Can students learn history by playing Assassin’s Creed?

AN EXPLORATORY STUDY OF 329 HIGH SCHOOL STUDENTS

Thierry KARSENTI
Julien BUGMANN
Simon PARENT
University of Montreal
(Canada)
This document is published under a Creative Commons Attribution 4.0 copyright licence (the least restrictive).

For more information on this type of licence, please visit the Creative Commons site at creativecommons.ca

To cite this document:

Linguistic revision: Valérie Drouin  
Edition: Bong-Sou Moulinet  
Data collection and analysis: The team at the Canada Research Chair on Technologies in Education.

Report available at: karsenti.ca/acreed/
## Table of Contents

*Introduction* ........................................................................................................................................ 1  
*Objective* ........................................................................................................................................... 2  
*Genesis of the project:* ......................................................................................................................... 2  
*Gaming: a highly effective learning tool* ............................................................................................... 3  
*Does gaming help students learn?* ........................................................................................................ 4  
*Assassin’s Creed: can a blockbuster game be used for learning?* ...................................................... 5  
*Assassin’s Creed: pure entertainment or learning tool?* ....................................................................... 6  
*Method* ................................................................................................................................................ 7  
*Main study results* ............................................................................................................................... 9  
  - Gaming by gender ................................................................................................................................. 10  
  - Students greatly appreciated using Assassin’s Creed in class ...................................................... 11  
  - Gaming teaches more about historical events and personages .................................................... 11  
  - Five main benefits perceived by students ....................................................................................... 12  
  - Multimedia features as drivers for learning .................................................................................... 14  
  - A course with Assassin’s Creed: like—yet so unlike—a textbook .............................................. 15  
  - Gaming for learning: a digital shift that some students found beneficial ........................................ 15  
  - The potential of the virtual world to engage students ..................................................................... 16  
  - Using Assassin’s Creed at school changed how it was played at home ......................................... 17  
  - Five main challenges in using Assassin’s Creed in class .............................................................. 17  
  - Many students wanted more ............................................................................................................. 18  
  - Determinant teaching practices ........................................................................................................ 18  
*Discussion and conclusion* .................................................................................................................. 20  
*References* .......................................................................................................................................... 22
INTRODUCTION

Who would have dreamed that a video game would storm the gates of our schools? Today, Assassin’s Creed (Ubisoft)\(^1\) is in widespread use as a teaching tool, and spurred by this thriving trend, a specialized educational version is due for release.

Despite the steady rise in the use of gaming for learning and the growing social acceptability of gaming as a mainstream pastime, it seemed beyond belief that education would actually fall in sync with the passionate digitality of today’s students. Is gaming the next key to learning? Can gaming propel the acquisition of learning processes? More to the point, when the vast majority of youth play video games regularly or obsessively, neglecting this pervasive medium would constitute a colossal missed opportunity. But we must ask, is the game worth the candle?

As the video gaming industry skyrockets to the top of the cultural industry—leaving films and books in the dust—, it becomes critical to examine the effects of gaming on student learning.

This report presents the conclusions of an exploratory study of the impacts of an educational video game on student learning. Called Assassin’s Creed, the game was not originally designed for learning purposes, but with its immense appeal and educational potential, it can be an invaluable ally in history and geography classes. To gain an initial impression of how using this game in class impacts learning, we conducted an exploratory study in 2018 in Canada. The methods included classroom observations, interviews with over three hundred students, and questionnaire surveys.

We found that this video game can make a real contribution to learning, depending on how it is used. In other words, to extract the maximum learning value of the game, teachers must tap into its full potential, including not just the images and settings, but also—and above all—the narrative, or the storyline.

This report is organized as follows. Beginning with the genesis of this project, we present our motivations to examine the use of this video game by high

---

\(^1\) Ubisoft: [https://store.ubi.com/ca/home?lang=en](https://store.ubi.com/ca/home?lang=en)
school teachers and their students’ perceptions of these uses. We then take a theoretical detour to review the literature on the impacts of gaming on learning, and we propose hypotheses about the uses of Assassin’s Creed for learning and the potential impacts. We follow with a presentation of the research question, research methods, and results. We end with the conclusion, discussion, and references.

