Thesis Project Portfolio

A Music Education Social Network

(Technical Report)

Technology and the Music Industry

(STS Research Paper)

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Sociotechnical Synthesis

My sociotechnical project examines the impact of the progression of music technology on music. I analyze the network of human and non-human elements contributing to music's role in society. Music, technology, artists, and the audience all interact in a complex network that comprises music's role in our culture. Music technology introduces new digital sounds for artists to experiment with, creating music that more accurately portrays intended meaning and conveys emotion. Some may argue that digitally-produced sounds may lack human originality and imperfections that give art its inherent value. Algorithmically derived music forces artists to question what constitutes art and whether the process of creation determines artistic value. The evolution of music recording technology has had lasting impacts on the ways music is created and consumed. Ideas from society influence music, just as music can impact societal issues. Racism, sexism, and bigotry present in our culture infiltrate the music industry, and advances in technology in music have caused some shifts in these evolving issues. Music education is not very accessible to aspiring musicians of lower socioeconomic status. Classical music especially has a steep entry barrier, necessitating expensive acoustic instruments, private lessons, and music education programs to contend in a competitive industry. Classical music has historically been dominated by white, upper-class men. Young artists may not see the representation of diversity in music ensembles, discouraging them from pursuing the art. Private lessons can be costly, and students who cannot afford them fall behind their peers. A lack of access to quality music education can discourage artists from continuing to pursue music. Music serves as a valuable tool for self-expression, builds community, and tells stories across generations that have the power to drive cultural shifts. Everyone should have access to this powerful tool.

My technical project takes one step toward mitigating these issues of accessibility. The project involved creating a music education social network and practice logger. The web application allows users to add friends, join groups of collaborators or ensembles, post music recordings, post and receive feedback, and track daily practice goals and records. The goal of the application is to provide motivation, encouragement, and constructive feedback to student musicians who may not be able to afford traditional musical education programs. The social aspect of following and interacting with friends aims to encourage young artists to continue to pursue music by building community and providing a platform to follow artists they admire. The platform would be provided free of charge, lowering the barrier to entry for music education. Teachers and peers could provide constructive feedback on music recordings, providing valuable education and motivation for musicians. The practice logger provides a convenient space to track goals and record notes of practice sessions. Musicians can use this page to reflect on previous practice sessions, observe their growth, and plan for future goals. The practice history calendar motivates students to practice daily. Manually entering practice session notes and goals encourages students to practice intentionally and more effectively.

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