Article

Playing By Their Rules: Why Issues of Capital (Should) Influence Digital Game-Based Language Learning in Schools

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Abstract

While digital gameplaying is increasingly recognized for its potential for language learning, its use among English as a foreign language (EFL) teachers in both leisure and pedagogical contexts is comparatively meagre. Assumptions regarding the appropriate nature of schooling on the one hand and appropriate leisure pursuits on the other mediate beliefs about digital gaming to generate skepticism of gameplaying among many educators. Their devaluation of digital game-based language learning (DGBLL) has implications for language learning, not just in terms of skills and attitudes, but in regard to the development of linguistic capital. The purpose of this article is to use the concept of habitus to examine the reasons why educators marginalize DGBLL and the implications of such pedagogic decisions on the development of linguistic capital. Given the emergent empirical base, this contribution adopts a theoretical approach to contextualize observed trends. The article concludes by discussing the importance of teacher-mediated DGBLL for reasons of access and equity before recommending ways of integrating DGBLL to achieve these goals.

Keywords: digital game-based language learning; linguistic capital; digital inequality; digital divide; habitus

Introduction

Despite the supposed universality of digital gaming (ESA, 2015), emerging evidence suggests that, as a group, pre-service and in-service teachers engage in

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less gameplay than their peers. As Kenny and McDaniel (2011) point out, this trend challenges the assumption that "just because up-and-coming teachers have been brought up in the digital age, they are automatically familiar with, disposed to using, and have positive ideas about ... games" (p. 200). Instead, the accumulating evidence suggests just the opposite—namely, that future and beginning teachers are disinclined to utilize digital games. A new type of "digital divide" is emerging, predicated not on material access as it is meant in the original sense, but on attitudes (cf. Selwyn, 2004). Where the lines of this divide stretch is not entirely clear, but digital gaming—a category that includes an array of objects and activities¹—seems to fall on one side of this fault.

The role of English both on- and offline makes this state of affairs particularly relevant for teaching EFL. There is substantial research documenting the salutary effects of digital game-based language learning (DGBLL) in terms of language skills, motivation, and opportunities for meaningful interaction (Peterson, 2013). Moreover, utilizing DGBLL could enable access not just to a body of knowledge and favorable attitudes; it could facilitate the development of cultural capital more generally, and linguistic capital, i.e., knowledge of language that mediates access to symbolic power (Bourdieu, 2011), more specifically. However, without guidance by educators as informed practitioners, a lack of gameplaying literacy creates a new kind of digital divide that has the potential to deepen socioeconomic disparities by limiting the acquisition of legitimized linguistic capital and devaluing learners' extramurally acquired linguistic capital.

Drawing on themes already under consideration in foreign language pedagogy, research on game-based learning, and studies of access and equity, this contribution proposes that DGBLL is an essential element of K-12 EFL instruction in high income countries (cf. Fantom & Serajuddin, 2016) because of its potential to mediate differentials in students' linguistic capital. The article discusses the emerging evidence surrounding teachers' gameplaying behavior before examining factors that account for these patterns. It relies in part on Bourdieu's conceptions of habitus, i.e. individuals' socially and culturally acquired and ingrained behaviors and sensibilities (Grenfell, 2014) to explain this behavior. The argument will subsequently be made that these non-playing tendencies disenfranchise these teachers' students by perpetuating their exclusion from certain habitus. Building on the concept of "gaming capital" (Walsh & Apperley, 2008), the focus is on research that establishes DGBLL's multiple benefits in developing linguistic capital in terms of motivation, language acquisition via sociocultural processes, and identity construction. Thus, the notion of capital is a pivot for both understanding why these patterns exist and why they are problematic. The paper concludes by considering implications for instruction.



Given the dearth of empirical data, the arguments rely primarily on theoretical and conceptual work. This contribution is part of a larger project that analyzes pre-service teachers' gaming behavior, informing the theoretical assertions made here. The limited data set is employed, alongside related studies, to indicate this is an area necessitating further study. The emphasis is on seeking explanatory models for this apparent state of affairs, as well as highlighting why it is of concern.

Teachers' Digital Gaming and DGBLL

Digital Gaming Practices among Teachers

Literature attesting to "the socio-cultural trend of ludification" (Groh, 2012, p. 41) has masked significant subgroup distinctions. While culture, gender, and age-related differences have been thoroughly examined in this regard (Iversen, 2015; Park & Wen, 2016; Williams, Consalvo, Caplan, & Yee, 2009), only limited research has focused on other distinctions, including those of race and class (Jackson et al., 2008; Koivusilta, Lintonen, & Rimpelä, 2007). Whereas qualitative studies have identified significant differences in gaming behaviors among these groups, the findings of initial quantitative analyses tend to be contradictory.

