Teaching Exhibition Design Through a Pedagogy of Creative Problem-Solving

by Clare Brown with contributions from Tricia Austin

Clare Brown *is Program Head, Master of Arts in Exhibition Design and Assistant Professor of Design, Corcoran School of the Arts+Design at The George Washington University. She may be contacted at cb_design@gwu.edu.*

Tricia Austin *is Course Leader, MA Narrative Environments Central Saint Martins, University of the Arts London. She may be contacted at p.austin@csm.arts.ac.uk.*

If you would like to comment on this article or others in this issue, please go to the NAME page on Facebook or send us a tweet @NAMExhibitions.

"Creativity is not a talent, it is a way of operating." John Cleese, 1991

Exhibition is a unique medium: a truly multi-disciplinary form of storytelling and experiential design. Professional exhibition designers know that their essential contributions to the field go well beyond choosing colors and creating aesthetically pleasing layouts. Successful designers are those who embrace the challenges inherent in teamwork, spatial oddities, functionality, audience, and aesthetics. Designers are important participants in the museum field in that they come with training to find complexity in the mundane, and simplicity in that which overwhelms. This training is rooted in an intentional process of creative problem-solving. This article proposes that those who use this process effectively will succeed in creating the most engaging and innovative exhibitions.

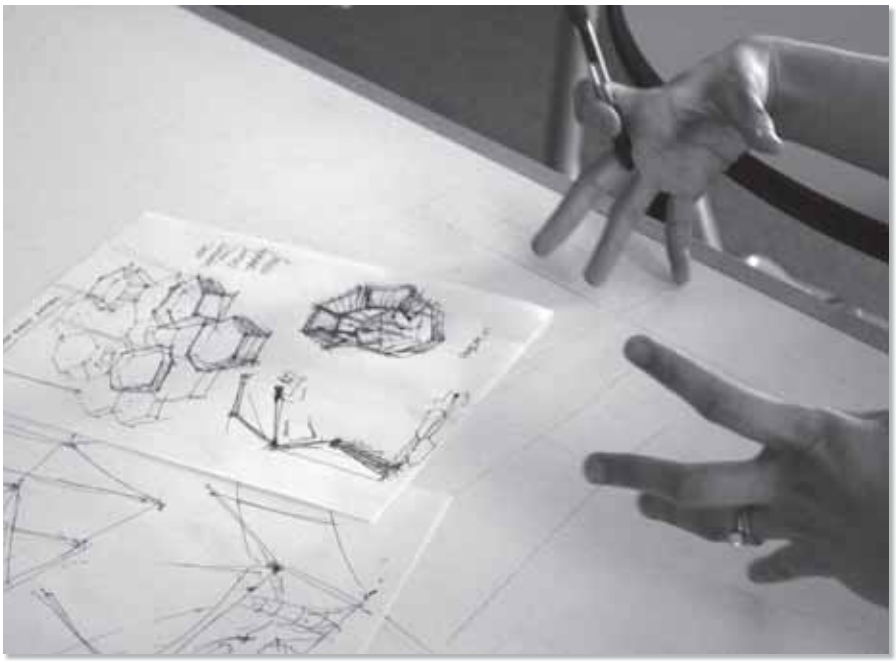
Corcoran exhibition design thesis students present visual evidence of their creative process, 2013. Courtesy of Clare Brown.

Professional exhibition designers have, until recently, come to museums with backgrounds such as architecture, interior design, industrial design, and theater. Graduate programs providing professional training that specializes in exhibition design are a relatively new phenomenon. The University of the Arts, Philadelphia MFA in Exhibition Design and Planning was started 25 years ago. Since then just a handful of graduate programs focusing on exhibition design have arisen in the United States. These programs are shaped not only to respond to the requirements of the field, but also to the types of applicants coming into the programs. My experience as the Chair of one such program is that most of the applicants do not come from backgrounds in design, fine art, or architecture. Rather, applicants are coming to study exhibition design from anthropology, sociology, education, international relations, and art history. The common thread that unites these applicants is an interest in human behavior. These applicants come to exhibition design with the goal of creating meaningful experiences for people in spaces. With the majority of applicants having little prior experience or formal training in art or design school, it is necessary to create a curriculum that brings to the foreground an understanding of creative practice and process, while also teaching technical design skills, museum and design theory.

