

Pedagogical Considerations for Using English Video Games in the Classroom

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Introduction

Video games and their usage as learning instruments is something that has been the subject of much research in the past years (e.g. Annetta, 2008; Chik, 2014; Gee, 2007). In the realm of language learning, there have also been many studies validating video games as having a positive effect on language acquisition (e.g. Suh, Kim, & Kim, 2010; Sylven & Sundqvist, 2012). However much of the research involving video games for language learning has revolved around simulation games created specifically for language learning, online games where players can collaborate and communicate, or the usage of games outside of the classroom to learn a language. Much of the research that has been released pertaining to using video games takes into account literacy and general learning (e.g. Squire, 2011), however when it comes to the acquisition of a second language, there are differences that must be taken into account. This paper will attempt to move toward establishing a criteria for teachers to use when selecting or evaluating games they can use in their classrooms. Theoretical and practical (actual gameplay) characteristics will be considered.

Games and Learning

Looking at the issue theoretically, there are many advantages to using video games in a classroom to stimulate learning in students. First of all, Prensky (2001) classified the majority of learners nowadays as “digital natives”, or people who have grown up and are more receptive to learning and interacting with digital environments and multimedia. Gee (2007) stated that video games naturally contain several elements that promote more efficient learning that digital natives are naturally more receptive to. These include aspects of game design such as the ability to make mistakes with minimal repercussions and influence the game

world. In fact, participating and influencing the game world in a participatory fashion has been said to be one of the more powerful characteristics of games (Kirriemuir & McFarlane, 2004). This shift away from traditional styles of learning and move towards a *participatory culture* is something that has been heralded by other researchers as well (Squire, 2011).

In order to fully understand the scope of video games being used in the classroom, this section will seek to explain studies and concept that are tied to why educators have been looking in the direction of video games for new educational materials. As stated above, this article will not discuss the usage of simulation-based video games, otherwise known as “serious games”, but will rather choose to remain in the realm of the more easily accessible Commercial Off-The-Shelf (COTS) game. COTS games are, in essence, simply games that have not been made with the intention of creating an educational material (Cornillie, Thorne, & Desmet, 2012). It has been stated that it is in the usage of these types of games, and not simulation games, that the biggest potential for imparting knowledge onto players lies (Gee, 2007).

Observations From The Classroom

One of the earlier studies conducted on video games by Baltra (1990), remarked that using video games as a kind of task-based activity could in fact reinforce vocabulary learning in students. However, the main goal of the game used in class was not to uphold motivation and retain student interest, but rather to improve communicative competence in a certain time frame. Squire (2005) used the COTS game *Civilization III* with his high school students in order to teach them world history. Reaction to the game were mixed amongst students with some stating they did not understand why they were playing games to learn something while other students found it to be an ideal way of learning. It is interesting to note that students who were not receptive to normal pedagogical methods took to the games the most readily. In addition, many students found the difficulty overwhelming and that failure in the game would quickly lead to disinterest in continuing the game. Squire suggested structuring video game curricula around student personal interests and using games to support learning rather than to use them as the basis for evaluation. In a very similar study, Wainwright (2014) also used *Civilization* to teach students historical concepts. He

Pedagogical Considerations for Using English Video Games in the Classroom

stated that video games were effective in prompting critical discussion into video game design and the historical concepts presented in video games. Van Eck (2006) highlights the need for instructional activities in the classroom is digital video game-based learning (DGBL) is to be successful. He also stated that there is a need to prioritize student engagement in the game. Students must be engaged in the video game or else the effect wears off quickly. Thus, teachers must balance the usage of pedagogical activities with allowing the students to freely play. Also, activities introduced must be logical extensions of the game; they should serve to draw the student further into the game rather than taking them out of it by assigning more pedagogical-focused exercises.

Moving Towards the Language Classroom

When discussing the viability of video games as learning instruments, many researchers reference “good” games (e.g. Gee, 2007; Kirriemuir & McFarlane, 2004; Squire, 2011). As discussed above, these “good” games often contain certain characteristics that help facilitate engagement in the game and learning; for instance, agency in the game world or prompt and useful feedback. However, when it comes to language learning, certain principles must be modified or altogether taken away in order to facilitate learning. In order to investigate precisely what language teachers must pay attention to when evaluating video games, it is with a hope to discover an appropriate criteria that this paper was written. The criteria presented below is introduced with commentary from my own experiences of using video games to teach English at the university level to support each point.

