

USING INSTAGRAM TO INCREASE STUDENT ENGAGEMENT WITH DESIGN HISTORY

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ABSTRACT

In today's rapidly evolving design disciplines, design history students should demonstrate an understanding of the social and cultural impact of design of both historical and contemporary designers and their methods. To increase student engagement with design history and discourse, we prototyped a new format for our design history course in Brigham Young University's Industrial Design department. Our goal was to enable students to process designs they encounter, both in person and social media, through a critical and cultural perspective, and then turn those lenses towards their own design work with greater social and cultural awareness. To do this, we utilized Instagram as the primary platform (@byudesignhistory) for course discussion and altered the way we framed student assignments.

This new curriculum was prototyped in the spring of 2018. Outcomes were measured by monitoring student engagement, responses, and comprehension scores on verbal and written assignments and examinations. Students also responded to a series of reviews to gather their perspectives on the class. Results indicate an increase in their understanding of the cultural position design holds in a way that was absent in student results from the previous course structure. If our course interventions are effective, students should move from concrete to abstract knowledge as well as from lower order to higher order thinking skills. Students will thus be better prepared to assess, understand and discuss both current and historical design cultures and trends while influencing their own design work through an informed perspective.

Keywords: Industrial Design, Bloom's Taxonomy, Participatory Learning, Design Culture, Design Education

1 INTRODUCTION

In today's rapidly evolving design disciplines [1], it is becoming vital for design educators to prepare students to utilize new tools, technologies, methods, along with an understanding of the contexts in which they are being used. Much discussion in studio courses today centre on new methods of creating persuasive design, but it is equally important that students have a cultural component to their education to responsibly place these new designs in a meaningful social and cultural context. Alain Findeli argues that moral and ethical discussion is vital to design education as designers will become "actors" in the world [2]. Many of these discussions that contribute to students' moral and ethical understanding of design can happen through study of design history.

Our programme's design history course has been popular with students over the past several years, but many previous students indicated they lacked in-depth knowledge and understanding of the contemporary design climate in particular. Our goal was to improve this aspect of the course, which we implemented by altering and updating the section of the course focusing on contemporary designers as well as making changes to the earlier portions of the course to increase emphasis on the linked evolution of design and culture. To make these changes, we pursued a project-based model that would feel more familiar to students in a design environment than a more-traditional lecture-based course often used in art and design history courses.

In design education, the majority of classes primarily utilize project-based learning methods, something often absent from traditional lecture-based history courses. As Terrence Curry says, "One of the noted strengths of project-based studio learning is that it promotes situated active problem solving and solution exploration under the guidance of an experienced practitioner" [3]. In order to use

design history coursework to help students develop their own understanding of design, we sought to translate the subject matter to a more applied model to allow them to develop and exercise their own opinions about design. To do this, we made Instagram a central platform for class work and discussion and altered the course curriculum using a variety of tools to increase opportunity for discussions that would help students develop their own opinions. Because social media, and by extension, the internet as a whole, is so central to presentation and discourse in the design marketplace and students are constantly exploring and interacting with design online, we chose to utilize this familiar tool to help them process the history of design. By integrating current cultural technology that requires student participation and content creation, we aim to help students practice “acting” and learn to exercise design judgment in both the course and with a wider audience.

2 METHODOLOGIES

The general goal of our course update was to increase students’ knowledge and cognitive understanding of the social and cultural impact of design by increasing the level of student participation in the curriculum. To accomplish this, we made a variety of changes, utilizing Bloom’s Revised Taxonomy shown in Figure 1, to guide our course modifications [4]. The taxonomy organizes cognitive processes in order from low-level skills, like remembering, all the way up to complex skills like creating. Our goal was to alter the dynamic of the class in order to help students move beyond low level processes of remembering and understanding to the mid-level processes of applying and analyzing their knowledge. To do this, we incorporated exercises into our course structure that would require the students to practice the skills in these categories such as providing, selecting, and differentiating information in curated Instagram posts; responding to questioning, and deconstructing biases as they practiced both asking and answering complex questions. These guidelines from the Taxonomy support our efforts to make the class more participatory as they require students to engage and practice more than they do in more lecture-based models. As students learn to ask thought-provoking questions and provide their own analysis as to the meaning of designs, we hope they will learn both knowledge both about design history and culture that will be useful in their careers as well as processes they can apply to their own design work.



Figure 1. Bloom’s New Taxonomy, which we used as a guideline to define the design history course objectives. © 2012 Rex Heer/Iowa State University/Centre for Excellence in Learning and Teaching. Licensed under Creative Commons Attribution-Non-Commercial-ShareAlike 3.0

2.1 Previous Course

This design history course currently serves as the main cultural and historical point of discussion in Brigham Young University's (BYU) Industrial Design programme. It is required for all students to take in their third year of study (class size typically between 15 and 19 students), following their foundation and skill-based coursework and acts as an introduction to the context in which designers operate. Covering Western design from the Industrial Revolution to the present, this one-semester course has been taught using a combination of instructor-led discussions and student presentations. Students were evaluated using three exams throughout the semester, which focused on identifying individual designers, artefacts, and movements, and a final project in which they were to emulate the design style of a chosen practitioner studied in the course to design a birdhouse. This course model attempted to integrate studio-based learning methods through the student presentations and the final project [5], but it still focused primarily on facts and remembering, with some amount of classification and summarization, putting learning at the lowest levels of knowledge and cognitive process as outlined in the taxonomy. This was supported by use of the textbook *Design, an illustrated historical overview* [6] which is text light and image heavy (and out of print), serving primarily as a timeline with little commentary of the work shown.