This article will explore ways that teaching exhibition design is, at its core, teaching creative problem-solving and design-thinking, both of which are rooted

in focused research skills, listening, and observation. While technical skills, design theory, museum theory, and practical experience are all critical elements of an exhibition design curriculum, they are nothing without teaching how to ask the right questions, seek the essential challenges, distill the real issues, and work with others towards creative solutions. The teaching of creative problem-solving and design-thinking enables and empowers young designers to be active participants in the exhibition development and design process, ultimately leading to more engaging and innovative forms of the medium we call "exhibition."

To illustrate how teaching creative process can be integrated into an exhibition design pedagogy, this article will draw on examples from the MA Narrative Environments (MANE) program at Central Saint Martins (CSM), University of the Arts London, and the MA Exhibition Design (MA/EX) program at the Corcoran College of Art + Design in Washington DC.[1] Both of these programs require design students to approach their work not only from a technical standpoint, but also through research into "audience, site, and message." (Austin, personal communication, June 10, 2014) Students in both programs are taught that this research is part of the design process, and that it is the basis for creative problem-solving and design-thinking. While the two programs teach creative-process through a variety of techniques, this article focuses on three essentials: Defining the Challenges, Practicing Iterative and Speculative Design, and Exercising the Creative "Muscles."



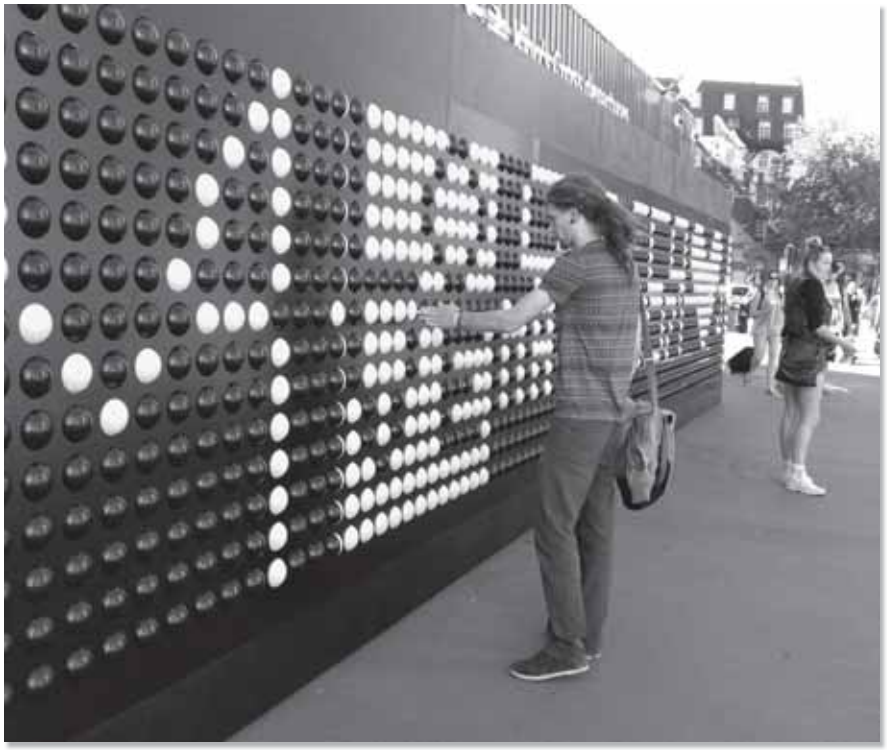
Corcoran exhibition design student describes the iterative process of her idea development, 2014. Courtesy of Clare Brown.