The degree to which teachers present a unique subgroup also remains unclear, although the data suggest their behavior is atypical. Shaffer, Squire, Halverson, and Gee (2005) intimate low usage of digital games among teachers without providing specific data. Kenny and McDaniel's (2011) analysis indicates that 42% of the pre-service teachers they surveyed in a small sample regularly engage in digital gameplay, compared with 80% of that age group among the general population. Of the 76.4% of the pre-service teachers who indicated that they played video games in a survey by Schrader, Zheng, and Young (2005), almost half played for less than an hour per week, suggesting a comparatively low rate of play. More recently, similar results have been reported by Wu (2015) and Hayes and Ohrnberger (2013). However, Takeuchi and Vaala (2014) found widespread extracurricular play among the teachers they surveyed. Such discrepant results suggest the need for further studies, including ones that take into account potential subgroup differences, such as those related to the target teaching population (e.g., early childhood, secondary school, or adult education professionals) or subject area.

Descriptive and quantitative data from outside the United States, but from other high income countries, suggest low rates of play among teachers and future teachers, although these data remain inconclusive given the various ways in which "regular play" and "games" are defined (Alqurashi & Williams, 2017; Chik, 2011; Martín del Pozo, Basilotta Gómez-Pablos, & García-Valcárcel Muñoz-Repiso, 2017; Sundqvist & Sylvén, 2012). In one recent



sample in Germany, only 30% of pre-service teachers indicated regular digital gameplay (Blume, 2019). This compares to a digital gameplaying rate of approximately 42% among the population as a whole (ISFE, 2012) and a rate of 68% among German youth (Feierabend, Plankenhorn, & Rathgeb, 2016). Data about media attitudes in general (and not specifically regarding gaming) come to the same conclusion: pre-service teachers in Germany are disinclined to utilize digital media (Schmid, Goertz, Radomski, Thom, & Behrens, 2017).

Explaining Teachers' Digital Gaming Behavior

Researchers have adopted and adapted a number of paradigms to explain the reluctance of educators to utilize game-based learning in general (cf. Sánchez-Mena & Martí-Parreño, 2017, for a partial review), and, in initial studies, DGBLL specifically (Chen, Chen, Chen, & Yang, 2012; Chik, 2011). The Technology Acceptance Model (Bourgonjon et al., 2013), Educational Game Acceptance Model (Ibrahim, Khalil, & Jaafar, 2011), TPACK-G (Hsu, 2013), and pedagogical beliefs (Ertmer, 2005) are some of the theoretical constructs utilized to explain teachers' attitudes towards game usage. A recurring focus is accorded to the role of personal gameplaying experience, with most studies concluding that it is a determining factor regarding teachers' adoption intention. Thus, what happens in teachers' milieus prior to, and outside of, the classroom is critical for understanding their gameplaying behaviors in the classroom.

Although gender and age continue to be examined as explanatory categories for differential play, the evidence is contradictory (Williams et al., 2009). With socioeconomic status (SES), education levels, and race accounting for some of these discrepancies in the general population, what is emerging as an area of focus is differential acceptance informed by sociocultural attitudes. For teachers raised within *habitus* that question both "playful learning" and digital leisure activities, the result is a denigration of the value of digital gaming in any context.

Attitudes About Schooling

Attitudes regarding the proper nature of education inform acceptance of game-based learning. The notion that school should be "fun" is not universally accepted (Prensky, 2007). More frequently, education is seen as "hard work" and games are therefore inappropriate (Chik, 2014; Stewart et al., 2013). In the case of EFL, the fear of playful approaches might be stronger than in other domains; Thomas (2012) theorizes that opposition specifically to DGBLL may come from EFL academics, who fear that language learning already suffers from an unserious image.

There is moreover a general skepticism towards incorporating students' "lifeworlds" (Beavis et al., 2015) into instruction. Not only are teachers frequently



less skilled gameplayers than their students (Sundqvist & Sylvén, 2012); digital games forefront students' interests (Grau & Legutke, 2015), thus implicitly challenging educators' assessment of what is worth knowing and, concomitantly, relationships of power and authority (Hill, 2008). This reluctance to include "popular" culture exists not just on the part of educators, but also among some students who question teachers' intentions (Jones, 2017; Sauro, 2017). In EFL, this tension is exacerbated by contested notions of what constitutes "proper" English (Tollefson, 2007).

