# Bekir Mugayitoglu

# Annotated Bibliography - 4

Conference Paper 1

Reference

Jansz, J., & Martis, R. (2003). The representation of gender and ethnicity in digital interactive games. In. M. Copier & J. Raessens (Eds.), Level Up: Digital Games Research Conference (pp. 260-269). Utrecht: Utrecht University.

Abstract

The actual content of games is an understudied area in social scientific research about digital interactive games (DIGs). This paper aims to contribute to the understanding of game content, in particular with respect to the portrayal of men, women, and people of different ethnic origin. Early studies by, for example, Provenzo (1991), and Dietz (1998) concluded that games were dominated by stereotypic male characters with a few stereotypic females in minor roles. The representation of ethnic groups in DIGs was hardly ever studied, although some researchers noted that characters generally were ‘white’, or ‘Anglo’ (Children Now, 2001; Dietz, 1998). Nowadays, quite a few DIGs have women in leading parts. We wanted to establish if this change resulted in a multiplicity of meaning in the representation of gender (see, for example, Kennedy 2002). We used a content analysis to study the representation of gender.

We also included the representation of ethnic groups in our analysis. We concentrated on the portrayal of the leading character, and supporting role in the introductory film of the DIG. Our sample consisted of 12 games that run on ‘Next Generation Consoles’ (PS2, X Box, Game Cube). Among the titles studied were games with a female leading character (for example, *Tomb Raider, Parasite Eve*), and with a male leading character (for example, *GTA ViceCity, Splinter Cell*). Our results show that the number of female characters was far larger than before, with many of them in leading parts. Whatever their role in the game, the physical representation of women was as stereotypical as before: Their attire emphasized female features. Most characters in the DIGs belonged to the dominant, ‘white’ ethnic minority, the heroes exclusively so.

Annotation

This paper presents to content analysis uses to show male and female characters, and characters from different ethnicities, and how game characters were stereotyped. Not only, gender and ethnicity, lifestyle and also they represent publicly a diversity of identity options regarding, for example, gender, ethnicity, lifestyle, but also feelings, behaviors and attitudes.

The aim of paper is the advance scientific knowledge about games, and also aimed to feed public discussions by investigating the representation of gender and ethnicity in a dozen contemporary, state of the art games. Men and most characters are white but Digital Interactive games are traditional representation of gender relations with women. I feel that this will greatly benefit my research. It was especially relevant for me to helps me to understand the gender, ethnicity, and lifestyle languages. One of the strength of this paper is that me to understand the gender, ethnicity, and lifestyle. However, one of the weaknesses of this paper to analyze a limited set of variables in the video game.

Conference Paper 2

Reference

Beatty I. Improving physics instruction by analyzing video games. American Institute of Physics Conference Series, 2013. Retrieved from http://ianbeatty.com/files/beatty-2012ipi.pdf

AIP Conf. Proc. 1513, pp. 70-73; doi:[http://dx.doi.org/10.1063/1.4789654](http://link.aip.org/link/doi/10.1063/1.4789654)

Abstract

Video games can be very powerful teaching systems, and game designers have become adept at optimizing player engagement while scaffolding development of complex skills and situated knowledge. One implication is that we might create games to teach physics. Another, which I explore here, is that we might learn to improve classroom physics instruction by studying effective games. James Gee, in his book *What Video Games Have to Teach Us About Learning and Literacy* (2007), articulates 36 principles that make good video games highly effective as learning environments. In this theoretical work, I identify 16 themes running through Gee’s principles, and explore how these themes and Gee’s principles could be applied to the design of an on-campus physics course. I argue that the process pushes us to confront aspects of learning that physics instructors and even physics education researchers generally neglect, and suggest some novel ideas for course design.

Annotation

This article gives a great overview of examples how video games help states that How Learning about with images, words, actions, symbols, and artifacts helps players to learn complex system is core to the learning experience. This paper also helps us to learn from video game design so as to improve in person instruction in deep ways.

One of the strength is that apply to academic learning, not just video games. I discover their implications for physics instruction and set up to encourage active and critical, not passive, learning will greatly benefit my research since images, words, actions, symbols, and artifacts helps players to learn also for second language learners vocabulary.

