

Scott Trent

Innovate NOT Collaborate Exploring the Artist's Process

I propose a ten page paper utilizing images with short descriptions to document the process of creating a sculpture and extrapolate the notable steps that are unique or shared by other disciplines in the process of innovation. This project can be expanded in future iterations to have an engineer, scientist and mathematician capture their innovation process and then overlay the results to discover commonalities and creative distortions.

The underlying question is when talking about introducing the "A" for art back into the STEM curriculum, what "A" are we talking about? How is Art being defined and what does it mean? I would argue until we can empirically describe the value of art to the sciences, it will continue to be excluded from the core subjects taught at all levels of education.

The explicit call to action for this paper is to identify the fundamental attributes of each discipline, Science, Engineering, Art and Design. And to emphasize innovation as opposed to collaboration as the larger objective. The proposed shift allows each field of study their unique approach to creativity; but recognizes that Art provides a valuable aptitude not fluent in other innovation fields. As opposed to seeking a universal language of design, creativity or arts; I propose we redirect our efforts from attempting to collaborate which is counter-productive, to emphasizing the innovation process and bringing each discipline in as a unique endeavor within a designated stage of the innovation process.

To illustrate the different roles and subtle aspects of creation within the different disciplines, imagine a movie that is completed and an artist decides to contribute to the finished presentation. In this case, the artist adds an elephant to the scene and the elephant steps on the protagonist's toe. The resolution of the movie does not change; the file size does not expand, or the length of the film increase. In all practical applications, the movie does not change, but interest, relevance, a connection to the viewer, entertainment value, and narrative can change dramatically. Twitter was conceived from an engineering, practical foundation with the 144 character limitation, but it is the poet that has made it relevant.

The artist endeavors to create, navigate and negotiate a world not observed or experienced by others. It is their perspective that is unique and can provide value to the fields of science, math and engineering. The artist in the act of creating finds answers in the ambiguous, seeks meaning in the unexplainable, and derives inspiration in ideals. They see patterns where others see chaos. They dedicate a life to expressing these interpretations and rely on a perspective that can bring value to the STEM (Science, Technology, Engineering, Math) disciplines.

Horst Rittel, a design-theorist, coined the term, "wicked problems" in 1973. He was describing the challenge of dealing with problems of social policy. His claim was that, because social problems could not be defined objectively and therefore could have no "solutions" in the sense of definitive and objective answers, a scientific basis for confronting such problems made no sense. Design was introduced as a process to address these seemingly unsolvable and complex issues. The argument for innovation NOT collaboration is built on the premise that collaboration is a wicked problem. The act of emphasizing collaboration is de-emphasizing the greater objective of achieving a measureable outcome.

Design is to Art as Innovation is to Creativity. One is built on the foundation of the other, but does not represent the same approach to a common process or consistently deliver similar results; within the separate disciplines, intention, expression, and purpose can all be extremely different. But, you could not have one without the other and the terms, roles and process are commonly confused and interchanged. Design is a process that is suited to addressing wicked problems. Artists possess a perspective that embraces creativity. Innovation is the result of the creative process facilitated by a Designer. I argue that the artist has an innate aptitude that is valuable to the disciplines of math, science and engineering. The purpose of this paper is to further explore this skill and discover the practical applications beyond the esoteric and aesthetic.

I have a preliminary manuscript exploring the value of the artist's process to business innovation. This document would be condensed to produce the proposed paper. You can view the current document in progress at http://scottrent.com/Trent_manuscript_artistsprocess8-5-12.pdf.