



Being in the Game; Language Teachers as Digital Learners

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Abstract

Although Prensky [1] famously described the “digital natives,” empirical research illustrates that the relationship between technology usage for pleasure and in knowledge acquisition and application contexts is not straightforward. Based on the preliminary results of a survey, this research examines the attitudes and experiences of future teachers regarding their use of digital game-based language learning (DGBLL) for both English acquisition and instruction. By considering them as both language learners and future teachers, students’ conceptions of themselves as both “digital learners” and “digital instructors” are examined in conjunction with one another. In addition to describing the kinds of DGBLL this cohort utilizes for its own language growth, the paper will identify the ways these behaviors are reflected in their attitudes towards DGBLL.

1. Introduction

Digital gaming largely takes place in English, presenting unique opportunities for English language learners and teachers. On the cusp of becoming teachers, current pre-service teachers (PSTs) of English as a foreign language (TEFL) are negotiating their transition from being primarily learners to identifying as teachers in a gamified world. This study examines the ways teacher candidates of TEFL use gamified programs for both their own knowledge acquisition, and their intentions to use these in instructional settings with learners. An initial analysis of a questionnaire administered at one German university reveals that their patterns of personal usage differ significantly from their attitudes towards instructional implementation in ways that challenge existing theories regarding the intersection of teachers’ personal and professional game-playing behaviors.

2. TEFL Teachers as (Digital) Learners

While digital game-based learning (DGBL) holds promise for a range of academic subjects and professional and vocational settings, its use among future TEFL teachers is particularly critical. The majority of digital games, gamified programs, and applications with game-like elements[2], are made for English-speaking audiences for a predominantly English-speaking medium [3,4]. Not only does this have significant implications for formal learning situations; it also raises important issues regarding informal language learning. TEFL teachers increasingly often encounter students for whom English is pervasive in their daily (online) lives, but who are disconnected from English instruction in school [5–8]. This dichotomy highlights the importance of teachers’ being able to capitalize on the affordances of DGBLL.

At the same time, the prevalence of gamified applications geared toward the improvement of English language skills affords future TEFL teachers unique opportunities to hone their own skills. While educators of all subjects can find gamified tools to enhance their subject-matter knowledge, these are by no means as pervasive as language learning options, which constitute one of the largest categories of educational games [9].

3. Transference of DGBL(L) Behaviors

While several studies have examined the impact of personal digital game-playing on attitudes towards DGBL, the connection between the two activities remains unclear. Whereas a large-scale study by Bourgonjon et al. [10] found little evidence to support the hypothesis that those teachers who have personal experience with commercial computer games are more likely to adopt them for educational use, another study with some of the same authors [11] identified prior instructional experience with DGBL as a critical aspect of a teachers’ adoption intentions. Other studies [12–15] have found clear evidence that prior game-playing experience positively affected attitudes towards gaming for learning purposes.

4. PSTs in Focus

Research focusing on PSTs examines their behavioral intentions regarding technology usage, conceptualized in a multitude of ways. Teo, Lee and Chai [16] extended the TAM developed by Davis [17] to include items regarding *subjective norms* and *facilitating conditions* in order to more fully model

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PSTs' behavioral intentions regarding technology integration. Other researchers have focused on the notion of computer user self-efficacy to explain PSTs' behavioral intentions. Magliaro and Ezeife [18] utilized a computer user self-efficacy scale constructed by Cassidy and Eachus [19], focusing on those factors that most significantly influenced PSTs across a range of subjects. Another approach examines PSTs' Technological Pedagogical Content Knowledge (TPACK) as a predictor of future technology integration. Developed by Mishra & Koehler [20], the TPACK framework extends Shulman's [21] model of pedagogical content knowledge by identifying seven domains of teacher knowledge at the intersection of technology, pedagogy, content, and pedagogical content knowledge. Abbitt [22] found that knowledge in the TPACK domains was correlated to self-efficacy beliefs regarding technology affordances in classroom instruction.

5. Research Question and Methodology

This research sought to examine the attitudes and experiences of PSTs in TEFL regarding DGBLL for both their own edification and for instructional purposes with their (future) students. The anonymous questionnaire administered to a convenience sample of PSTs in TEFL at a German university garnered 72 responses that were analyzed using descriptive statistics.

6. Results

Recalling their own experience with DGBLL, the survey respondents indicated that they had little institutional exposure to DGBL during their own secondary schooling. Asked whether they had played English language games, 64% indicated that they *never* engaged in this kind of activity in grades 5-13. While a further 18% indicated that they utilized digital games *rarely* (every few months) in school, only 5% said that they used such items on a *regular* or *frequent* basis (The remaining 13% were unable to remember how frequently they engaged in such activities).

Examining their current activities, 68% of the students indicated that they *never* play digital games in English on the computer and 56% do not play English games on their cell phones during their leisure time. 27% of the informants do play games on their cell phones *frequently, regularly, or occasionally*. The data revealed the PSTs are less likely to play games in German on their computers, but more likely to do so on their cell phones.

Table 1. Frequency of game-playing activities among pre-service teachers of English as a foreign language

	Frequentl y	Regularly	Occasionall y	Rarely	Never
I play digital games in English on the computer.	6.4	9.0	1.3	15.4	67.9
I play games in English on my cell phone.	9.0	9.0	9.0	16.7	56.4
I play games in German on my computer.	7.7	3.8	1.3	9	78.2
I play games in German on my cell phone.	12.8	17.9	6.4	9.0	53.8

Only a comparatively small percentage uses educational programs on the computer or the cell phone to improve their English skills (25% and 30% respectively).

Although their own usage of DGBLL is comparatively low, PSTs in TEFL demonstrate a willingness and perceived ability to incorporate DGBLL in their own classrooms. 60% of the respondents *strongly agreed* or *agreed* that computer games could teach students authentic English usage, and 87% *strongly agreed* or *agreed* that using such games in the classroom would be motivating to students. Furthermore, 54% *strongly agreed* or *agreed* that they can learn to play computer games easily and 56% asserted their belief that they can help students if they encounter difficulties. While half of PSTs are convinced that good computer games for teaching English are available, 60% of PSTs *disagreed*



or *strongly disagreed* with the statement, “I know about computer games I can use for teaching English.”

7. Discussion

The fact that the PSTs in this survey did not encounter DGBLL in their own schooling reflects findings from other studies regarding the comparatively minimal infiltration of usage in German schools [23,24]. The survey results further reveal that most PSTs in TEFL do not generally engage in leisure gaming to the degree indicated by other statistical analyses regarding the saturation of play in society [25,26] and among other educators [14,27]. The PSTs’ affirmation of DGBLL is surprising in light of their concomitant willingness to acknowledge their own limitations regarding knowledge of appropriate games and game-related educational research. A likewise complex picture of computer self-efficacy and TPACK emerges from these results.

This cohort turns the conventional wisdom about personal play presaging professional usage on its head; these future teachers acknowledge the affordances of DGBLL for their students, although they themselves have limited personal experience. This is a counterintuitive finding that bears further analysis.

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