Journal Article 1

Reference

Hartmann, T., and Klimmt, C. (2006). Gender and computer games: Exploring females' dislikes. Journal of Computer-Mediated Communication, 11(4), article 2. <http://jcmc.indiana.edu/vol11/issue4/hartmann.html>

Abstract

On average, girls and women are less involved with video games than are boys and men, and when they do play, they often prefer different games. This article reports two studies that investigated the dislikes of German females with regard to video games. Study 1 applied conjoint analysis to female respondents' (N=317) ratings of fictional video games and demonstrated that lack of meaningful social interaction, followed by violent content and sexual gender role stereotyping of game characters, were the most important reasons why females disliked the games. Study 2, an online survey (N=795), revealed that female respondents were less attracted to competitive elements in video games, suggesting an explanation for gender-specific game preferences. These findings are discussed with respect to communication theory on interactive entertainment and their implications for applied video game design.

Annotation

This paper presents a culture-based view of gender construction and associated video game preferences. The aim of the paper indicates the significance of content and personality factors for the explanation of gender differences in video games. It is very useful for me to understand how culture and genders demonstrates the reactions of games. One of the strengths is that me to figure out before future research of gender girls and young women display less interest in digital games, have less game-related knowledge, and play less frequently and for shorter durations than do boys and young men and also female subcultures adopting contemporary video games designed for males. One of the weaknesses is that the paper mentions about just two cultures, which are German and U.S.

Journal Article 2

Reference

Video game playing and academic performance in college students.

Computers & Education 58 (2012) 1260-1266

By Burgess, Stephen R.; Stermer, Steven Paul; Burgess, Melinda C. R.  
Academic journal article from *College Student Journal*, Vol. 46, No. 2

Retrieved from http://myweb.fsu.edu/vshute/pdf/games\_styles.pdf

Abstract

The relations between media consumption, especially TV viewing, and school performance have been extensively examined. However, even though video game playing may have replaced TV viewing as the most frequent form of media usage, relatively little research has examined its relations to school performance, especially in older students. We surveyed 671 college students concerning their history of video game usage and school performance. In general, video game players had lower GPAs, but this finding varied by gender. Video game players also reported a greater likelihood of playing video games to avoid doing homework. There were consistent negative associations between liking to play violent video games and school performance.

Annotation

The aim of this paper demonstrates the relationships between video game play and school performance and also how video game playing has been associated with increases in aggressive behavior and decreases in social behavior of player school life. This study found negative correlations between spent playing video games and school performance. I would like to investigate this further in my own research.

# Annotated Bibliography - 3

Shaker, N., Nicolau, M., Yannakakis G. N., Togelius, J., and O’Neill Michael. (2012). Evolving Levels for Super Mario Bros Using Grammatical Evolution. *Proceedings of IEEE Conference on Computational Intelligence and Games.* ‎Retrieved from http://julian.togelius.com/Shaker2012Evolving.pdf doi.org/10.1109/CIG.2012.6374170

This paper presents the use of design grammars to evolve playable 2D platform levels through grammatical evolution (GE). Representing levels using design grammars allows simple encoding of important level design constraints, and allows remarkably compact descriptions of large spaces of levels. The expressive range of the GE-based level generator is analyzed and quantitatively compared to other feature-based and the original level generators by means of aesthetic and similarity based measures. The analysis reveals strengths and shortcomings of each generator and provides a general frame- work for comparing content generated by different generators.The approach presented can be used as an assistive tool by game designers to compare and analyze generators’ capabilities within the same game genre

This paper presents to provide a framework for analyzing and comparing the expressivity ranges of various content of syntax of language. It introduces the concept of a Grammatical Evolution structure and demonstrates its use by analyzing design of Super Mario Bros game levels with Grammatical Evolution. This paper was especially important because of its focus on the syntax of languages used in computing, such as computer programming languages, document formats, instruction sets and communication protocols. One of the strengths of Grammatical Evolution is mapping makes easier the application of search to different programming languages.

Shaker N., Asteriadis S., Yannakakis G. N., and Karpouzis K. (2011). A Game-based Corpus for Analysing the Interplay between Game Context and Player Experience. *Proceeding of the 4th International Conference on Affective Computing and Intelligent Interaction.* Retrieved from http://www.image.ece.ntua.gr/papers/701.pdf

Recognizing players’ affective state while playing video games has been the focus of many recent research studies. In this paper we de- scribe the process that has been followed to build a corpus based on game events and recorded video sessions from human players while playing Super Mario Bros. We present different types of information that have been extracted from game context, player preferences and percep- tion of the game, as well as user features, automatically extracted from video recordings. We run a number of initial experiments to analyse players’ behavior while playing video games as a case study of the possible use of the corpus.