Creative process part 1: Defining the challenge, finding the hook

> Wicked problems force us to work "outside the box." Problem definition and identification may require much dialogue between relevant stakeholder teams. We do not really "solve" wicked problems; rather we "design" more or less effective solutions based on how we define the problem. (Mascarenhas, 2009, p. 5)

Design is, in essence, a way of solving problems. In order to design effectively one needs to know what challenges are the important ones to be solved. For instance: if museum visitors are loitering around the entrance of an in-gallery film, is the appropriate design solution to add more seating for viewing the film? Probably not. A quick look inside the mini-theater will probably show you that it is sparsely occupied while people watch from the doorway. The issue at hand is not that more seating is needed, it is that museum visitors don't like to commit to watching a full film while in a gallery. They want to watch these films, but they also want to be able to walk away at any moment. A good design solution to the problem of visitors loitering is to create wide "leaning walls" rather than

Successful designers are those who embrace the challenges inherent in teamwork, spatial oddities, functionality, audience, and aesthetics.



Passerby composing an image on SongBoard, an interactive wall on a pedestrian road at Kings Cross, London. Designed by students at Central Saint Martins, University of the Arts London. Photographer unknown.

(continued from page 43)

standard doorways for mini-theaters within galleries. Reduce the seating, and allow more people to observe the film comfortably.

Designers, by nature and through training, have the ability to find innovation and creativity within even the most basic of directives because they know how to ask the right questions and look for the real challenges. It is often the case that the most engaging exhibitions are those in which the design responds in non-overt and non-literal ways to the goals of the exhibition. One way of teaching this skill is through "forensic design" (Featherstone, 2014), a form of design-thinking based in focused listening, observation, and research. Through "forensic design" exhibition designers are able to dig deeply into an exhibition topic to find the "key drama" (Austin, 2014) and narrative hook that will ultimately engage audiences on many levels. "Forensic design" is incorporated throughout the core curriculum at MA/EX and MANE in both abstract and practical ways. Both programs take the approach of emphasizing forensic research in site, audience, and message.

It is often the case that the most engaging exhibitions are those in which the design responds in non-overt and non-literal ways to the goals of the exhibition.

Sarah Featherstone, Faculty at MANE, and Architect and Director of Featherstone Young, describes how she encourages her students in creative process through forensic design. "We encourage our students to do deep research," states Ms. Featherstone, "not just analyzing visitor statistics, but looking at the wear on the flooring, looking for scratches on the walls; creating a scenario around these findings" (personal communication, June 13, 2014).

In an MA/EX course titled "Non-Traditional Environments" Corcoran students work with the International Finance Corporation (World Bank Group) on a mission-driven, message-focused campaign about sustainable practices at the organization's DC headquarters and the global offices. In describing how this course engages students in creative process, Naomi Clare Crellin, Adjunct Faculty and Designer at Sparks Event Marketing, explains that they put into practice a deliberate and intentional process of identifying the real challenges at hand before moving forward. She states that:

> The process of design-thinking quickly reframed the project scope and client brief.... Navigating a conceptual development journey can feel circuitous, especially for young designers. But, the process toward identifying message and meaningful concept is guided, underpinned, by the design-thinking that was conducted on the front end of the process: What do we know about the topic and audience? What are our communication goals? How can we communicate our message to the audience in a meaningful way? (Crellin, 2014)

The entire length of SongBoard at Kings Cross, London. Photographer unkown.

Teaching forensic design provides students with skills to start the creative process of exhibition design: approaches such as considering the audience, asking the right questions, and identifying the deeper narratives are used to build the framework for an exhibition's design. These skills will ultimately help students find the hook that will transform a curatorial essay or subject research into a meaningful experience for those who visit and participate.

Creative process part 2: Practicing iterative and speculative design

"Part of the art of dealing with wicked problems is the art of not knowing too early which type of solution to apply." (Rittel & Webber, 1973)

It is very easy to fall into the trap of assuming that the first answer is the right one. All designers, professionals and students alike, are challenged regularly to come up with quick solutions to creative problems. It is important however, to allow oneself the time to develop and re-develop multiple ideas and variations before settling on a final solution.