Attitudes Towards Gaming

While Thomas (2012) asserts that gameplaying has contributed to "overturning ... the assumptions that popular culture and its artefacts are always antithetical to serious learning" (p. 19), others are not as sanguine. Eklund (2015) points out that "an enduring moral panic still clings to the medium ..." (p. 276). Even when digital gaming is not seen as somehow dangerous, its inherent value is questioned (Friedrichs, von Gross, Herde, & Sander, 2016). Reinhardt and Zander's (2011) experiences revealed tensions over tertiary students' assessments of DGBLL's relevance, which the authors attribute to the students' *habitus* and, specifically, to a "utilitarian home discourse" (p. 338). This devaluing of gameplaying mirrors the institutional denigration of other popular culture forms that often simultaneously comprise students' lifeworlds and their capital (cf. Hill, 2008).

Kommer and Biermann (2012) rely on a notion of an unwelcoming *mediale Habitus* arising from a traditional middle-class skepticism of mass media to explain the rejection of digital games among pre-service teachers in Germany. This critical view of media, held by the middle class from which teacher candidates in Germany are heavily drawn (Kühne, 2006), persists despite the penetration of digital tools for professional and communicative purposes. These pre-service teachers possess material access, but the motivational desire for access among these "want nots" (van Dijk, 2012) is absent.

While the explanations for these attitudes are manifold, there is increasing evidence that various SES groups engage in differential patterns of digital media usage (Hollingworth, Mansaray, Allen, & Rose, 2011). Data regarding gameplaying specifically is meagre, but Goldfarb and Prince (2008) conclude that, among those who go online, individuals with lower SES are more likely to play games. Likewise, Graham (2017) and Koivusilta et al. (2007) establish a correlation between parental levels of education and adolescents' leisure gameplaying in the United States and Finland respectively. Although some data suggest attitudes towards gameplaying are evolving, (not) playing games remains an expression of *habitus*.



Teachers as (Problematic) Gatekeepers

The dilemma is that teachers, who potentially have access to linguistic capital thanks to their *habitus*, choose to withhold access due to attitudes stemming from that *habitus*. This reinforces what Kvasny (2006) refers to as "digital inequality," i.e., a differential ability to benefit from digital access. By not valuing gameplaying, educators reject the notion that game discourse is legitimate linguistic capital, thereby undermining the validity of games and the skills of those who play them. Mediated access to digital games could provide access to discursive knowledge that could enable players to both take advantage of the opportunities it offers and challenge its unwitting, inequitable reproduction.

DGBLL and Linguistic Capital Creation

English as Linguistic Capital

Bourdieu and Wacquant (1992) describe linguistic capital as an ability, shaped by one's *habitus*, to employ utterances that wield symbolic power; it is an embodied form of cultural capital (Bourdieu, 2011). In the formal language learning setting, learners from less privileged *habitus* are at a disadvantage academically, although the explanations as to why this is differ (cf. Gayton, 2010). While Gee (2004, p. 83) maintains that linguistic capital is acquired primarily in school and in select homes, creating for its adopters a type of school-oriented consciousness akin to a *habitus*, Pishghadam and Khajavy (2013) use sequential equation modeling to emphasize how cultural capital in turn shapes psychological factors that influence language learning. Regardless of the mechanisms, the relationship between various forms of capital and academic success is well-documented, albeit inadequately considered in the EFL classroom (cf. Vandrick, 2014).

The ability to communicate in English is a form of linguistic capital both on- and offline. While Phillipson (2008) questions the degree to which English is a universal language, he suggests that the actual quantification of its usage is secondary to how it is perceived as such. Despite recent attempts to validate varieties of English (cf. Tollefson, 2007), certain kinds of English, with particular pronunciation, dialect, and narrative structures, continue to serve as symbols of power and status (Block, 2012). Access and aspiration reinforce one another; those who have the ability to pursue English instruction (both in terms of quantity or perceived quality) do so by a variety of means (Waters, 2005).