This paper investigates how to build the content of games interaction with players emotion. The research investigates the relationship between behavior, game events, game parameters. Successfully defining this relationship constitutes a very important towards closing the affective loop in games. Detecting the players emotion, such as entertainment levels, is considered a hard problem mainly because of the multi-modal nature of emotion. To tackle this, multiple traditional evaluation methods such as subjective and objective techniques have been adopted to detect affective states. The strength of this paper indicates that how emotion is a big part of it. Self-reported engagement, challenge and frustration emotions are affects players a lot.

Jung C. Using Games to Promote Communicative Skills in Language Learning. (2010). *International Journal of Artifical Intelligence in Education* 20, 175-195. Retrieved from http://iteslj.org/Techniques/Chen-Games.html. DOI 10.3233/JAI-2010-0006

This article considers the reasons why games serve as excellent communicative activities. The use of games can be a powerful language learning tool. On the surface, the aim of all language games is for students to "use the language"; however, during game play learners also use the target language to persuade and negotiate their way to desired results. This process involves the productive and receptive skills simultaneously. In this article the author also shares her experience of some interesting games and their application in the language classroom.

This paper represent to overview how teachers should focus on to teach language to seek task-oriented activities that engage their students in creative language use. Students learn language while playing since Games offer students a very entertaining and relaxing learning atmosphere. After learning and practicing new words, players have the opportunity to use language in a without freaking out way. This eases the fear of negative evaluation, the concern of being negatively judged in public, and which is one of the main factors inhibiting language learners from using the target language in front of other people. The one of strength in this paper is how Competition helps students while playing games improve their communicative skills. The one of the weaknesses of paper is to generalize players without giving exception.

Arnold M., Doe R., Second Language Acquisition Video Game. 1-13. Retrieved from http://www.cse.sc.edu/files/Matthew%20and%20Renaldo.pdf

Traditional methods of learning a second language are often difficult, frustrating, and time-consuming. Typical classroom strategies employ memorization and drills which are often intimidating and frequently ineffective. Communication among people in an ever increasingly connected world with a vast array of languages utilized is vital for so many parts of society. The goal of our research is to create a second language acquisition video game to provide an effective and inviting alternative to learning a second language in a classroom. The approach is to employ a few theories of language teaching integrated with a fun and interesting game. The second language acquisition game exposes the player to an abundance of simple, comprehensible input of their target language in an interesting, motivating, and low stress setting to allow the player to naturally acquire the language. Untitled utilizes total immersion, focusing on the language’s culture to offer a fun, motivating, and low pressure way to naturally acquire a language directly through intrinsic meanings of words by two and three dimensional representations in contrast to translations into the learner’s native language, creating a unique experience.

The main of paper is the Second Language acquisition theory states that learner learn an intuitive way for a second language rather than learning the structure and grammar rules. After getting some knowledge and learner then uses this knowledge to produce output in the target language that is regulated by traditionally learned grammar knowledge. There have been three generations of educational games. Behavior, learn, and culture are the main effective educational games employ. The principles seek to guide the creation of the best foreign language video games possible by keeping fun levels high, stress levels low, and language learning to the maximum. The strength of paper is to how motivation affects second language acquisition.

# Annotated Bibliography 2

# Reference

Rankin Y., Gold R., and Gooch B. (2006). 3D Role-Playing Games as Language Learning Tools. *Proceedings of EuroGraphics Conferenc*e, 25(3). ‎Retrieved from http://www.thegooch.org/Publications/PDFs/Rankin\_Gold\_Gooch.pdf doi=10.1.1.151.8843‎

**Abstract**

Leveraging the experiential cognition and motivational factors of 3D games, we conduct a pilot study that utilizes Ever Quest 2 as pedagogical learning tool for English as a second language (ESL) students. We combine the ben- efits of massive multiplayer online role-playing games (MMORPGs) and second language methodology to create a digital learning environment for second language acquisition (SLA). Rather than using traditional computer- assisted language learning (CALL) software, we explore the immersive, virtual environment of Ever Quest 2 as ESL participants assume virtual identities and engage in social interactions within the game world. We suggest that language becomes a crucial artifact for character development and completion of game tasks in the virtual world. Preliminary results demonstrate that Ever Quest 2 intermediate and advanced ESL students increase their English vocabulary by 40% as result of game play interactions with non-playing characters (NPCs). Furthermore, intermediate and advanced ESL students practice their conversational skills with playing characters (PCs), generating a 100% increase in chat messages during eight sessions of game play. These results lead to the conclusion that MMORPGs can provide motivation and adequate language learning support for intermediate and advanced ESL students.

