergraduate graphic design curriculum guide students to become better thinkers, makers and citizens? What is the value of a student driven project and how can it shape a young designer's path as they step out of academia? What learning outcomes are necessary when creating a capstone project? These are some of the questions that have shaped the senior undergraduate capstone class at Oregon State University. The goal of the project is for students to see how a research driven design process can lead to visually exciting solutions. The following two projects successfully combine strategy and research (head), insight (heart) and craft (hand) in unique ways.

{Bio}
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{Keywords}
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How can a senior capstone project in an undergraduate graphic design curriculum guide students to become better thinkers, makers and citizens? What is the value of a student driven project and how can it shape a young designer’s path as they step out of academia? What learning outcomes are necessary when creating a capstone project? These are some of the questions that have shaped the senior undergraduate capstone class at Oregon State University. The goal of the project is for student’s to see how a research driven design process can lead to visually exciting solutions. The following two projects successfully combine strategy and research (head), insight (heart) and craft (hand) in unique ways.

Capstone Project Structure
There are many undergraduate graphic design programs that contain senior capstone projects, all with the goal of giving students the opportunity to synthesize what they have learned in the previous three to four years. At Oregon State, the senior graphic design students spend a total of two terms (20 weeks) exploring a topic of their choice. The first term of the project is spent on research and writing and the second term is used for visual experiments and design of the final project. Currently, the graphic design program is undergoing curriculum revisions which will allow the senior capstone project to fall over three terms (30 weeks) instead of two. This will allow each senior to have one term of research and writing, one term of visual research and one term of making/prototyping.

Term 1: Contemporary Issues in Design: A Writing Intensive Course
In 2001, I developed a course called Contemporary Issues in Design, a designated writing intensive course required for all graphic design seniors. This ten-week course is where the research and writing for the capstone begins. Writing is used as a tool for learning and to strengthen students’ ability to think critically. A course goal is to demystify the writing process and show parallels between the design process and the writing process. It is the first “non-studio” course where students focus solely on reading and writing about design and its relationship within a broader cultural context. The course is broken up into five, two-week topic modules:
Weeks 1 + 2  Designer as Author and Entrepreneur
Weeks 3 + 4  Innovation and Partnership in Design and Business
Weeks 5 + 6  Do Good Design; the Social Impact of Design
Weeks 7 + 8  Influences, Inspiration, Remix and Originality
Weeks 9 + 10  The Path Beyond Graduation

These themes are broad enough for a diversity of readings, discussion and writing. Concurrently, students choose a subject they are passionate about or at the very least, very interested in and begin the research. I give them a list of broad topics (e.g., design ethics, design activism, crowd sourcing, designing for emerging markets, branding) they can use as jumping off points, or they can choose their own topic. Deciding on a topic can be challenging, as the students know they will be working with this topic for twenty weeks, and they are asked to think about topics that interest them over winter break, so they can come to the first class prepared. Subjects for projects don’t have to directly relate to graphic design, but the final project will look at the subject through a designed artifact (a campaign, a book, an app).

Projects from the class of 2013 included a wide range of topics:
- The effectiveness of social media in marketing for small businesses
- Small apparel business tactics and techniques vs. large apparel companies
- How packaging affects consumer behavior
- The economics of permanence
- Changes in creative working spaces
- The way brands tell stories
- Creative bartering at a university

Class Writing Projects
The over-arching goal of the course is for students to gain confidence with their writing skills and the do this with both formal and informal writing throughout the term. Additional learning outcomes include:
- Demonstrating an understanding of current design issues and criticism
- Demonstrating the use of diverse research methodologies
- Managing effective organization and time management skills
- Showing the ability to craft a clear, concise, effective verbal communication
Weekly assignments are given to help guide the students in their topic research. Examples include creating an annotated bibliography using diverse sources (Web, books, articles), developing a research question to help develop a thesis statement, writing an abstract, writing up a case study and finding or conducting an interview and writing a response to it. All of these assignments are framed around the student’s senior topic.

**Research Methods**

A variety of research methods and ways to conduct research are discussed, including libraries and the Internet and methods, mapping, sketching, diagramming, reading, writing, interviewing, drawing and recording. Each student develops a research inventory with distinctions made between primary and secondary research and a simple diagram illustrating their resources. Methods for primary research are taught including: photo ethnographic research, observational research, surveys, questionnaires and interviews and students are expected to correctly use and cite secondary sources such as books, journal, periodicals and Websites.