**Objective**

“The use of digital technologies, including social media and gaming, is a way of life for young people that can no longer be ignored if schools are to remain relevant” (Ontario Public Service, 2016). Consequently, schools must embrace the new media if they are to capture students’ attention. Furthermore, as we have seen above, gaming has demonstrated benefits for learning. Finally, gaming is one of the most prolific cultural industries ever.

Despite this positive momentum, few studies have examined the use of Assassin’s Creed for learning, and even fewer have examined the issue from the perceptions of a large student sample.

The aim of our study was therefore to explore the use of Assassin’s Creed for classroom learning in a large sample of high school students.

We were guided by three main objectives: to better understand 1) how Assassin’s Creed is used for learning, 2) the benefits of these uses for learning, and 3) the challenges in these uses for learning.

**Genesis of the Project:**

This exploratory study was not the fruit of hazard. The idea arose from a meeting between our team and a high school teacher who uses Assassin’s Creed in his classroom. Inspired by this resourceful and forward-thinking educator, we decided to explore how gaming can be used for learning and the associated impacts. We then contacted the teacher and proposed that he participate in the study. To increase the number of participants and improve the quality of the study, we also invited other high school teachers who were using the video game for learning to join the study.

We should mention that this study has no associations with Ubisoft (the publisher of Assassin’s Creed) that may have biased the results or called them into question.
GAMING: A HIGHLY EFFECTIVE LEARNING TOOL

The use of video games for learning is gaining ground by leaps and bounds. Some schools use video games such as Minecraft as a regular part of the school day. But the use of gaming for learning is not entirely new, and it could even be considered a traditional practice. Many authors have described the vital role of play in learning and advocated play as a way to develop knowledge and skills (Dewey, 1963; Piaget, 1959; Winnicott, 1975).

Video gaming is enormously popular among youth, and the age is getting younger. In a sense, video games may be thought of as digital extensions of traditional games, with their boards, dice, and playing pieces. Enjoyed among friends, families, and complete strangers (thanks to networked gaming), gaming allows millions of aficionados to pass the hours of the day. This fire has been stoked by the massive emergence of mobile supports such as smartphones that provide permanent accessibility practically anytime, anywhere.

Universities are also jumping on the bandwagon. In North America, prestigious universities are embracing gaming as a legitimate varsity sport. The first out of the gate was Robert Morris University, in 2014 (Jenny, Manning, Keiper, & Olrich, 2017). Currently, the Université de Montréal has an official E-sport team on its varsity roster, collectively known as the Carabins (originally, medical students who are physically active). As hockey, football, and soccer players rub shoulders with gamers, e-sports are gaining social acceptance across North America and abroad. In South Korea, where gaming is a national pastime (not to say an addiction), e-sports have had a dedicated television channel since 2000. Paris has announced plans to hold an e-sports competition (as a demonstration sport) at the 2024 Olympics. Compare this meteoric rise in status to the struggles that some other sports have had in achieving legitimacy.

As gaming continues to garner favor as a social activity and nears universal acknowledgement of its learning potential, an important question begs to be addressed: does gaming help students learn?
DOES GAMING HELP STUDENTS LEARN?

The accrued interest in gaming for learning owes much to the observation that students are passionate gamers. To this we may add the research on the numerous benefits of video games (Przybylski, Rigby, & Ryan, 2010; Russoniello, O’Brien, & Parks, 2009; Vella & Johnson, 2012), notably for learning (Amato, 2011; Berry, 2009, 2011). In addition to enjoyment and learning, games have been shown to foster social and cooperative skills (Nachez & Schmoll, 2003). Furthermore, video games provide a strong vector for student motivation (Karsenti & Bugmann, 2017).

In terms of psychological benefits, it was demonstrated that celebrated World of Warcraft gamers felt less social anxiety and solitude in the virtual universe than in the real world (Martončik & Lokša, 2016). Because gaming takes place in an interactive space, it also helps develop social skills (e.g., Hui-Yin Hsu & Shiang-Kwei Wang, 2018). Moreover, this immersion, or entry into the flow state (Csikszentmihalyi, 1990), enables concentration, which in turn facilitates learning.