**Annotation**

This paper is relevant to my future research because I am planning to investigate the use of games in education for second language learners. The aim of this paper is the design of two games to teach students to second language skills and to identify the appropriate pedagogical strategy that enables students to leverage the benefits of gaming. This is highly relevant for my own research since students develop proficiency in the target second language as they communicate with native speakers in a video game. I teach Turkish through the TCCP, and my own students report they learn from interactive websites where they chat with native speakers. This could be leveraged greatly through a richer interface. In the paper, the video game has a chat section that allows foreign students to meet with native speakers, acquire new vocabulary, reading comprehension, as well as English translation skills, and conversational skills. In turn, native speakers have a chance to learn about other cultures. Video games like this bring foreign language students and native speakers closer. One weakness of this setting is how it could be threatening and not safe users. Good game design of future educational games will need to provide mechanisms to prevent abuse.

# Reference

Sorensen B., Meyer B. (2007). Serious Games in language learning and teaching – a theoretical perspective. *Proceedings of DIGRA 2007Conference.* (pp. 559-566).

Retrieved from http://www.digra.org/wp-content/uploads/digital-library/07312.23426.pdf

doi=10.1.1.190.388

**Abstract**

The paper focuses on a part of a new project Serious Games on a Global Market which focuses on language learning and teaching. Serious Games are digital games and equipment with an agenda of educational design. The paper makes a theoretical argument for a Serious Games product based on theories of educational design and learning in relation to games. Furthermore technology based perspectives on language teaching and learning are described and in addition to this, the paper draws on data from two recent research projects that have studied the role of game based activity in children’s digitally based practices in off school contexts. This theoretical construction will be employed in the developing of the prototype of the digitally based educational platform ”Mingoville”.

**Annotation**

This paper presents to reflect on the theoretical issues involved in the development of game based prototypes for language teaching and learning in primary school students. The paper builds on theoretical and methodological approaches associated with the educational design of games, as well as on technology based perspectives on language teaching and learning. The strength of this paper is that this video game focuses on action, navigation and interaction in their use of digital media. These perspectives are significant for the motivation and learning of game activity. These perspectives are significant for the motivation and learning of game activity. On the negative side, it doesn’t talk about the game based prototypes for language teaching and learning in higher education.

This paper is relevant to my future research since In the game based course Mingoville will be a significant prototype for the exploration and development of educational design that aims at innovation.

# Reference

Sasha B., Brianna S., Sinem S., Robert G., Adam I., Steven Z., Scott W. (2009). Transformational Play as a Curricular Scaffold: *Using Videogames to Support Science Education.* Retrieved from http://cognitrn.psych.indiana.edu/rgoldsto/pdfs/barab09.pdf

DOI 10.1007/s10956-009-9171-5

**Abstract**

Drawing on game-design principles and an underlying situated theoretical perspective, we developed and researched a 3D game-based curriculum designed to teach water quality concepts. We compared undergraduate student dyads assigned randomly to four different instructional design conditions where the content had increasingly level of contextualization: (a) expository textbook condition, (b) simplistic framing condition, (c) immersive world condition, and (d) a single-user immersive world condition. Results indicated that the immersive-world dyad and immersive-world single user conditions performed significantly better than the electronic textbook group on standardized items. The immersive-world dyad condition also performed significantly better than either the expository textbook or the descriptive framing condition on a performance-based transfer task, and performed significantly better than the expository textbook condition on standardized test items. Implications for science education, and consistent with the goals of this special issue, are that immersive game-based learning environments provide a powerful new form of curriculum for teaching and learning science.