1. User-paced dialogue

Mayer (2009) discussed the concept of interactivity when using multimedia to acquire knowledge. He stated, “people learn better when a multimedia message is presented in user-paced segments rather than a continuous unit” (p .175). In other words, players are more apt to learning content when they are allowed to progress messages on the screen at their own pace. In my own classroom, I often used *Pokemon Y* on handheld devices as ways to expose students to English content outside of the usual video and textbook cycle. The students commented that segments near the beginning of the game which often contain long stretches

dialogue that are game-paced were the hardest to understand. When they were asked to press a button to advance a message (in other words, to control the rate at which dialogue appeared on screen), the rate at which they advanced the dialogue would slow down and complaints about not being able to comprehend that dialogue would be noticeably less. If necessary, they would also use dictionaries to check game vocabulary. Players learning a foreign language should be allowed to advance the dialogue to suit their own personal pace. Taking that control out of their hands may preserve the flow of the story or scene, but it can negatively impact text comprehension. In summary, while story, flow, and drama is important, foreign language learning through video games is better achieved through allowing the student to have as much hands-on time with the text as possible.

2. Linear Story, Limited Freedom

The "sandbox" has been said to be a feature of video games that can promote learning (e.g. Gee, 2005; Kirriemuir & McFarlane, 2004). Players of video games can interact freely with a world, go where they want, and experiment with how systems of the game can interact with each other. For more exploratory learning subjects such as engineering, history, or physics this can be a definite positive. However, when it comes to language learning I have observed that the opposite can be more beneficial. It is true that students can be more exposed to different parts of the game world, and thus be more exposed to dialogue if they are allowed to freely roam. However, when considering student investment in gameplay, it would be more effective to have them stay along a pre-determined path. Lower level language learners, already dealing with a language they may not have a good grasp on, can find it difficult if they stray off a set game path. Some games do not often highlight the path to the next objective clearly; they want to promote more engagement in the game world and immerse the user in the lore or tale they have built. For a language learner, these priorities may not exactly work in the favor of promoting comprehension and motivation or engagement in the game, they can lose their way in the game and end up unable to advance. It is more beneficial for the students if the game played in class restricts movement throughout the game in a linear fashion. The story should move along a pre-determined path that minimalizes students getting lost in the game. In my own English communication classrooms, students who

Pedagogical Considerations for Using English Video Games in the Classroom

were allowed to wander through the game world freely were more apt to lose motivation in continuing the game. Reasons for this include forgetting the main path, or becoming exposed to too many new words that arise from encountering new mission objectives, side tasks, or new characters. The teacher should have knowledge over what characters and situations the students will be exposed to.

3. Broken in Chapters or Missions

The basis for this section is similar to the last, however, the purpose of introducing this is to give grounding for possible assessment or comprehension checks if used in the classroom. For material in class to be successful, there should be periodic assessments on the material to ensure understanding. This goes doubly for language learning since there are many things to cover besides the general story such as the minute details of language use in the game. There are many games out there that present the story as one narrative that can flow seamlessly from one “chapter” to the next. An ideal game to use in the language classroom would break the flow of the story into small digestible chunks. While not practical for more video games that are played for recreational purposes, the ideal game to use in the language classroom should include a chapter or mission objective switch every hour of gameplay or so. This is mainly for the purpose of providing a base for assessment and review by the teacher. As a teacher, it was very difficult to keep track of what my students were seeing in the game when given a more open, chapter-less game such as *Civilization* or *The Sims*. These games, while they move through certain phases (ages or stages of family life), the amount and type of text to consider when creating assessment materials is quite difficult since everyone sees something different. Especially considering class time used for one section of the game, students should be able to feel like they made progress through a game to support gameplay motivation. It would be unfair to some students if I were to quiz them on vocabulary or content that only one part of the class potentially saw.

4. Respect “Flow”

In contrast to the sections above, this section will focus on steering away from over-supporting or providing too much support material to students. There is no point in using a video game to learn if there is no fun in it. Special

precautions must be taken to ensure that, while the game is educational, the “game” is not taken out of the equation. This is a point has been given much precedence in past research involving learning through digital video games (e.g. Gee, 2007; Squire, 2011). “Flow” is a state of mind that is said to lead to long periods of intense concentrate when performing a task or doing an activity (Csikszentmihalyi, 1991). Gee (2007) also commented on this by stating the importance of preserving this frame of mind when using video games to teach something. It could be said that one of the most beneficial aspects of using video games are their ability to draw players in and engage them for long periods of time. Thus, it should be high on the list of priorities for the teacher to consider. In my experience, students who were given too much to think about when playing games (vocabulary lists, comprehension problems, culture notes, etc.) were engaged in games less. This led to lower motivation in the classroom, both to play the game and to continue learning English from the game. This was most evident when I supplied students who played *Pokemon* with long lists explaining English slang, cultural uses of phrases, and comprehension questions they should think about. In total, there were three separate sheets I gave the students. I thought it would help them, but they performed worse compared to the same class in the next semester when I was able to knock everything down to one single-sided sheet per objective or city.