Numerous game-enabled devices have been used at schools for learning purposes. An early contender was the Adiboo educational game series, which failed to achieve the anticipated success. The blame for this could be laid on the rather primitive graphics and playability, which have since been eclipsed by more sophisticated productions. Other games have joined the cue in attempts to bridge the worlds of play and learning. The so-called serious games, which date back to the 1970s (Djaouti & Alvarez, 2011), have gradually penetrated classrooms. Some of the more well-known include Food Force, Stop Disasters!, and Les Éonautes (in French).

These entrants also suffered in comparison to subsequent commercial offerings. Because today’s games feature magnificent cinematics and exquisite playability, the fun aspect greatly outweighs the learning benefits. At least, that’s what students think. The guiding notion of this article is that the learning potential of gaming is not exclusive to “educational” games. In fact, many video games have the potential for use as learning tools.

Many wildly popular video games borrow their storylines, more or less loosely, from subject matter that is studied at school, such as history, geography, and civics. So why not use them for teaching? Why not lever them to help students improve their schoolwork? Or at least to spark their
interest? This is what we propose in this exploratory study of the use of Assassin’s Creed for learning.

We know that gaming has crept into all corners of society. We are bombarded by televised gaming tournaments, online gambling sites, mobile game apps, console games, bar gaming (“barcades”), and on and on. Instead of regarding this invasion as a problem, we could see it as a golden opportunity. Armed with this mindset, schools could take a giant leap forward to connect with the daily lives of young people as they meander through their virtual worlds. Perhaps this could help educators deliver the expected school mission: to educate and socialize youth.

ASSASSIN’S CREED: CAN A BLOCKBUSTER GAME BE USED FOR LEARNING?

We wanted to explore how the popular video game Assassin’s Creed could be used for learning. Why this type of game? And why this one in particular? Because it blends entertainment with education: the storyline revolves around historical events and geographic settings that are studied in school.

As a plus, the game is a heavyweight in the video game sector. It is an extremely well-liked action-adventure stealth game in which the protagonist, an assassin, embarks on exciting quests and engages in fierce battles. It provides a third-person perspective on an open virtual world that ranges across several historical periods, from the Garden of Eden to the Renaissance, the American revolution, and an imaginary apocalypse in 2012. The time sequence is cyclical, or polychronic (i.e., nonlinear) (Westin, J., & Hedlund, R., 2016). Each new installment of the game introduces a fresh storyline and time period, and all are interconnected. The first Assassin’s Creed begins with the Third Crusade. Assassin’s Creed II passes through the 15th century Italian Renaissance in Florence, Forli, Venice, and Tuscany. Assassin’s Creed Brotherhood explores 16th century Rome, and Assassin’s Creed: Revelations travels to the Assassin Base in 16th century Constantinople. Assassin’s Creed III pays a call to the American Revolution in Boston and New York City. Assassin’s Creed IV: Black Flag is set in the Caribbean in the 18th century during the “golden age” of piracy. Assassin’s Creed Rogue unfolds over the Seven Year’s War in the mid-18th century, and Assassin’s Creed Unity visits Paris during the French Revolution in the 18th century. Assassin’s Creed Syndicate delves into the world of organized crime
in Victorian era London. Assassin’s Creed Origins harks back to the forerunners of the characters in Ancient Egypt at around 49–47 BC. Coming soon is a new installment called Assassin’s Creed: Origins Discovery Tour. A purely educational version, it will allow students to explore ancient Egypt without being interrupted by quests or combat.

The games can be played on a wide range of media, and they have breathtaking visuals and playability, almost like a video game movie. Players can immerse themselves in lifelike simulations of historical and geographic settings, and hopefully, learn something along the way.

So why not take inspiration from this video game and exploit the fun and learning potential in the classroom? Why not use it to supplement and support more traditional teaching materials?

