A Corpus-assisted Discourse Analysis of Chiptune-related Practices Discussed within Chipmusic.org

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This study examined 245,098 discussion forum posts within a website dedicated to chiptunes, which are electronic music compositions or performances either emulating the sounds of or created through early computer and video game sound chips. Corpus-assisted discourse analysis tools and techniques assisted with revealing patterns of discourse across 10,892,645 words written between December 30th, 2009 and November 13th, 2017 within chipmusic.org.

Findings indicate seven interconnected themes of chiptune-related practices that demonstrate potential transdisciplinary connections between computer science education and music education: (a) music composition practices, (b) music performance practices, (c) maker practices, (d) coding practices, (e) entrepreneurial practices, (f), visual art practices, and (g) community practices.

Members of chipmusic.org engaged in computer science practices such as designing, manufacturing, and modifying electronic hardware for performing and recording chiptunes, as well as coding practices such as creating or modifying software for chiptune-related purposes. Such practices were guided by an interest in making music through old computer and video game hardware, and demonstrate several potential connections between computer science education and music education. For example, members engaged in computer science practices such as hardware and software modification to enable the ability to compose and perform music through the Nintendo Game Boy.

Findings from this study not only demonstrate potential connections between computer science education and music education, they also raise questions about spaces and curricula with blurred disciplinary boundaries. For example, where might chiptune-related practices that blur concepts and practices from a multitude of disciplines and standards occur within a formalized education environment?

Keywords: Chiptunes; Music-centered Making; Transdisciplinary; Interdiscipline; Curriculum; Computer Science Education; Music Education

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