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Hacking Disability in Music Education

"It's called the Lickmaster 5000," declared Aaron, a middle school music teacher holding up his prototype—a tinfoil-covered contraption with various wires drooping from it. "You see, I've got this student on the autism spectrum who licks everything, and everyone sees this as bad behavior. I wanted to make a musical instrument for him that encouraged licking. So, I created the Lickmaster 5000—you can only play it correctly if you lick it." Aaron's do-it-yourself (DIY) solution to help his student exemplifies hacking disability in music education. Learners who experience disability in music education are often relegated to the sidelines of participation. How could practices of hacking disability in music—such as those exemplified by Aaron—contribute to making music education more accessible and inclusive to learners who experience disability in music?

The Lickmaster 5000 was made at Monthly Music Hackathon NYC: a non-competitive community-based event in which participants—musicians, educators, coders, and software/hardware designers from beginner to expert—work on projects collaboratively over the course of a day or weekend to address real-world problems posed by stakeholders in their communities. With hacking themes often focusing on factors that marginalize people in music (e.g. gender, race, disability), and attendance averaging between 150-200 participants at each event, Monthly Music Hackathon NYC is the largest music hackathon where participants frequently hack on projects that confront the construct of disability in music.

Monthly Music Hackathon NYC will serve as a critical case study to examine practices of hacking disability in music. The findings of this study will inform how music education can be made more accessible and inclusive to learners who experience disability in music. To this end, the following questions will be investigated in this study:

- 1. What processes do the music hackathon participants engage in, from the first stages of discussion and idea generation, through to the design, development, prototyping, and presentation of a project?
- 2. How are "hacking," "disability," and "hacking disability in music" conceptualized and discussed by the music hackathon participants?
- 3. What are the best practices displayed and discussed at the music hackathons as they relate to designing for more accessible and inclusive music education practices?

With one undergraduate student and one graduate student to assist with data collection and analysis, I will attend three Monthly Music Hackathon NYC events in the Fall of 2017. First, we will video-record the events of the hackathons, which will allow us to review and analyze the processes that the music hackathon participants engage in. Second, we will engage participants in informal unstructured interviews to gain insight into their perspectives on hacking disability in music. Third, we will solicit participants to take part in semi-structured interviews (an estimated 18 to 27 interviews are feasible considering the time needed to conduct each interview, and the amount of time participants can typically be away from their groups over the course of a hackathon).

These one-on-one interviews will inform our inquiry on how participants conceptualize and discuss the constructs of "hacking," "disability," and "hacking disability in music," and to identify best practices for making music education more accessible and inclusive. Combined, this data set will be analyzed using theoretical frameworks rooted in the social model (disability as a societal problem). By dialoging with those at the forefront of hacking disability in music and examining their practices, this methodology will serve to inform the improvement of existing music education practices to be more inclusive of diverse populations.

This study will contribute new knowledge to the field of music education, illuminating new perspectives and practices on hacking disability in music. It will be one of the first research inquiries in music education to be grounded in disability studies theory, and will expand the existing literature on disability in music education. Those who teach music in schools, privately, and in community contexts can benefit from this project by attending a professional development workshop or reading an article in a practitioner journal that disseminates the study's key findings.