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## BACKGROUND

BUILDING A BETTER MOUSETRAP: LEARNING ENVIRONMENTS THAT FOSTER IMAGINATIVE AND CREATIVE EXPERIENCES TOWARD CREATING MEANINGFUL PROJECTS; Playful and Fun; Collaboration; Exploration and Discovery; Risk Taking and Curiosity; THE YIN AND YANG OF CREATIVITY AND THE COLLABORATIVE PROCESS; BIBLIOGRAPHY; Chapter 3: Interdisciplinary Teaching and Learning: Two Heads Might Actually Be Better than One; YESTERDAY AND TODAY; DEFINING INTERDISCIPLINARY TEACHING; "SYNCHRONIZED" VERSUS "HYBRID" COURSES; LEARNING FROM EXPERIENCE; BENEFITS TO STUDENTS; BENEFITS TO THE PROFESSORS; BIBLIOGRAPHY Chapter 4: Notation and Representation: How We Get 'Em to Crack the Code GATEWAYS, BARRIERS, AND BOUNDARIES; FOUND INSTRUMENTS PROJECT: GOALS AND OVERVIEW; A BIT OF BACKGROUND; SYNCHRONIZED CLASS VERSION; Part 1: The Music Assignment; Part 2: The Computer Science Assignment; HYBRID CLASS VERSION; From Two Parts to Three; From Exercises to Music; THEME, VARIATIONS, AND COMPUTATIONAL THINKING; BIBLIOGRAPHY; Appendix for Chapter 4; ADDITIONAL FOUND INSTRUMENTS AND NOTATION EXAMPLES: From the Synchronized Classes; From the Hybrid Class Chapter 5: Getting Them Started I Didn't Know You Could Do That with a Computer JUST WHAT IS A COMPUTER, ANYWAY?; AUDACITY: THE STANDARD IN FREE MUSIC EDITING; GETTING MUSIC INTO AND OUT OF AUDACITY; GAINING COMPUTATIONAL THINKING SKILLS THROUGH AUDACITY; HOW COULD YOU HAVE THE AUDACITY TO DO THAT TO MY SONG?!?; AN EXAMPLE FROM OUR COURSE: THE AUDIO-ETHNOGRAPHY PROJECT; THE VALUE OF PERFORMANCE; APPENDIX; Downloading and Installing Audacity with the LAME MP3 Encoder; BIBLIOGRAPHY; Chapter 6: Platforms and Tools: Anything You Can Do, I Need to Do Cheaper; GETTING INTO THE GAME; SOUND EDITING Audacity

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### Sommario/riassunto

This text, for music fundamentals educators, is devoted specifically to music, sound, and technology. The work offers practical guidance on creating an interdisciplinary classroom program, and includes numerous student activities at the intersection of computing and music.

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