Access to online content is mediated by linguistic knowledge. Whereas at the turn of the century it was estimated that 80% of web pages were in English, more recent data suggest that this figure has fallen to 45% (Pimienta, Prado, & Blanco, 2009). Yet English still represents the single most popular language on the Internet. In the United States, monolingual websites for public services



illustrate how digital illiteracy emerges from intersectional inequities of migration, poverty, and language (Warschauer, 2003). Gameplaying itself is equally shaped by the domination of English-language applications and, given the linguistic sophistication of many applications (Thorne, Fischer, & Lu, 2012), only players with an adequate degree of English knowledge are able to meaningfully participate.

DGBLL's Motivational Contributions to Linguistic Capital

The ability of DGBLL to develop positive attitudes towards language learning has been examined from a variety of perspectives, with the consensus emerging that flow creates intrinsic motivation and encourages further interaction with the medium itself. Flow, as conceptualized by Csikszentmihalyi (1990), emerges when individuals experience a perceived balance between their abilities and the presented challenge. In addition to receiving positive reinforcement, gameplayers (in this case) enjoy a sense of control and a lack of self-consciousness, facilitating intense concentration and goal-orientation (Sykes & Reinhardt, 2013). Research has focused on various elements of DGBLL that ostensibly contribute to flow, including immersion, narrative, interactivity, social interaction, autonomy, and achievement (Dickey, 2007; Yee, 2006). Although the findings regarding the role of these elements for language acquisition are inconclusive (deHaan, Reed, & Kuwada, 2010), evidence for their effect on attitudes is substantial (Peterson, 2010).

Other explanations of how digital gaming enhances language learning motivation focus on its authenticity, although the notion of authenticity in digital environments is contentious (cf. Buendgens-Kosten, 2013). While it is debatable whether educational games are authentic language usage situations, given their lack of socially constructed validity and distance from real-world encounters, authentic gaming offers meaningful opportunities to use the target language in situated contexts (Gee, 2004). Even more important than being authentic artifacts, digital games allow students to be their authentic selves, i.e., the games reflect their core values and interests (Henry, 2013, p. 139). This congruence generates engagement (cf. Thorne & Reinhardt, 2008).

Motivation is further enhanced through the playful feedback inherent in digital games. In contrast to other online activities, where errors can lead to embarrassment and thus discourage use among less-resourced users (Kvasny, 2006), the incorporation of "fail states" into well-constructed digital games generates a safe space wherein mistakes (whether they result from miscommunication or not) form part of an enjoyable learning curve (Cornillie, Clarebout, & Desmet, 2012; Prensky, 2007). Neither traditional classrooms nor other "offline" interactions, where learning and communication are fraught with communicative pressures, can afford the safety of games regarding errors.



The "low stakes" structure of games, along with an acceptance of imperfect or colloquial language in interactions in and around games, leads to salutary effects on students' anxiety and willingness to communicate (Reinders & Wattana, 2015).

DGBLL's Sociocultural Contributions to Linguistic Capital

The research that DGBLL provides numerous affordances for processes of sociocultural language acquisition is convincing. These affordances emerge through the relationship between the medium and its multiple users (cf. Blin, 2016). Not only is the language utilized in many games sophisticated and authentic, it also frequently takes place within a network of social exchanges that persist beyond the gameplay itself (Black & Steinkuehler, 2009). These exchanges facilitate attempts to acquire game-based skills and introduce players to new *habitus* and, in doing so, provide players with the skills to query not just the game, but also the world around them.

While several studies have identified ways in which language learning occurs through self-directed digital gameplaying (Rama, Black, Van Es, & Warschauer, 2012; Sylvén & Sundqvist, 2012), Chik (2014) focuses on how gameplayers use their gameplay communities to manage their DGBLL practices. She argues that, "when digital gaming is a community-based activity, the autonomous learning involved will inevitably be community-based as well" (Chik, 2014, p. 87). In the absence of a gaming community, either due to the (limited) choice of games or lack of game literacy skills, some gameplayers will proactively construct them (Chik, 2014). Individuals without the linguistic or structural ability to access such a community miss out both on the opportunity to direct their learning and on the affordances that emerge from collaborative gameplaying. The practice of learner autonomy within a sociocultural learning model is thus closely aligned with the presence and accumulation of linguistic capital.

Narrowing in on collaborative game play in massive multiplayer online role-playing games (MMORPGs), Steinkuehler and Williams (2006) demonstrate that online gaming takes place in "social third spaces" that expose players to a diversity of perspectives. The games serve as "trajectories for participation in social systems" (Squire, 2008, p. 653) that are otherwise foreign to many players. They resemble online "communities of practice" (cf. Stewart et al., 2013) that introduce learners to specific discourses and ways of thinking (Shaffer, 2006). The ability to participate in such "semiotic domains" (Gee, 2008) is dependent not just on specific language skills, but on possession of linguistic capital endemic to these communities (cf. Jenkins, 2009).