**Annotation**

The aim of this article has a target to situate both the science content and the learner within a rich interactive context in which scientific concepts have value as tools to understand and transform the environment. This article gives a great overview of examples how video games help students to in the fields of science education. Given that students are increasingly exposed to video games, this topic is growing in importance for education. The strength of this paper is that this video game focuses on to investigate the power of virtual worlds and videogame methodologies to develop a rich learning context for supporting learning. This study is so significant because of showing rethinking science classroom learning in addition to the teacher, textbooks remain the primary resources for supporting learning in most formal institutions. The weaknesses of this paper doesn’t mention about how the role of the teachers a Digital Immigrant to handle with Digital Native to use the textbooks, illuminative examples, or game-based virtual worlds.

# Reference

DondlingerM. (2007). Educational Video Game Design*.A review of the Literature.*

(pp. 21-31).

Retrieved from http://www.eduquery.com/jaet/JAET4-1\_Dondlinger.pdf

**Abstract**

Much attention has been directed to the use of video games for learning in recent years, in part due to the staggering amounts of capital spent on games in the entertainment industry, but also because of their ability to captivate player attention and hold it for lengthy periods of time as players learn to master game complexities and accomplish objectives. This review of the literature on video game research focuses on publications analyzing educational game design, namely those that present design elements conducive to learning, the theoretical underpinnings of game design, and learning outcomes from video game play.

**Annotation**

This paper is relevant to my future research because I am planning to investigate the use of games in educational game design.. The aim of this paper how to make educational video game design, shows us elements of game design, how to improve learning skills with game and learning theories that conceptualize how video games foster learning. I would like to investigate this further in my own research. The strength of this article is to distinguish between educational and edutainment games in educational video game design.

**Annotated Bibliography -1**

# Reference

Aleven, V., Dow, S., Christel, M., Stevens, S., Rose, C., Koedinger, K., & Myers, B. (2013).

Supporting Social-Emotional Development in collaborative Inquiry Games for K-3 Science Learning. *Proceedings of the Third Conference on Games, Learning and Society (GLS-9.0),* to appear.

**Abstract**

While games for science learning show considerable promise, they tend not to focus on the youngest students. We are engaged in a project to create and evaluate a series of games for science learning for students in Kindergarten through grade 3. These games address a range of educational goals: to help students understand targeted science principles, develop scientific inquiry skill, and deal with situations that call for social-emotional skill. In two of our games, *Beanstalk* and *Teeter Totter Go,* players alternate between problem-solving activities and inquiry activities integrated in a single narrative context. To support social-emotional development, players must collaborate with, and sometimes seek help from, in-game characters. The main contribution of the work is a design for science games for young children that synergistically addresses scientific inquiry, social-emotional development, and science content learning. The games serve as platforms for research into how best to support this synergy.

**Annotation**

This paper is relevant to my future research because I am planning to investigate the use of games in education. The aim of this paper is the design of two games to teach students social and emotional skills with a focus on help seeking, collaboration, and resolving disagreement through discussion. These meta-cognitive skills are crucial for improving learning and I would like to investigate this further in my own research. One weakness of the games presented in this paper is the visual complexity of the games. The screens are very busy and it seems hard for students to keep track. The most relevant strength of this research is how it was successful in supporting the students’ social and emotional development, which was demonstrated in an empirical study.

# Reference

Aleven, V., Myers, E., Easterday, M., & Ogan, A. (2010). Toward a framework for the analysis and design of educational games*.* *Proceedings of the Third IEEE International Conference on Digital Game and Intelligent Toy Enhanced Learning (DIGITEL 2010)*. 69-76. Retrieved from http://chrisharrison.net/amyogan/files/Digitel10FrameworkCRC.pdf

**Abstract**

We describe and illustrate the beginnings of a general framework for the design and analysis of educational games. Our students have used it to analyze existing educational games and to create prototype educational games. The framework is built on existing components: a method for precisely specifying educational objectives, a framework for relating a game’s mechanics, dynamics, and aesthetics, and principles for instructional design grounded in empirical research in the learning sciences. The power of the framework comes from the components themselves, as well as from considering these components in concert and making connections between them. The framework coordinates the many levels at which an educational game must succeed in order to be effective. We illustrate the framework by using it to analyze Zombie Division and to generate some redesign ideas for this game.

**Annotation**

This paper presents a novel framework to support the development of educational games. I feel that this will greatly benefit my research. It was especially relevant for me to start thinking defining learning objectives when working in the field of instructional technology. I also found it very useful to have an established methodology for game design (the MDA Framework) used. Both help focus and communicate. On the negative side, I wish I could have seen the game referenced in this paper, Zombie Division. I would like to play that game to better understand the framework.

