

## Chapter 3

# Leveraging Mobile Games for Place-Based Language Learning

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### ABSTRACT

*This paper builds on the emerging body of research aimed at exploring the educational potential of mobile technologies, specifically, how to leverage place-based, augmented reality mobile games for language learning. Mentira is the first place-based, augmented reality mobile game for learning Spanish in a local neighborhood in the Southwestern United States. This paper explores both the complexities and benefits of integrating mobile games in second and foreign language learning contexts. Relevant background issues are discussed and the Mentira project is described, including an exploration of the setting, narrative, gameplay, and curriculum. Initial findings and future goals are explored. Gameplay, the importance of 'place' for language learning, is discussed and the role of student buy-in. The paper concludes with future considerations for the continued use of mobile games projects for language learning as well as other disciplines.*

### INTRODUCTION

It is difficult to ignore the profound effect emerging technologies have had on social, economic, and professional practices in recent decades (Brown & Adler, 2008; Chinnery, 2006). As noted in the 2010 Horizon Report, mobile technologies (e.g., hand-held PDAs, the iPod Touch, the iPhone,

global positioning systems) represent the emerging frontier of these changes and warrant significant attention related to both research and pedagogy. While education continues to make an honorable attempt to incorporate technology in the classroom, we often fall short of innovation in implementation, perpetuating, rather than reforming, industrial models of teaching and learning (Levin et al.,

DOI: 10.4018/978-1-4666-1864-0.ch003

2002; Warschauer, 2007). This stands in contrast to an engaged attempt at rethinking education in light of new social practices and approaches to knowledge creation and dissemination. In this spirit, we build on the emerging body of research aimed at analyzing the educational potential of mobile technologies (Horst & Miller, 2006; Klopfer, 2008; Mathews, 2010; Roschelle & Pea, 2002; Squire & Klopfer, 2007; Squire, et al., 2007; Squire, 2009), and explore areas where we can leverage place-based, augmented reality mobile games for second language learning.

In this paper, we draw on our experiences with *Mentira* - the first place-based, augmented reality mobile game for learning Spanish in a local neighborhood in the Southwestern United States - to explore both the complexities and benefits of integrating mobile games in language learning<sup>1</sup> contexts. We first discuss how *Mentira* is situated within the area of augmented reality mobile games and language learning, briefly addressing issues regarding knowledge construction as an ultimate learner goal, design-based research, and the importance of place. We then describe the basic setting, narrative, gameplay, and curriculum of *Mentira*. Next, we take a brief look at a portion of data gleaned from three rounds of design, implementation, and evaluation of *Mentira* as part of a fourth-semester college Spanish course. Specifically, we analyze the ways in which the game was played, the importance of ‘place’ in framing context, and the role of student buy-in and ownership for continued improvement in the design and implementation process. We conclude with future considerations for *Mentira* and other work in this area.

## **RELEVANT BACKGROUND INFORMATION**

Ongoing shifts in both our understanding of knowledge creation and dissemination, as well as transformational educational practice, require an

intentioned look at the perspectives informing this project. Therefore, prior to considering *Mentira* itself, we briefly explore a number of important issues related to the way we conceptualize the project in light of current work in the areas of place-based, augmented reality mobile games and language learning.

## **KNOWLEDGE ABOUT VS. KNOWLEDGE OF**

Maintaining the relevance and purpose of any educational intervention demands that we, as educators, move beyond replication of existing practices in digitally-mediated environments towards what Hughes (2005) classifies as transformational interventions.

As a relevant example of the transformations suggested, Scardamelia and Bereiter (2006) describe the need for formal learning environments to become places capable of building, rather than simply transmitting, knowledge. In both diagnosing and addressing this need, they posit a conceptual distinction between knowledge of and knowledge about as key.<sup>2</sup> This is very similar to the distinction between learning about a language (i.e., knowledge about) and being able to use a language as part of a community (i.e., knowledge of) (Kramsch, 2002, 2009; Stryker & Leaver, 1997; Thorne, Black, & Sykes, 2009).<sup>3</sup> In general, there still tends to be an overemphasis on learning about a language at the expense of learning the skills necessary for intercultural competence, especially at lower levels of proficiency (MLA, 2007; Bardovi-Harlig, 2001; Felix-Brasdefer, 2007; Sykes, 2009<sup>4</sup>).

An empirical approach is critical if we are to develop practices that truly innovate; yet this approach cannot be blinded by a too-narrow outlook, whose epistemological background dooms it to perpetuate the status quo. Educational practices designed to prepare learners to participate in a world that simply no longer exists and methods

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