

Raising Deforestation Awareness Through Online Education
(Technical Report)

Political Polarization and Social Media in the United States
(STS Research Paper)

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SocioTechnical Synthesis

Charitable organizations and relief groups are becoming more and more reliant on online education and outreach in 2020. Amazon Aid seeks to educate and empower individuals to protect the Amazon Rainforest through art, activism, and other multimedia platforms. The technical thesis outlines an effort by the capstone team to improve upon Amazon Aid's Amazon Voices learning module for middle school students by creating features for student and teacher accounts, opening up Amazon Aid's exposure to the school system. Additionally, the team improved upon a previous capstone project's game within the site, adding functionality to traverse levels of the game and track progress. These efforts helped to improve teacher and student experiences with the Amazon Aid site.

Growing rates of political polarization within the United States over the last decade have plagued the lives of everyday Americans and led to gridlock and a lack of bipartisanship in Washington. Facebook and Twitter were identified in this research as the two most critical technologies to study because of their massive usership and political relevance. Facebook boasts over 220 million users in the United States and Twitter because of the sheer volume of tweets from key US politicians (see President Donald Trump). Facebook and Twitter are defined by human interactions, albeit virtual, meaning that their subsequent effects on society are significant. The massive volume of US politicians active on Twitter along with the 'echo chambers' that the platforms are

susceptible to makes these platform's influence on rising political polarization of interest. There are two theories that apply most to this research and observation: Social Construction of Technology and Technological Citizenship. Social Construction of Technology helps to understand how Facebook and Twitter could become such politically divisive platforms while Technological Citizenship serves as a framework to find a solution to these frightening trends. Using public surveys, original surveys, and observation of real-life Facebook and Twitter feeds from politicians this research will form a full picture of social media platforms and how they relate to political polarization. These methods are expected to uncover a direct correlation between social media usage and political extremism and polarization. It is also expected to uncover rising rates of hostility from politicians through the use of their Facebook and Twitter feeds. If the status quo remains, social media platforms will continue to inflame political tensions and heighten polarization within the United States. However with an increased awareness of a healthy technological citizenship, gridlock can be decreased and the moral fabric of the United States can begin to heal.