5. Low Difficulty

Learners should focus on the game and game content itself. While a slight challenge would increase engagement in the game, too much of a challenge could damage willingness to continue playing the game. It is important to remember that for many language learners, the unsimplified language found in video games is, by itself, already a significant obstacle to video game engagement. Teachers should honor that difficulty and make sure that students do not encounter too many difficult situations in the gameplay. Squire (2005) wrote of a similar situation with his students in that difficulty spikes were found to lower engagement in the game quite drastically. I have also observed the same phenomenon in my class. If instructions to functions are not clear, puzzles become too hard to solve easily, or goal hurdles become too high, students lose interest in wanting to continue playing; thus, they stop engaging with the

Pedagogical Considerations for Using English Video Games in the Classroom

language in the game. Working in conjunction with point #3, teachers should take special precaution to check the difficulty in a certain section of video games and provide any needed vocabulary or instructional support (however, not too much as to overload the students).

6. Relevancy to Student Lives

By relevancy to the student lives, this obviously does not mean the actual stories or content of the video games. We are not gearing our students up so they can go on a fantasy adventure or solve otherworldly puzzles. There are many different types of English that can be spoken, from slang-based casual speech between friends or professional business speech. Characters in video games can come in any variation of roles. From professors to children, close friends to arch enemies. Each character, and by extension, every game has its own unique tone and approach to the language it uses. It is up to the teacher to correctly identify what tone would be the most beneficial to the students' academic lives. Getting students to play a game like *Deus Ex* with its science fiction-inspired mystery and conspiracy-laden conversation would not suit a class, say, for general English conversation. In the same vein, a game like *Cooking Mama*, which doles out recipe after recipe written in easy-to-understand and elementary English wouldn't work for higher level learners looking to polish up skills for use in discussion or debate-focused classes. Students in my beginner university English conversation classes found playing games such as *Pokemon* were, in fact, beneficial to learning everyday phrases. The game comprises of many conversations between kids or teenagers and many of the characters use slang quite liberally. While the content may have not gone along with many textbooks, it still piqued the interest of the students because (and I was there to assist the students) they realized that some of the language was actually used in real life.

7. High Repetition of Phrases

This point is something that most teachers most likely won't have to look out for, but is a core design principle of most games. The possibility for students to incidentally acquire language forms or vocabulary during gameplay should be accounted for when choosing a game. However the speed of acquisition is usually at a lower rate than most teachers would like. While there is nothing we can do

about speeding up incidental acquisition, we can hopefully promote the learning of key phrases through looking for repetition in the text of a game. In other words, we would be indirectly forcing students to cognitively process the same phrase or word repeatedly and thus, facilitate more cognitive load (Hulstijn & Laufer, 2001). In my classroom, RPG's usually contain a fair amount of repeated text. Main characters in the game often repeat lines during situations such as battles or puzzles. The game system often also repeats messages such as descriptions for game options. While they may seem inconsequential when seen one or two times, students in my class often noted that they began to pick up on words that they would see or hear during these situations. It was these phrases that I often heard used by the students long after they completed gameplay sessions.

Conclusion

The purpose of this paper was to move towards an outline for a criteria for choosing video games to introduce to language learners. As stated above, it is highly unlikely that any one game would hit on every single one of the points. Video games in the language learning classroom is still something that is on the fringes of acceptable teaching materials. It is vital to first judge whether the students would be receptive to learning in this format. As Squire (2005) stated in his paper, some students don't often take to learning video games. The reaction to playing video games can still vary on a wide scale and understanding the makeup of students is the first step. It may even be that the best way to use video games is not in the classroom at all, but rather, to ask students to experience it in their time away from school. By their very nature, COTS games were not made for the classroom. It is up to a teacher's ingenuity to adapt them for our purposes in language learning. In summation, the criteria that was established in this paper was made in the hopes that teachers will begin to use video games as supplementary material to class language learning or even develop lessons around the games to further engage their students in the materials at hand. We already know that there are successful language learners who play games outside the classroom (Sylvén & Sundqvist, 2012). It is time that educators take notice and hopefully try to incorporate this new element into their classrooms in a significant way.

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Abstract

In recent years, video games have proven themselves to be capable of facilitating learning. However, much of the criteria that has been developed to help teachers have neglected the language learning classroom. Subjects such as general literacy or the acquisition of practical skills have been given much of the attention. The current paper was written in order to move in the direction of establishing a criteria for language teaching professionals to use when evaluating or considering the use of a video game in their classrooms. The focus is mainly on commercially-based games that anyone can acquire at an electronics store and thus simulation games, or games made for the purpose of education, have not been included. Each section of the criteria is written through the synthesis of other language-based video games research. In addition, the researcher's own classroom experience is also utilized to help support each point.