This participative process challenges accepted notions about existing institutional and social structures. Steinkuehler (2008), referring to MMORPGs, posits that



through participation in and reflection on such worlds, we are better able to understand how it is that the sense we make of events, contexts, and other people are not fixed and inevitable "truths" out in the world but interpretations that are created, maintained, and transformed by specific groups of people at specific historical times for specific reasons. (p. 626)

Rather than being passive subjects of realities constructed around them, linguistic capital enables individuals to co-construct these realities. This may help explain teachers' reluctance to incorporate games in the curriculum, especially in poorer schools, where authority is enacted most stringently (cf. Warschauer, 2003).

Linguistic Capital, Identity, and DGBLL

Participation in alternative realities provides players with opportunities to experiment not just with language, but also with identity (cf. Jenkins, 2009). This is evident in a game when the player constructs an avatar or joins a guild (Cheong & Gray, 2011) and beyond in fan fiction, forums, code alterations, and self-organized learning communities (Black, 2009; Squire, 2012). Squire (2008) highlights the fact that "games' most potent social value may be their *liminality*, their capacity to function as contexts within which participants can play with new identities and ideologies" (p. 651). These "projective identities" (Gee, 2004, p. 102), in turn, allow players to perform different *habitus*.

Beyond embodiment as avatars or playing characters, players engage in identity construction through interaction. Zheng, Wagner, Young, and Brewer (2009) show how contribution to chats in an MMORPG provide substantial opportunities for both language development and identity construction. Similar findings have been documented in relation to bridging activities (Reinhardt & Zander, 2011). As Thorne, Sauro, and Smith (2015) summarize,

[f]or L2 learners, ... learning involves developing new, or enhancing existing, performative repertoires. In this sense, notions of 'learning' and 'identity' are dialectically bound to one another and are emergent of, as well as contribute to, the ongoing formation and organization of social conditions. (p. 217)

Just as language is closely linked to the formation and construction of identity, so too is participation in digital gaming communities fundamentally connected to identity development, (re-)imagination, and social change.

DGBLL as a Tool for Equity and Access

It is in regards to DGBLL that the gap between digital "haves" and "havelessers" has the potential to develop into a chasm. The popularity of digital gaming serves to exclude those who do not or cannot participate adequately.



What is important, moreover, is not just access to digital games, but access to understanding games as a type of literacy. Without guided support, players of digital games are "mere" consumers without the opportunity to be "prosumers" (Thomas, 2012, p. 18) who can create not just alternate game paths, but alternate realities.

Not only do games give rise to various types of capital, but the games themselves also embody cultural capital (Seufert, 2017; Stewart et al., 2013) and are critical to identity development in relation to that capital (Bartlett, 2008). Their sheer popularity makes them an integral part of general mainstream culture, such that lack of knowledge of (specific) games or game activities can contribute to exclusion (BMFSFJ, 2016). As references to games proliferate in wider cultural settings, adolescents with limited qualitative or quantifiable access are faced with gaps in their linguistic capital and an increasingly circumscribed ability to infer these meanings without critical literacy skills.

It may seem that digital games are ubiquitous among adolescents, furthering the impression that access to games is not an issue of equity. However, emerging data suggest that gameplaying is most frequent among youth from working-class backgrounds, with those from both poorer and wealthier families playing less frequently (Graham, 2017). It is the poorest adolescents for whom gameplaying, and the acquisition of related capital, may be far from reach.

What is also unclear are the ways in which differential access to games affects the accumulation of capital. Thus, while children from less-resourced environments are playing games, it remains unclear what kinds of games they play, in what contexts, and with what kind of guidance and meaning-making opportunities (cf. Li & Ranieri, 2013; Seiter, 2008). Gameplayers who rely on public institutions for access have to contend with slower speeds, limited length of use, constraints on storage capacities, and censorship (Seufert, 2017). Opportunity cost and access to leisure time are also significant considerations; gaming of the kind that can contribute to the aforementioned possibilities may be an "investment" beyond the typical reach of many youth.

