

Thesis Project Portfolio

Guiding the Design of Inclusive Playgrounds through Needs Assessment and Materials Selection

(Technical Report)

The impact of nationalism and leadership on scientific faith and the effectiveness of the pandemic playbook in the United States

(STS Research Paper)

An Undergraduate Thesis

Presented to the Faculty of the School of Engineering and Applied Science
University of Virginia • Charlottesville, Virginia

In Fulfillment of the Requirements for the Degree
Bachelor of Science, School of Engineering

Kiley Weeks

Spring, 2021

Department of Systems Engineering and Environment

Table of Contents

Sociotechnical Synthesis

Guiding the Design of Inclusive Playgrounds through Needs Assessment and Materials Selection

The impact of nationalism and leadership on scientific faith and the effectiveness of the pandemic playbook in the United States

Prospectus

Sociotechnical Synthesis

Initially, I had planned to write my STS research paper on practical methods for ensuring accessibility in public spaces. I wanted the research paper to align with my technical project in which my team and I sought to determine recommendations for the design of an inclusive playground. My prospectus evolved to include the context of a COVID-19 world, where the nature of public spaces has changed greatly and the inclusion of individuals with disabilities is vital for community building. Researching societal attitudes towards disability for my prospectus led me to study some of the sociological factors surrounding the COVID-19 response, and I attempted to incorporate both into my prospectus as I felt there was a connection. But as I did more research, my STS advisor and I agreed that the narrative was being pulled in two different directions, and I ultimately chose to focus on the sociology of belief and its effect on the success of COVID-19 response.