

The Role of Background Music Used in Online Learning Environments in Enhancing the Higher Education Students' Learning Experience

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Abstract

In online education, adding background music to audio-visual content is seen as a promising way to enhance students' learning. This project thoroughly investigates how background music affects students' attitudes, engagement, and memory of course materials in the Virtual Learning Environment (VLE) of distance learning institutions. Our investigation draws from music cognition and educational psychology to shed light on the intricate relationship between background music and learning outcomes, addressing conflicting findings in existing literature. We collaborated with a music agency to create diverse audio-visual materials, adjusting tempo and music genre to understand their varying effects on student engagement and cognition. Our methodology included rigorous studies with cohorts of business and engineering students. Our findings suggest a nuanced interplay between music, mood, and task engagement. Of particular note is the discernible impact of music genre, with classical compositions notably influencing task engagement, particularly when carefully matched with the cognitive demands of the educational task. Our research highlights the crucial role of individual preferences and perceived alignment between music and study materials in shaping the overall learning experience. Discussion topics include implementing background music across various educational contexts and its wider implications for higher education instructional design. Critical reflections are needed on how background music affects students from diverse disciplines and the potential for refining pedagogical practices in virtual learning environments. Our study advances scholarship in multimedia-enhanced online education by elucidating the complex relationship between background music and learning outcomes, fostering scholarly engagement and collaborative discourse to optimise virtual learning experiences.

Keywords: higher education; learning; multimedia; music genre; music tempo