JEREMY SWANSTON

RESEARCH STATEMENT

Assistant Professor of Graphic Design, Program Head Jeremy-Swanston@uiowa.edu +1 {319} 385-1638 JeremySwanston.com

As a graphic design scholar engaged in cross-disciplinary research, my central belief is that design has the ability to play a fundamental role in informing and driving solutions that can have a positive impact on users and communities. Driven by the principles of both human-centered and socially-conscious design, my research endeavors are squarely focused on the intended end-user through employing collaboration and joint creative inquiry to affect positive outcomes.

Placing the User At the Center

In my work, human-centered design involves employing design processes and principles to engage the target audience from the very beginning, defining the very way projects are conceptualized, tested, and implemented. These principles are exemplified in two of my interactive design projects - SO•BE Stories, an educational app designed to teach kindergarten students essential social skills, and the *Gravbox*, an interactive sandbox that simulates gravitational dynamics to teach middle and high school students astronomy.

For SO•BE Stories, a collaboration with a faculty member specializing in social-emotional learning and child development, I utilized human-centered design to drive the development of interactive stories and games to help kindergarten students navigate social dilemmas and practice positive behaviors. From conceptualizing characters, story environments, and game play, to usability testing and interface design, this project illustrates the importance of placing the user at the center and inhabiting their experiences. Designed specifically with kindergarten students in mind, this interactive project showcases how effective human-centered design can emotionally connect with the user and create measurable change.

Funded by a Community Impact Grant (\$10,000), of which I was the Co-PI, SO•BE Stories has been extensively presented locally, nationally, and internationally, including the Iowa Educational Research and Evaluation Association, AIGA Design Educator's conference, the University and College Designers Association (UCDA) conference, and the International Conference of Applied Human Factors and Ergonomics. Furthermore, SO•BE Stories was implemented and tested in the Iowa City Public Schools, with promising results from this study currently in press as a peer-reviewed article in the Journal of Professional School Counseling, for which I am a co-author. SO•BE Stories is available free of charge on the Apple Store, and has garnered 30,000 downloads since 2015. It has been recognized as a Gold Winner by the Hermes Creative Awards, a Gold Winner of the AVA Digital Awards, and a Silver Winner of the 45th Annual UCDA Design Competition.

For the *Gravbox*, a collaboration with a faculty member specializing in physics and astronomy, I utilized human-centered design to drive the development of an interactive learning tool that simulates gravitational dynamics in a physical sand box to help students experience principles of astrophysics in real time. Utilizing a 3D camera, the user inputs information through an app,

which is then projected via computer-generated graphics onto the surface of the sand. Putting the young user at the center of this design project was essential to effectively bridge abstract concepts in a visual format that resulted in a fun and engaging learning experience. For this project, the functionality of the simulator and potential for teaching depended on the app component and its intuitive design, with user interaction, interface, and usability testing being an essential component to its realization.

This scholarly project was funded by an NSF grant (\$405,011), for which I was a collaborator, and has been presented nationally at the AIGA Design Educator's conference. The gravity simulator project has garnered positive media attention both in the community and nationally, and was featured in WKOW, KCRG, and Iowa Now, as well as on Astronomy.com, Science 360, Space Daily, and Inverse.

Activating Design To Drive Community Engagement

In my work, socially-conscious design involves applying design processes as a crucial component to understand, connect with, and facilitate the engagement of a community to enact positive social change. Exhibiting a spirit of collaboration, co-learning, and cultural humility, as a socially-conscious design scholar I strive for my work to be reflective of the voices of diverse communities. These principles are exemplified in two of my socially-driven design projects - *Project Perry/Proyecto Perry*, a week-long, culturally immersive partnership between two state institutions and the community of Perry, IA, and *PhotoVoices*, an interdisciplinary research collaboration to illuminate the lived experiences of rural Latinx youth.