# Reference

Young, M. F., Slota, S., Cutter, A. B., Jalette, G., Mullin, G., Lai, B., & Yukhymenko, M. (2012). Our princess is in another castle: A review of trends in serious gaming for education*.* *Review of Educational Research*, 82 (1), 61-89. Retrieved from http://www.sunyresearch.net/IITG/wp-content/uploads/2012/09/REVIEW-OF-EDUCATIONAL-RESEARCH-2012-Young-61-89.pdf

**Abstract**

Do video games show demonstrable relationships to academic achievement gains when used to support the K-12 curriculum? In a review of literature, we identified 300+ articles whose descriptions related to video games and academic achievement. We found some evidence for the effects of video games on language learning, history, and physical education (specifically exergames), but little support for the academic value of video games in science and math. We summarize the trends for each subject area and supply recommendations for the nascent field of video games research. Many educationally interesting games exist, yet evidence for their impact on student achievement is slim. We recommend separating simulations from games and refocusing the question onto the situated nature of game-player-context inter- actions, including meta-game social collaborative elements.

**Annotation**

This article gives a great overview of examples how video games help K-12 students to in the fields of mathematics, language learning, science, social studies, history, and physical education. As an ESL learner myself, I am greatly interested in the use of games for language learning. Video games have positive effect on a broad range of learning outcomes including engagement, motivation, content mastery, and sustained interest in the subject. Given that students are increasingly exposed to video games, this topic is growing in importance for education. I was especially intrigued how the paper shows that a different cultural background of the learners has significant effects on how students learn from video games. I was impressed that in an empirical evaluation, undergraduate observers learned more than twice as much vocabulary as the players themselves. As an ESL speaker, I was hoping that there would have been a focus on non-English language learning application. But, I may have to fill this with my own dissertation research.

# Reference

Squire, K. (2005). Changing the Game: What Happens When Video Games Enter the Classroom? *Journal of Online Education*, 1(6). Retrieved from http://website.education.wisc.edu/kdsquire/tenure-files/manuscripts/26-innovate.pdf

**Abstract**

Over the past few years, games have gone from social pariahs to the darlings of the media, technology, and now educational industries. E-learning educators in particular stand to learn a lot about building next-generation learning environments from games (Dalesio 2004). While online courses are usually little more than "online course notes," games offer entire worlds to explore. While educators wonder if it is possible to create good online learning communities, game designers create virtual societies with their own cultures, languages, political systems, and economies (Kolbert 2001; Steinkuehler, forthcoming). While completion rates for online courses barely reach 50%, gamers spend hundreds of hours mastering games, writing lengthy texts, and even setting up their own virtual "universities" to teach others to play games (Squire, forthcoming). In short, while e-learning has a reputation for being dull and ineffective, games have developed a reputation for being fun, engaging, and immersive, requiring deep thinking and complex problem solving (Gee 2003).

Given emerging research on how video games and associated pedagogies work in designed settings (Shaffer 2005), it seems the important question is not whether educators *can* use games to support learning, but *how* we can use games most effectively as educational tools. The explosion of research initiatives, conferences, books, and software focused on educational games suggests that computer and video games will have some part in education, just as all media before them have been used for learning. However, the history of educational technology also suggests that educators will abandon media that do not fit the social organization of schooling (Cuban 1986).

Over the past two years, I have studied educational uses of *Civilization III*, a historical simulation game that has sold many millions of copies, depicted in Figure 1 (Squire 2004). This initiative highlighted a number of important considerations for educators interested in introducing games into the classroom—with respect to selecting appropriate game experiences as well as to evaluating the context in which games might contribute to learning. If, as this study suggests, games do indeed embody significant learning principles, our challenge as educators is to build better game-based pedagogical theories while reciprocally investigating our assumptions about the social organization of schooling.

**Annotation**

This paper presents how video game helps to achieve student learning about history. The approach was evaluated in an empirical study, comparing skill level before and after. The strength of this approach is that in an subject that students often find challenging, like history, video games create intrinsic motivation through control, challenge, curiosity. On the negative side, packing 6000 years of history into one game can be overwhelming and confusing for students. While my own research is not going to be in the same subject area, I feel that the specific approach of increasing motivation is particularly relevant because both history and language learning are subject that are often considered hard to get excited about by students.