Students present their research throughout the term at different stages and have many opportunities for peer review. Comparing this peer review process with a critique gives the students a better way to see commonalities between writing and design. Students are also required to keep a Tumblr blog that allows me to see individual efforts at research, writing and collection materials. At the end of the term, students have a well-researched paper with proper citations and a bibliography. A “designed” version of the paper is included in the project process book. Lastly, students are asked to write a one page paper titled “Looking Ahead”, a one page paper on their possible project interests for the next term.
Term 2: Senior Capstone Visual Project

The spring term is the laboratory component in which students conduct and design visual research in response to the written research done the previous term. The research is organized into a minimum of three “experiments” that are documented and presented to the class. The results, which are both qualitative and quantitative, continue to inform each student as they develop an appropriate final visual piece. All of the work from the two terms is bound into a comprehensive process book. The class is considered a studio course and meets twice a week for three hours each class period, but students meet primarily in small groups or individually. Collaborations are allowed, but students must show specific individual components and how they relate to their senior topic.

Learning outcomes for the class involve both energetic research and presentation of work:

- Create self-driven projects & define the outcomes for each of these
- Synthesize research & visual exploration into a coherent body of work
- Translate research into visualized work
- Demonstrate effective time management & planning skills
- Demonstrate the ability to set goals & expectations for experiments and projects
- Create qualitative and quantitative experiments & analyze and synthesize the findings
- Create a reflective document that encapsulates the experience and process
- Develop professional, structured presentations of findings

Visual Research Methods

Each student writes a project strategy with four main components;

1) synopsis of their project (what is the project about?)
2) project objectives (what they think they want to say, show, visualize, make?)
3) expectations (what they want to learn, explore and investigate?)
4) documentation (how will the process be documented?)

The strategy is looked at as a flexible structure that may shift depending on the results from the experiments. Next, students develop a timeline and are held to it. Since this project is primarily self-directed, a timeline helps students stay on task with definable goals.
Experiments
Students use this set of questions to guide them in writing up their experiment results:
• What is the title of experiment?
• What is the question used to drive the experiment?
• What is the summary of results?
• Where do you go from here? How do the results inform the next experiment?

The experiments tend to be interactive and participatory with social media platforms, such as Facebook and Survey Monkey used to broaden results. Students design prototypes and get targeted feedback from both classmates and others not connected to graphic design. Students are expected to deliver a smartly conceived process book, containing the key elements from the six-month project. The book is an important portfolio piece in showing an extensive process.

Projects
The following two senior capstone projects were completed in June, 2013. Each show a thorough development process and give the student the opportunity to dig deeper into an area of interest.

Brand People Story | Maschell Cha
Maschell Cha’s interest and challenge was exploring branding in a more personal way. Her project; Brand People Story, looks at the connections and narratives between identity, brand, and people. Her project summary states:
“My project topic is about identity, brand, people, and story. People’s identity are constructed through stories that happen in their own life and create who they are. Brands play a role in constructing a person’s sense of identity.”

She began her project with a researched paper titled; Beyond the Commodity; Story and Brand. The paper threads two themes together; brand as a market commodity and brand as a personal story. An opening excerpt from the paper reads:

“A brand’s story comes from the company’s history, values, and goals. By creating stories, brands are making their product more valuable and memorable. Moreover, brands are able to connect with the hearts and minds of consumers. Brands have utilized story in a way to appeal to consumers and connect with them on a personal and meaningful level. The continual usage and importance of story in branding influences the fact that consumers value brands for reasons beyond their physical use.”
Maschell spent more than two months reading articles and books and synthesizing material. In her “looking Ahead” brief, she states:

“The most interesting part of this topic for me was merging different fields. I started with branding in terms of brand identity and design. It evolved into learning more about marketing, storytelling, literature, and objects. The relationship between business and the arts can seem so vast at times, yet they go together hand-in-hand. In my research, I found both marketers and designers talking about storytelling in brand. I also found that the imagery I collected during my research had more depth and aesthetic interest to them because of the story behind them.”

Three experiments conducted over a period of five weeks are a valuable part of each student’s process. The experiments push students to move beyond Google in seeking information.

