Students’ Aesthetic Experiences of Playing Exergames:
A Practical Epistemology Analysis of Learning

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ABSTRACT

The aim of this study was to explore Swedish junior high school students meaning-making of participating in exergaming in school based on their aesthetic judgments during game-play. A transactional approach, drawing on the work of John Dewey, was used in the study and the data consisted of video- and audio recordings of ongoing video gaming. A practical epistemology analysis (PEA) was used in order to explore the students’ meaning-making in depth. When analyzing the data, the importance of performing well in relation to the challenges the game offers; developing techniques suitable for the game; and interacting socially with one’s peers emerged as main themes in the students’ meaning-making and learning. It was clear that the students’ taste for gaming played a crucial role in how they proceeded in the activity and that meaningful gaming included an intrinsic combination of pleasure and displeasure.

Keywords: Aesthetic Judgments, Exergames, Learning, Meaning-making, Practical Epistemology Analysis

INTRODUCTION

In this paper we examine how aesthetic experiences – what people find beautiful/ugly and pleasurable/displeasurable – are involved when students play exergames at school. In doing this, we examine the aesthetic aspects that junior high school students experience when playing exergames as a free choice activity in school.

As exergames, such as Wii Fit, Wii Sport and Just Dance, require bodily movement, this type of gaming has attracted an increasing number of physical education (PE) scholars as a subject of research (c.f. Chen, 2013; Sun, 2012). These scholars show that exergaming has the potential to contribute to the PE curriculum by supplementing the current activity options and increasing students’ motivation for taking...
part in PE and physical activity. However, in an overview Ennis (2013) points out some of the limitations in this body of research. According to her, scholars have limited their studies to physiological, psychomotor and cognitive meditational variables and have neglected knowledge-oriented educational goals. Ennis (2013) suggests that there is a need to explore exergaming in terms of learning, and in this paper we argue that exploring students’ aesthetic experiences of gaming is a fruitful way of responding to this call for research.

Aesthetic experiences are also taken into consideration when exploring learning in other educational disciplines. Research undertaken in the field of science education (Jakobson & Wickman, 2008; Wickman, 2006) and PE (Maivorsdotter & Lundvall, 2009; Maivorsdotter, Lundvall & Quennerstedt, 2014) has shown that aesthetic experiences are involved when students make selections about what is noticed and what is ignored in a certain practice. Cognitive and aesthetic aspects can be explored as entwined when learning is not just seen as a finite, mental outcome, but as part of an often contingent learning process in an activity as a whole. Considering these arguments, it is of interest to empirically examine the role that aesthetic experiences have for meaning-making and learning in exergaming beyond that of motivation.

An approach using a constitutive role of aesthetic experiences in learning gains further support in empirical studies of students in other embodied practices (Maivorsdotter & Lundvall, 2009; Maivorsdotter, Lundvall & Quennerstedt, 2014). Here it is shown that learning body movements involves learning a different kind of aesthetics; one that is closely tied to learning how to proceed in the activity and learning the subject content. The situations in which such learning occurs are often aesthetic experiences, where the learner used aesthetic judgments to communicate the directions and preferences of their undertakings. We would argue that there is reason to believe that students taking part in a body movement such as exergaming also use aesthetic judgments as a way of communicating and proceeding during game-play. This line of thought resonates with what Eisner (1976) calls educational connoisseurship.

The specific role of aesthetic experiences for personal transformation and learning about one’s own place in relation to an activity also finds support in socio-culturally oriented studies (Jakobson & Wickman, 2008). Similar to Eisner’s (1976) connoisseurship as being able to differentiate subtleties in a certain practice, Bourdieu (1984) studied the tastes of people with a different upbringing and education. His results suggest that by learning aesthetic distinctions (i.e., taste) education supports the formation of social identity. Hence, learning a certain taste and experiencing aesthetically are not just personal matters, but an important part of being educated within a certain area (Jakobson & Wickman, 2008), what Gee (2014) in relation to video games talk about as learning to act upon various semiotic domains.

Earlier research in the field of game-based learning suggests that the feedback from objects and the social interactions within and between communities allow the players to build up a better notion of themselves, how they fit into the world and how they can have a positive impact on it through communication (de Freitas, 2013). Drawing from this research, it is clear that learning gaming is a matter of being educated — being a connoisseur — within a certain area and that gaming contributes to the formation of social identity, which, accordingly, means learning a certain taste for gaming. People involved in an educational setting can either accept or reject the ‘certain taste’ within the setting. They nevertheless have to cope with this taste, and their coping has an impact on their possibility to proceed in the activity. Not accepting or being able to learn the certain taste means not being able to share what is valued and not valued in the activity, which makes it difficult to proceed successfully (Wickman, 2006; Maivorsdotter & Wickman, 2011).

So, what we find significant in this body of research is that it shows that exergaming has the potential to contribute to learning in different ways. Some of the studies also
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Maria Saridaki and Constantinos Mourlas (2013). *International Journal of Game-Based Learning* (pp. 10-20).
www.igi-global.com/article/integrating-serious-games-in-the-educational-experience-of-students-with-intellectual-disabilities/95079?camid=4v1a