2.2 Course Changes

Since the course is the primary place of design history instruction for the students in this programme, it was important it teaches both working knowledge of design history as well as the mental framework to utilize this knowledge. To do this, we adjusted the course to focus more on applying and analyzing, with hopes that students could use their knowledge to ultimately move towards being able to evaluate both their own work and the work around them. We therefore introduced a series of curriculum changes to encourage more-thought provoking discussion and expound on the basic historical facts that had been the focus of the previous class. Key upgrades included first: introduction of a new, more text-based textbook, second: alterations to the nature of the material to include cultural and ethical questions, third: increased class discussion time and required reflections throughout the course, and fourth: adding a focus on exploring connections between design history and contemporary design.

With these conceptual changes made, it felt important to increase the participatory aspects of the course, thus the introduction of Instagram as a discussion platform. The Instagram model would allow the class to become more participatory in nature, as students would be frequently required to develop and articulate their views more than they would in class lectures alone. Furthermore, since Instagram is one of the primary venues used by young designers for discovering new design, it would mimic the experiential format of design studio classes, in which design students develop and refine their skills in real-world applications.

Thus, our goal is twofold: first, we aim for students to better understand the cultural and contextual aspects of design history in order to better understand their own role as designers, and to develop a greater sense of the accompanying moral and ethical obligations through participatory learning. Second, we desire that students learn to view their own culture, as seen on social media, through the lens of design history, and that by practicing on Instagram, they will learn to appreciate social media as a tool for development and deployment of design views. By practicing the online presentation and discussion of design using the historical work discussed in class, we hope that students will develop the skills needed to analyze and develop opinions on design work they encounter daily both online and in person for context and culture.

2.2.1 Upgrading Frameworks of Thought

In order for students to be able to provide thoughtful contributions to these exercises, we implemented further adjustments to the course in the form of four key supporting elements. First, we began the course with a lively discussion about definitions of "good design," the difference between morals and ethics, and when and how these notions will influence their own design work. These discussions were supported in reading assignments and case studies, such as discussion around the personal position of the designer of the AK47 machine gun and the product's social, cultural and ethical roles, with students naturally addressing both sides of the conversation. This discussion laid the foundation for future course discussions, and was further discussed on Instagram, establishing discussion styles there. By addressing these factors early on, a precedent was set for the type of thought students should be applying to their own presentations and discussions. Alongside this, we upgraded our textbook to the

more current Fiell book *The Story of Design* which includes both cultural and social insights [7]. This switch mirrors the shift in class discussion topics, moving focus from dates and details to criticism and perspective, and further provides students with an example of the sort of lens they can practice. Finally, we reframed student assignments, asking them to evaluate, find, and present contemporary examples of the historical design theme they researched for their presentation and propose one to three meaningful questions (both online and in class) to initiate discussion around their presentation topics. By changing class instructions from emphasizing set points and facts to focusing on relevance, meaning, and evaluation, students are encouraged to consider contemporary work in a historical context and broaden their ability to judge and integrate higher level learning processes into their work.

2.2.2 Instagram

The course has created a shared Instagram account (@byudesignhistory) that students use to create an online archive of their research and presentations. The account is open to the public, and design programme alumni were informed of its existence and invited to contribute to the discussions. Brisco et al., report that students gravitate toward using social networking for academic communication and purposes, specifically sites they are familiar with [8]. Since Instagram is a platform students already use to interact with design, it was a natural transition to work with it for class purposes.

Students were each required to post four times a semester on the account 24 hours before their assigned in-class presentations. The posts consist of a series of images showcasing the designated presentation topic accompanied by a short summary of the work as shown in Figure 2. The contents of the summary were left open to student discretion, with the only requirement being it was both understandable to viewers who do not possess background knowledge of the subject as well as insightful to those who do. Students were encouraged to consider the meaning of the work they are posting in the context of the greater design world when crafting these descriptions. What does it say? Why is it important? Following the summary, students were to post a thoughtful discussion question for their peers to respond to. Failure to post would result in a point deduction from the student's presentation grade, and an instructor would provide content instead for their classmates to respond to.



Figure 2. Example of Student produced Instagram post; including image related content and a few higher-level questions as well as the start of a student response

Following the initial posting, other members of class were to respond in a comment before the class period in which the topic posted online would be presented in-class. This pre-class online discussion was intended to serve as both a reading check and a way for students to begin preparing opinions for in-class discussion. Instructions for their comments were left similarly open, with the only guideline being that they show some sort of engagement with the topic in a timely manner. These comments

were given an insignificant amount of points based on completion as incentive to participate but allow students to opt out without fear of class failure in order to keep discussions as organic as possible in a class setting. Comment quality assessment was left relatively open to encourage a variety of student opinions and allow the comments to act as a thought exercise rather than an attempt to find a “right” answer.