**Experiment 1**

**Question: Do many design studios connect their work with creating stories?**

Maschell looked at twelve Portland Design Studios and how the actual word story and/or the idea of story was reflected in the identity of the company. She found most of the studios used the words story, storytelling or an idea closely linked to story, such as experience, value or truth in their studio description.

**Experiment 2**

**Question: Do consumer’s see a brand’s story as the main point of success to them?**

For this experiment, Maschell sent out a questionnaire to classmates to find out their thoughts on brands, with questions such as; Do you have any memories that relate to a brand? What makes a story interesting? What draws you in, moves you, intrigues you? She received valuable feedback from this questionnaire and most people had an interesting memory and short story associated with a brand.

**Experiment 3**

**Question: Do brands have their own official story statement?**

For the final experiment, Maschell researched five different brands and their stories (based on brands mentioned in experiment 2) and looked for key words that related to the concept of story. Words from companies included; Moleskin: philosophy, Nike: mission, history, heritage, Muji: philosophy, North Face: our story, Canon: history.
Result: Brand People Story

The experiments helped Maschell shape her final visual project; *Brand People Story*, a thirty-six page, tabloid-sized book, highlighting three individuals relationship to nine different brands. The book’s simple but bold story and layout are the result of six months of reading, writing, research and design. The book’s concept couldn’t have been conceived without the months of reading, writing, research and thinking.

*Mashell Cha: Brand People Story*
Chris Shults was interested in environmental awareness and sustainable design. His paper titled; *It’s Not Easy Being Green*, focused on the challenges with sustainability in a world of ever-increasing consumption. An excerpt from his paper reads; “Many environmental optimists claim that sustainable design methods can, and ultimately will solve the problems of overconsumption. Human ingenuity has limits. It is simply impossible to rewrite the laws of physics to run an economy of infinite consumption. Reducing waste through sustainable and green design is an issue of optimization. Innovations in engineering, and technology will not stop the planet from passing its breaking point indefinitely. In order to overcome the problems associated with a bloat¬ed global population, and increased consumption the industrial process will need to evolve".

Students design their experiments based on their interests and abilities. Chris's interest in infographics lead him to illustrate the results from the research questions he posed.

**Experiment 1 (environmental impact)**

**Question: What is the consequence of economic growth? Do economies thrive on waste? Is sustainability harmful for profits?**

For this experiment, Chris looked at the ten most and least green states of 2011. He was curious to see the cause and effect between larger economies and energy expenditure and concluded that more waste typically equals greater profit. This experiment showed him that industrial engineers are needed to improve sustainability through energy expenditure and his knowledge base was limited. He changed direction and chose to focus his project towards social sustainability rather than environmental sustainability.
Experiment 2 (social impact)

Question: How prevalent is global wage inequity? Is an IPhone worth 710 hours?

This experiment changed Chris’ attitude about consumption and global inequity. After researching wage inequity, he realized that a worker in India would have to spend at least two and a half months, working eight hours a day to purchase an IPhone5. Following this experiment he vowed not to purchase new clothes for an entire year.

Experiment 3 (economic impact)

Question: Is foreign aid helpful? Is there a need for privatized aid to alleviate the effects of poverty?

In the final experiment Chris looked at U.S. foreign aid and how it was distributed. He concluded that millions of the poorest people in the world don’t receive aid and wanted to create an app that would help donate money a percentage of money to those in need.
Result: Do Good Index

The app Chris designed named the *Do Good Index*, allows users to see how sustainable a product is on a scale from 1-100, simply by scanning the barcode on the product with their smartphone. The four factors that make up the index evolved from the research Chris did in the previous term: Product’s Source, Product’s life span, Percentage of product that is recyclable/decomposable.

Consumers donate a percentage of the product cost to a number of different charities, with the goal of helping to offset the environmental damage from over-consumption. Though the app was not built, it has been thoughtfully researched and designed, and that is the ultimate goal of the senior capstone projects.
When students are asked to spend six months on a topic of their choice, it is inspiring to see that the head, heart and hand play a pivotal role. Capstone projects are an important part of a graphic design curriculum and the range of projects, from theoretical and experimental to more pragmatic, give students an opportunity to find deeper personal connections with subject matter. The self-driven project gives students confidence in their abilities as they move from academia to the workforce, and the opportunity for a unique project in their portfolio.