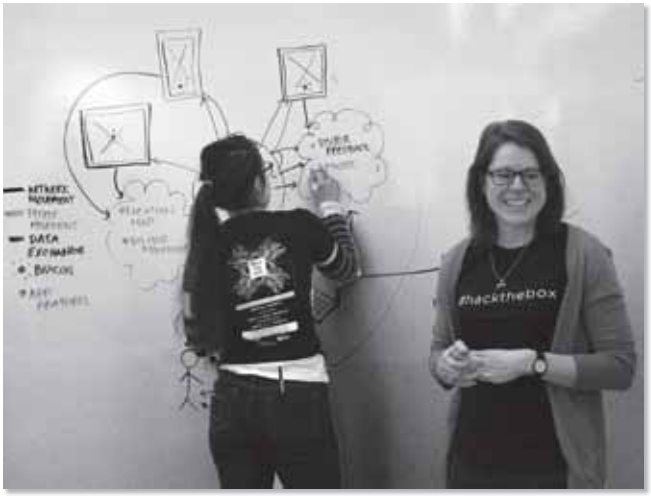
The terms "iterative design" and "speculative design" refer to processes by which designers may work through multiple versions of a design, and by which they can use design process as a vehicle for exploring possibilities. Iteration and speculation are also used in prototyping, which is an activity that is becoming increasingly accepted in museums (even non-science museums!) and practiced by exhibition creators including museum educators, developers and designers. Iterative and speculative approaches are strategies integral in creative problem-solving, and important elements of exhibition design curricula.

According to Tricia Austin, Course Leader, MANE, students at CSM spend the first part of the program, October-March, before the Thesis or Major Project, working on short five week projects that introduce their methods of mapping stories onto spaces.

> Students work in small multidisciplinary groups exploring cultural, commercial, and community spaces and designing user/visitor experiences and social engagement. They test their propositions by setting up quick interventions on site. These comprise short performances, or introducing objects in the space, or setting up light-weight structures that invite interaction. For example, we are currently designing an interactive wall on a pedestrian road near Kings Cross and students left a dial up telephone on a table to see if curious passers-by would try to use it and indeed they did. Tests are documented and used for further design development. (personal communication, June 10, 2014)

It is very easy to fall into the trap of assuming that the first answer is the right one…. It is important however, to allow oneself the time to develop and re-develop multiple ideas and variations before settling on a final solution.

"Hack the Box" Phase 1: Corcoran Exhibition design students, with technologists from BrivoLabs, learn about the Corcoran collection from Sarah Cash, Bechofer Curator of American Art. Students and technologists used this information to design a digital application for preserving the unity of the Corcoran collection and connecting a digital community around the collection. Courtesy of Clare Brown.



During a "reporting out" session of "Hack the Box" Corcoran Exhibition design student Sarah Wiener diagrams the information and hardware architecture for a proposed digital application. Exhibition design Faculty, Cory Bernat describes the process while Sarah draws. Courtesy of Clare Brown.

(continued from page 45)

Students who engage in iterative and speculative design process are well equipped to interpolate this process later and apply it to real-world exhibition projects. In a first semester course at MA/EX entitled "Methods of Visual Representation," Assistant Professor Jonathan Healey and Adjunct Instructor Salvatore Pirrone engage students in projects that explore the deep levels of design investigation and analysis through a course that would otherwise be simplified to technical training in CAD and design software. According to Jonathan Healey, Assistant Professor MA Interior Design and MA/EX:

> MVR's learning objectives focus simply on introducing the conventions of 2D and 3D visual representation. A similar course might present this material by way of studying and reproducing the graphic norms of a basic professional construction documentation set. While we share the same concerns for craft and communication, our approach fundamentally differs by its insistence that the experience and practice of drawing and modeling be itself an intellectual act of curiosity, research, and speculation. Not coincidentally, this process of observation, analysis, testing, and refinement resembles the development of a design thesis. (personal communication, June 17, 2014)

Creative process part 3: Exercising the creative muscles—hack it and get real!

Hackathon, Designathon, and *Design Charrette* are names for collaborative events in which specific ideas or challenges are presented for problem-solving and critique within a fixed timeframe and in a group environment. These events are excellent ways of teaching creative process within multi-disciplinary group dynamics. Active practice of design-thinking is a critical element of any of these types of events.