Initially posts were guided by a peer instructor, but the account quickly transitioned to being student run and moderated, with instructors occasionally participating unofficially in the discussion. This kept instructor bias to a minimum in order to allow students to develop and vocalize their own opinions. Occasionally online discussion topics would be referenced for in-class discussion by instructors, but they were primarily allowed to be a study tool to allow students to process material and bring up for class discussion on their own as they wished.

2.3 Student Surveys

In order to measure our progress, we looked at previous student ratings for the course as a comparison measure. In addition to examining formal course ratings, we sent students an anonymous mid-course survey to hear their opinions on course progress and learning outcomes. This 19-question survey asked students to rate from 1-10 the effectiveness, in their opinion, of the impact of the course and the Instagram system on certain aspects of the learning, as well as for more general feedback.

We also asked students to respond in writing to the prompt “what are the qualities of good design?” on both the first and last day of class. While we were interested to see how their answers differed before and after taking the class as a measure of how effective we were moving upwards on the taxonomy, we were not terribly concerned with the specifics of their answers. Primarily, we used this exercise to ask students to confront their own understanding of design and learn to develop and articulate their own beliefs, thus contributing to their critical thinking skills. By asking this question at the beginning of class, we hoped to plant ideas about developing one’s own opinions on design matters that they could practice in the Instagram discussions.

3 RESULTS

Throughout the semester, about 90% of students consistently participated in online dialogue centred around design history questions. Early in the course, responses were primarily individual comments directly engaging with the question posed in the post. Several students reported viewing these comments like homework assignments, carefully crafting a complete and thorough answer to submit. By midterm, overall commenting style had shifted, with students often posting several shorter comments responding to each other, and sometimes asking questions of their own, in a more conversational style. By this point, a number of programme alumni and general users began following along and participating in online discussion. Several students responded that they enjoyed seeing more informative posts in their regular social media use, and many reported participating in discussions related to design history subject matter that freely began outside of class.

Unanimously, students responding to the anonymous survey indicated they felt the Instagram had a positive impact on their learning. They indicated the greatest benefits, for them, were seen in their ability to write about design, their interactions with design on social media, their ability to understand complex concepts, and their overall knowledge of the subject matter. They indicated the discussions (both in class and online) and viewpoints posed were the most beneficial aspect of the course. Several students remarked that they appreciated the chance to articulate their feelings in writing, both because it required them to develop a skill they previously had not exercised in their design coursework, and because it allowed students who typically feel sidelined in class discussions a chance to participate in a slower manner. Several students remarked that participating in the Instagram programme changed the framework they used to process design, saying that they now think about morals, philosophy, and culture when trying to analyze and create their own work.

When responses from the “good design” questionnaires taken before and after the class were compared, the majority of pre- and post-class responses differed considerably, with more students referencing concepts discussed in the class on the second questionnaire than the personal taste matters that were more prevalent in the first questionnaire. While there was no clear consensus in the responses, several students used phrases or values that came up frequently in discussions, mentioning the role of culture, context, narrative, questioning and morals most frequently. This indicates the students are developing a deeper view of design and learning to question their own opinions.

There were some downsides, however. While some students found their Instagram participation to be helpful in preparing for class, many felt the additional workload became burdensome, and reported that they neglected class readings in favour of Instagram commenting. Furthermore, because the system was primarily student run, there were instances when students failed to deliver content, causing occasional confusion for their classmates, some of whom reported feeling unable to keep up. On one occasion, a student used the platform to post opinions of a more personal nature, which required instructor intervention to maintain a professional tone on the account.

4 CONCLUSION

In order to successfully train students who can design for the future, we must equip students to understand the role of cultural context in design. Our goal was to increase this understanding in our students by reframing class discussions around deeper thinking and asking them to practice this on Instagram, creating a learning situation in which they can develop and exercise their thoughts using the same platform they use to experience design every day. While the system may be imperfect, students' level of comfort with the conversation, and their verbal responses and comments indicate that the way they view designed objects has changed over the course. This serves as an indication that these goals were successful.

In the future, we are curious to investigate ways to further use the established Instagram account as an educational archive. As the students who participated this semester become alumni, will they add comments and continue to interact with the account and the current students who run it? How will this effect learning for both groups? We also are interested in experimenting further with the guidance we give students in regards to their posts to increase the educational potential of the account and exercise. This year we deliberately left our instructions relatively open, which allowed students space to both learn and flounder. In the future, we could add further requirements, such as requesting they contribute examples of their own into discussion, providing discussion questions on specific topics for them to answer, or changing the themes and designers they present on to some that are less familiar. Other ideas to increase participatory learning in future design history courses include asking students to design items of their own using specific historical techniques and perspectives or requiring students to curate an exhibit using historical topics of study. Through continued forays into participation, we can further move up Bloom's Taxonomy by developing strategies that enable students to practice using their knowledge as they acquire it.

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