

# Attitudes Towards Game-Based Music Technologies in Education: A Survey Investigation

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## ABSTRACT

### Background

A growing body of literature has recently emerged extolling the virtues of incorporating digital-based games within formal education settings, in line with defined curriculum goals. Yet, despite the widespread usage and relative accessibility of music-based digital games, coupled with the abundance of research that exists to support the cognitive, emotional and social benefits of musical participation, there remains a dearth of empirical research into the inclusion of such technologies within the realm of music education.

Indeed, whilst music-based digital games present a highly pervasive medium through which to engage and inspire young people with music, academic enquiry has thus far failed to empirically investigate the educational potential of such games.

### Aims

As part of an ongoing EPSRC-funded project designed to evaluate the educational potential of music-based digital games, a large-scale survey investigation was primarily conducted as a means of ascertaining current uses, requirements with and attitudes towards music-based video games across three groups of relevant stakeholders, to include educators, learners and game industry experts.

### Method

An ad-hoc questionnaire was built from literature surrounding the use of digital games within educational settings (c.f. Gee, 2003), music-based games (Missingham, 2007) and music education (Hargreaves, Marshall & North, 2003). In addition, sources pertaining to both educator and learner attitudes towards technology and the usage of new technologies in education were exhausted.

An initial pilot study was then conducted as a means of

assessing the reliability and validity of this scale ( $n = 250$ ). Following analytical proceedings, the questionnaire was subsequently refined before being administered across the 3 groups of relevant stakeholders. ( $n = 2000+$ ).

### Results

Findings from the initial pilot phase shall be discussed with regard to the development and validation of the survey and the resultant structure of the final questionnaire employed. From here, results from a nested sub-sample of cases ( $n = 300$ ) from the overall participant pool shall be presented here with a specific focus on learners' responses to the final version of the survey.

### Conclusions

These initial findings shall be discussed in light of the overarching aims of the project, and with regard to the effective and successful integration of music-based games within music education.

In addition, future uses of the questionnaire here developed shall also be proposed with respect to the inclusion of further technologies (i.e. out-with digital games) across music education and in line with current curriculum goals.

### Keywords

Music Technology, Digital Games, Music Education, Health & Wellbeing.

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