

## RESEARCH + PRACTICE STATEMENT

Design has evolved from a practitioner's discipline dealing with the form and function of products and communications into a new paradigm involving new models of interaction and understanding of systems dynamics. It has emerged as a strategic impact field where users' needs, their interactions, collaborations (stretching far beyond the boundaries of any single organization or discipline) are informing the future. I see design as a critical intersection between art, science, culture and technology, enhancing the quality of human interactions by responding to real needs and desires. After years of creating visual communication experiences across media, I became interested in applying design to the challenges people encounter as they interact with their daily environments (digital and/or physical) and to promote design's potential to help improve the human condition and aid our fragile planet.

The majority of my teaching and scholarship over the past 10 years has dealt with socially responsible design practices, taking a systems-thinking approach to problem solving, and focusing primarily on issues of education, health, sanitation, social justice and environmental stewardship. I constantly challenge the definition of the design profession, acting as a bridge across disciplines and academic silos. I have a natural ability to connect with people from different backgrounds (cultural, professional and economic) and I use that talent to engage them in interactions they "traditionally" would not embrace. Through my research, I investigate the interconnected trajectories within the design field and concentrate on strategic design problems dealing with social change and sustainability. I merge my research with my teaching, for which I devise complex projects to educate students on the impact and importance of their work –bridging worlds, whether locally or internationally– so that the interfaces, products and environments they create meet the needs of their intended users.

My scholarly accomplishments have been recognized by my peers. For the past seven years, I have been honored to be a Winterhouse Institute Founders' Circle Member, actively participating in the *Winterhouse Symposium on Design Education and Social Impact*—an invitation-only gathering of design educators from prestigious US institutions that explore the intersection of design and social innovation, and how this new paradigm could effect solutions to social problems within the teaching and practice of design in undergraduate and graduate education. My participation in Winterhouse has strengthened my reputation as a design-thinker with new pathways for the evolution of my career, where design can be epistemologically and ontologically positioned as a means to affect positive social, technological, economic, environmental and political change, and also can help us attain the types of goals that 21st century institutions must now achieve on behalf of their students—if they are to fulfill their missions of educating them to contribute to futures that they would actually want to be a part of. That is, teaching students to be prepared for the challenges we are now facing and for the ones that will come ahead; as well as facilitate better, more sustainable solutions to the problems that affect society.

I take my practice and advocacy for promoting design's potential to improve the world to my classroom, providing students with life-long enriching experiences—from community-driven work on nonviolence in Connecticut and service-learning projects helping rural farmers in Africa and Asia to helping a Beaumont's

animal shelter and designing information graphics for Park Rangers at Big Thicket National Preserve. The collaborative think-tank I founded in 2008 (Design Global Change) continues to attract interest and receives more inquiries for collaborations than members we have to fulfill the demand for new work. Many of the design solutions developed require financial assistance to be implemented; so one important aspect of my scholarship has been the successful procurement of funding (securing both internal university grants as well as external sponsorship; such as being awarded the renowned Sappi “Ideas that Matter” grant twice, totaling \$28,350).

Furthermore, my scholarly work on social impact has been substantial. Since 2007, I have presented my research at more than twenty-six national and five international venues (India, Mexico, Argentina, Poland, and Saudi Arabia, forthcoming in February). Fourteen of these were refereed abstract/articles proposals for conferences, with three articles published in peer-reviewed proceedings. In addition, I often receive invitations to give lectures and workshops on the shifting nature of design education curricula. My research practice incorporates collaboration and strategic partnerships with other disciplines, through activism work that focuses on impact and betterment of society, with the continue development of change enablers that promote the social impact and value of design.

As a strategic thinker, I use social media to expand the design profession, for outreach and dissemination of ideas among professionals. Over the past years, I have participated in global conversations with communities spanning from design to public service, healthcare to activism. I am a frequent panelist in webinars on global health innovation and social change and also I am part of the prominent Health Design Network. In the past year, I have become literally immersed in the latest form of experiential design: Virtual and Augmented Reality are the new challenges for the Experience Design discipline; and the Houston community abounds with opportunities to be an active leader in the field. Given the challenge of a world where many things seems to be changing—including the ways we live, eat, communicate—our needs span the silos of today's society, the boundaries of our disciplines and the relationships between them will inevitably also have to adjust. To be an effective practitioner during this moment of flux in design education is to work towards achieving better outcomes in changing the old school mindset into a systems-thinking/systemic social change paradigm.

My passion and dedication to design for social change is reflected in the following TEDx talk entitled *“Helping Communities Thrive”* which presents an overview of three prominent socially responsible design initiatives.  
<http://bit.ly/NatachaTEDx>