In March, 2014 MA/EX collaborated with technology company Brivo Systems and their research and development branch, Brivo Labs, to run a three-day hackathon called "Hack the Box: Re-programming the Museum Experience."[2] According to Jonathan Healey, Faculty in MA/EX and MA Interior Design,

> Corcoran exhibition design and interior design students teamed up with Brivo technologists and the crowd-sourcing experts at TopCoder. Together, they explored the implications of new mobile, social, cloud-based access technology when adopted in the traditional spaces of the Corcoran Gallery of Art. Design teams researched, brainstormed, and developed proposals that offered prototypes and conclusions about how traditional museum spaces may come to interact with a networked audience. (Healey, 2014)

End Notes:

[1] While the curricula of these two programs differ from one another, the program philosophies are very much aligned. At CSM, the MANE program is an "MA course that challenges the way stories are told in cultural and commercial spaces." (University of the Arts London, 2014). The Corcoran program is described as teaching interpretive exhibition design through a "consideration of human factors."

[2] In May 2014 "HacktheBox: Reprogramming the Museum Experience" won the Bronze MUSE Award, in the Honeysett and Din Student Category, in recognition of the highest standards of excellence in the use of media and technology. This award comes from the American Alliance of Museums Media and Technology Professional Network.

Hackathons are like calisthenics for a designer's mind.

Hackathons are like calisthenics for a designer's mind. The time constraints and group dynamics of a hackathon force participants to get at the real issues as quickly as possible. As part of curricular or extra-curricular activities they are excellent training grounds for designers.

In addition to events like this hackathon, graduate programs in exhibition design provide students with many opportunities to exercise their creative muscles through real-world projects, and creative challenges. By practicing creative process in these real-world projects, or in intensive hackathons and charrettes, graduates of exhibition design programs enter the job market with skills that enable them to navigate professional projects with agility.

Creative Process: A Pedagogy to Advance the Field

While many people who work on exhibitions agree that "a book on the wall" is anathema to effective use of the medium of exhibition, it is often difficult to find ways to break out of that format, especially given institutional expectations embedded at many museums. When creative process is integrated into a graduate curriculum, students learn to produce new forms of exhibition design by "heightening the narrative" (Featherstone, 2014). In other words, creative process is a tool exhibition designers use when working with exhibition teams to rise above pre-conceived and out-dated expectations of what an exhibition "should" be.

To graduate as a Master in the field of exhibition design requires technical competency paired with an elevated level of critical thinking, museum and design theory, in addition to explorations into the future of the discipline. Because many current professional exhibition designers come from fields such as architecture, interior design, theater, industrial design, fine art, and graphic design, it may seem appropriate for a graduate program in exhibition design to pull together courses from these disciplines. This a la carte approach, however, may provide students with the technical skills to create exhibitions, but it may fall short if it is not held together with the teaching of creative process as a specific design methodology.

Graduate programs in exhibition design must provide students with training in how to be creative solution-seekers. By learning a disciplined and intentional approach to creative problem-solving, our next generation of exhibition designers will be equipped to ask the right questions, find the small details that make a difference, look for connections that are not apparent on the surface, identify the deeper narratives, and find the hook that will ultimately transform a curatorial essay into a meaningful experience. This creative process is the key to unlocking the possibilities inherent in the unique medium that is "Exhibition."

References:

Crellin, N. C. (2014). HMMM... *How message and meaning matter.* Washington DC: Self.

Healey, J. (2014, March). *Home: Hack the box*. Retrieved June 2014 from Hack the Box: http://www.hackthebox.org

Mascarenhas, S.J.,P. (2009). *Innovation as defining and resolving wicked problems*. Class Lecture Notes, University of Detroit Mercy. Detroit, Michigan.

Rittel, H., & Webber, M. (1973). Dilemmas in a general theory of planning. *Policy Science,* 4, 169.

University of the Arts London. (2014). *About: MA narrative environments*. Retrieved June 2014, from MA Narrative Environments: http://www.narrative- environments.com/page/about