Game type may also be affected by a variety of these factors. Graham (2017) shows that those games preferred by working-class adolescents are what he labels "male genre" with limited narrative, and which may not be equally conducive to the generation of linguistic capital. Although Graham describes these games as peculiarly male, other researchers have focused, conversely, on the limited opportunities for linguistic development among females *visàvis* digital gameplay. While there is continuing disagreement regarding the amount of gameplaying women engage in, there are indications that, for those females who do play, opportunities for sociocultural interaction or identification are shaped by the nature of the games they play and by how games



construct female characters (Eklund, 2011; Sylvén & Sundqvist, 2012). While these analyses are still being contested (cf. Williams et al., 2009), they suggest additional types of disenfranchisement that may occur when gameplaying is relegated to extramural usages.

These findings reiterate the fact that physical access to games is inadequate without game literacy skills. Jenkins (2009, p. 15) describes how participation, analysis, and ethical evaluation represent three different levels of access that are left to chance when educators marginalize digital media. While participation relates to physical access, the ability to analyze games and act accordingly relies on digital literacy skills (Walsh & Apperley, 2008). Warschauer (2003, p. 27) predicts that such differential access will distinguish between those who act and those who are acted upon in the future.

The potential of DGBLL to enhance learner autonomy, a key factor in the ability to shape one's environment, is likewise dependent on the existence of certain attitudes, skills, and capital. As Reinders and Hubbard (2013) paradoxically point out, "technology often requires precisely those self-directed learning skills it is intended to help develop" (p. 359). Assuming all learners are capable of autonomous knowledge acquisition is detrimental especially to those learners who have not had the opportunity to develop autonomous learning skills. Studies of autonomy conducted in relation to varying *habitus* demonstrate the variation of learner autonomy in various sociocultural milieus (Bremer, 2009; Hollingworth et al., 2011).

Similarly, there are indications that there is a potentially powerful relationship among SES, learner autonomy, and DGBLL. First, children from lower SES settings are more likely to engage in directive, authority-driven learning and computer use (Warschauer, 2003). Thus, they have fewer opportunities to engage in the kinds of computer-based activity that foster autonomy. Secondly, their limited extracurricular use of sophisticated digital applications further thwarts their access to opportunities for generating learner autonomy.

Discussion and Conclusions

It is important to recognize that using digital games in the classroom does not automatically promote equity. School-based usage differs by SES, with educators in less-resourced schools less likely to enact digital practices that support critical digital literacy (Reinhart, Thomas, & Toriskie, 2011; Wood & Howley, 2012). Moreover, the continued privileging of English in games, foreign language pedagogy, and research of these issues, needs to be more substantially problematized (cf. Sauro, 2016).

Even when integrated into a critical media literacy approach, digital games remain products conveying implicit and explicit ideologies. Digital game



environments can as easily reinforce disempowerment as they can empower (Stewart et al., 2013). Gaming in the classroom will only mediate inequity if the pedagogy around them is designed to do so (Apperley & Beavis, 2014). One illustration of how this can be done is described by Squire and Barab (2004). In their study of an urban, African-American class' use of *Civilization*, students wrestled with issues of identity, authenticity, agency, and equity. Although this example does not explicitly address the issue of language learning, the authors' descriptions yield promising instances of how this could be addressed.

Their approach is illustrative as well, because critical approaches to game literacy may backfire if games are merely problematized as potentially dangerous or meaningless pursuits. Such an approach diminishes not just the games, but also the cultural capital they represent to players and the linguistic capital they generate (cf. Jones, 2018). It furthermore significantly diminishes their cultural and functional authenticity (cf. Buendgens-Kosten, 2013), weakening their potential impact as socially validated activities. While all didactization erases some authenticity, "bridging activities," as described by Thorne and Reinhardt (2008), minimize this loss by celebrating students' leisure activities, knowledge, and capital.

Educators need to consider DGBLL in relation to their non-game pedagogical content knowledge (Shulman, 1986) and how their decision-making processes in this regard reflect milieu-specific assumptions. This can be done only with an understanding of *habitus* and capital, their own and their students', to comprehend "differences in gender, class, cultural background, all of which can have a profound impact upon how/when/why students would be engaged or motivated in working with specific games" (Beavis et al., 2014, p. 577). Given the potential of DGBLL to mitigate some of these aforementioned disparities by both developing capital and valuing students' pre-existing capital, renewed attention needs to be focused on these issues.

Notes

1. See Sykes and Reinhardt (2013) for one categorization of games, and Reinhardt and Sykes (2012) for gaming activities.

About th Author

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