

Chapter 88

How do Professionals’ Attitudes Differ between what Game-Based Learning could Ideally Achieve and what is Usually Achieved

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ABSTRACT

This paper compares the results of two surveys conducted between July 2009 and January 2010 with 45 subject matter experts (SMEs) and 41 game experts in the UK. The surveys examine the attitudes and attitude differences of the participants towards teachers who use games in the classroom and studios that produced educational games. The findings revealed respondents’ attitudes were statistically significantly less positive—comparing ideal conditions to usual practice—for the issues studied. The SMEs were unaware of the problems faced by educational game studios, which could lead to a scenario where games are made fun at the expense of learning outcomes or vice versa. In issues related to educational games, the SMEs were found to be certain only about aspects of related directly to teaching and learning while the games experts were confident only for game design and development. This revealed a need for collaboration between SMEs and game experts rather than independent production when designing and developing GBL solutions.

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INTRODUCTION

According to Tan, Johnston-Wilder, and Neill (2008), game-based learning (GBL) is a form of learner-centred learning that uses electronic games (e-games) for educational purposes. This form of learning “urges learners to actively construct meaning and understanding during every phase of the learning process (Yilmaz, 2008),” an idea lying in the constructivist learning theory tradition. From the constructivist perspective depicted by Pivec, Dziabenko, and Schinnerl (2003), “learners are active participants in knowledge acquisition, and engaged in restructuring, manipulating, re-inventing, and experimenting with knowledge to make it meaningful, organized, and permanent.” In GBL, the learners must play and learn the game themselves, and their teacher cannot play on behalf of the learners because that would be a demonstration rather a game playing session. The idea of positioning GBL practice in the learner-centred learning domain, as opposed to teacher-centred or content-centred learning—referred by Prensky (2007) as traditional learning, is to focus on how do learners learn *what* instead of how do learners learn. In this pragmatic view, any definitions, theories, styles or forms that relate to learning can be linked to GBL to suit the requirement of what is to be learned (Prensky, 2007). In this sense, teachers who embrace GBL practice could have tremendous opportunities to innovate new pedagogic and learning methods, hence creative teaching.

When Mason and Rennie (2006, p. 110) attempted to synthesize concepts which are synonymous to learner-centred learning, they retained the role of teachers, in which the teachers should focus on “how the learners are learning, what they experience and how they engage in the learning process,” while the learners should be given “greater autonomy and control over choice of subject matter, learning methods or pace of study.” This view about learners is particularly suitable for GBL practice, as game playing is essentially decision making, with reference to the goal, the

rules and the feedback. However, how teachers and academics see themselves in GBL practice is an interesting, yet seldom examined issue.

The practice of GBL has gone through three generations (Egenfeldt-Nielsen, 2007). The first generation involves the use of edutainment and focuses on the change of learners’ behaviors; the second involves using games for educational purposes, in which learners become the central of attention while cognitivism and constructivism are linked to game playing. The third generation expands the focal point to include the social context and augmented reality, based on the propositions of constructionism. In an instance of the third generation GBL practice, Tan, Johnston-Wilder, and Neill (2011) asserted that if commercial games—games designed for entertainment purposes—are chosen carefully and associated with predetermined learning outcomes (LOs), GBL with a conventional teaching approach could support knowledge and skills development. In other words, teachers or academics that choose and associate games with teaching and learning activities are crucial in making GBL practice successful.

Choosing the right games for teaching could be a problem for teachers, especially when the teachers are not familiar with GBL practice. Felicia (2009) offered a handbook to assist school teachers in selecting the appropriate games, while Whitton (2010) provided guidelines for those in higher education. The practicality of these guides or supports alike is always related to three issues of GBL practice: the games used in teaching, the teachers who use games, and the students who learn through game playing. Many researchers have focused on practical issues found in GBL practice, such as gender of learners (Carr, 2006; Yasmin, 2009), players’ involvement (Iacovides, 2009), motivation (Kii, 2009) and childhood development (Sherry & Dibble, 2009), but the teachers and the experts who developed the games (termed ‘game experts’ below) have been less studied.

When Tan, Johnston-Wilder, and Neill (2010) explored the potential of games in educational con-

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