For Project Perry/Proyecto Perry, a collaboration with a faculty member specializing in graphic design and community engagement at another state institution, we utilized socially-conscious design to create a team-based graphic design partnership between the two state institutions (University of Iowa and Iowa State University), and the community of Perry, IA. In the first phase of the project, we forged partnerships with community leaders and City officials, as well as various local business owners, to discuss current and future challenges facing the residents of Perry. For the second phase, we invited design students from both institutions to employ problem-and project-based learning, informed by principles of human-centered design, to engage with the rural and socio-economically diverse community of Perry, IA. Students formed small teams to create rapid prototypes through engaging with residents to address a variety of challenges that were essential to community vitality, including, but not limited to, economic development, education, community engagement, and cultural inclusiveness. Community members provided feedback on each prototype, and as solutions advanced in stages, so did their complexity and application. By the end of the project, there were a total of twelve prototypes actively implemented in the community, including a screen-printing workshop to promote community identity and pride, a three-dimensional model of the downtown that empowered residents to envision and participate in re-designing the function and aesthetics of their town, and a youth gardening project geared towards addressing food insecurity through connecting with the land. The final prototypes were displayed during a public exhibition that invited members and leaders of the community to interact with the solutions and engage in meaningful dialogue with the students about the collaborative process and proposed outcomes. Employing human-centered design to guide this process leveled the power differential between university design students and faculty and community members, allowing the needs of the participants to take central-stage. Taking students outside of the classroom and university campus and presenting them with pressing problem-and project-based experiences allowed them to connect with diverse communities and actually be part of the solution.

Funded by a Community Impact Grant (\$10,000), for which I was the PI, Project Perry/Proyecto Perry has been presented nationally and internationally, including the AIGA Design Educators Conference and was slated to be presented at the Design Principles and Practices International Conference. Reflecting the purpose of socially-conscious design, the project was also extensively covered in the community it originated, including the Perry News, and via various local government social media platforms.

For PhotoVoices, an interdisciplinary collaboration with two other faculty members specializing in school counseling and educational policy, and a rural high school, we engaged academically-at-risk Latinx students in a year-long photography project, along with critical discussions, to document their lived experiences and identify ares for policy change. At the end of each semester, students selected meaningful photographs and themes that best captured their experiences, and identified areas for advocacy. Informed by socially-conscious design principles of co-creation, agency, and action, we created an extensive poster series featuring selected student photos, along with salient quotes from group discussions. Our team hosted several community art shows with key school and community stakeholders, visually sharing student experiences through the poster series, eliciting valuable community input and exchange, and raising awareness about the needs of Latinx students.

Funded by a Carver Foundation grant (\$85,000), an Outreach and Engagement Micro Grant (\$1,500), an Obermann Fellowship (\$18,000), and a Public Policy Center Summer Residency (\$6,000), for which I was Co-PI, PhotoVoices has been presented locally, nationally, and internationally, including at the Iowa Public Library Community Conversations, the Muscatine LULAC Chapter, the Applied Human Factors and Ergonomics International Conference, the American Educational Research Association International Conference, and the European Branch of the American Counseling Association Conference. Reflective of the purpose of socially-conscious design, the project was also extensively covered in the community it originated, including the Muscatine Journal, and via various local educational social media platforms.

Professional Practice

While the main content of my research statement focuses on my scholarly interdisciplinary research activities involving digital, print, and interactive components, I also maintain an active professional portfolio that spans regional, national, and international spheres. For example, my engagement with the Woodrow Wilson International Center for Scholars, a Smithsonian Institution that focuses on tackling global issues through independent research and open dialogue, is reflective of my passion for incorporating both human-centered and socially-conscious design methods. This decade-long partnership has led to numerous print projects, including creating a report series for the Science and Technology Innovation Program aiming to mobilize public participation in science, technology, and policy. Additionally, my design partnership with Holacracy, an international company focusing on self-management practices for organizations, has involved branding, print, and digital components for improving work culture and synergy. On a more regional level, my six-year involvement with Matt Jensen Marketing has led to numerous interactive multimedia projects, involving a variety of clients, such as the Central American Eye Clinics and the Advanced Reproductive Center of Hawaii.

Looking forward to the next stage of my career trajectory, I am excited to continue my engagement in both scholarly endeavors and professional practice that combined, showcase the central role of design in communicating, inspiring, and engaging across platforms and audiences.