**ASSASSIN’S CREED: PURE ENTERTAINMENT OR LEARNING TOOL?**

First, we must emphasize that the issue at hand is not the game itself, but rather how it is designed and used for learning. Furthermore, our definition of the educational use of Assassin’s Creed comprises not just the game but all the associated resources (e.g., images, video clips, trailers). For instance, Carrasco and Molina (2017) used a documentary about a genuine pirate who appeared as a character in Assassin’s Creed IV: Black Flag to get students interested in the piracy age. Other authors believe that Assassin’s Creed is particularly relevant for its treatment of a variety of historic periods and places, even though the coverage is somewhat uneven (Westin & Hedlund, 2016), the cities are not necessarily faithfully reproduced, and the storyline follows a polychronic time system (Westin, J., & Hedlund, R., 2016). For example, Rome is presented according to two narratives: one drawn from archeological facts and another that appeals to the popular imagination. Nevertheless, this can be an advantage, because a vividly imaginative setting can be more attractive to students than an “expert” historical rendering. According to Spring (2015), the imaginative mode has “far greater potential for the creation and presentation of history than any other entertainment or interactive media.” The interactive storyline is presented from the third-person perspective to allow the player to roam freely through a gorgeously rendered world. This provides a sandbox space for players to explore and interact with historical events (Spring, 2015), and sandbox games leave most
of the agency up to the player (e.g., Bereitschaft, 2015; Coutinho et al., 2015), allowing them to engage more (e.g., Arici, 2008).

According to Joly-Lavoie (2018), only two studies had been done by 2017 on the use of Assassin’s Creed to teach history. However, the situation has changed since then, as more and more teachers incorporate the game in innovative and effective projects. For example, spurred by the criticisms of two politicians, Yelle and Joly-Lavoie (2017) had their history students compare the Assassin’s Creed interpretation of the taking of the Bastille and the French Revolution with more historically accurate accounts.

Although only a handful of precursors have investigated the use of this type of video game for learning, this is a fertile and flourishing research field. The upcoming release of Assassin’s Creed: Origins Discovery Tour is expected to fuel this growth.

**METHOD**

The study participants comprised 329 high school students and four teachers at two high schools in the province of Québec (Canada). Note that we did not seek to examine the students’ gaming practices, but instead how the teachers used the game Assassin’s Creed for teaching and learning. We considered the use of images, film clips, gameplay sequences, and any other scenarios or storylines that were used to teach history. To respond to our first objective, we identified the diverse uses, as presented in the following section.

We used four main data collection methods: 1) questionnaires, 2) individual interviews, 3) group interviews, and 4) videotaped classroom observations. The main themes addressed were how Assassin’s Creed was used in class and the attendant benefits and challenges. The data collection methods were used with all the participants, as follows.

1) Students completed an online questionnaire in class (n = 329).
2) Group interviews (n = 5) were held with the students and the teachers in class.
3) Semi-open individual interviews were held with the students in class (n = 46).
We conducted two types of data analysis. We began with a quantitative analysis using descriptive and inferential statistics in SPSS 22. The interviews and open responses were then subjected to a content analysis (L’Écuyer, 1990; Miles & Huberman, 2003) using semi-open coding based on the uses of gaming for learning. The individual and group interviews were subjected to a thematic analysis adapted from L’Écuyer (1990) and Van der Maren (1996). The interviews were filmed to allow a more vivid dissemination of the statements and findings. In addition, we wanted to consolidate the results and inform our team about the students’ and teachers’ perceptions of gaming for learning.

Responses were obtained from 329 students across the five classes. The majority (62.69%) of the students were 13 years old, and 60% were boys, as shown in Figure 1.

![Pie chart showing distribution of boys and girls in the sample.](image)

**FIGURE 1.** Distribution of boys and girls in the sample

In terms of gaming for fun at home, almost 89% of the students (nine out of ten) played video games at least once a week, and almost 23% (one out of four) played every day.
The fact that the students were in the habit of playing video games lends credence to the proposal that gaming has relevance for learning. This exploratory study provided an opportunity to investigate the potential relationship between gaming at school and at home.

**MAIN STUDY RESULTS**

Of the students in the sample, 55.12% (slightly over one out of two) had already played Assassin’s Creed, in all its installments, as shown in Figure 2.

![FIGURE 2. Playing frequency.](image)

Of those who had played Assassin’s Creed, 96% said they liked it, and 78% liked it “a lot” or “enormously.” Very few students who had tried the game did not like it at all (Figure 3).

![FIGURE 3. Students’ appreciation of the game](image)
Gaming by gender

We wanted to determine the presence of significant gender differences (boy vs. girl) in playing Assassin’s Creed for fun. The results of an ANOVA test indicated a significant gender difference in both playing and liking the game.

Boys played or used to play significantly more often than girls (F(1,152) = 65.59; p = .000). Boys who played or used to play also liked it more than girls who played or used to play (F(1,138) = 29.70; p = .000).

This confirms the popular lore that boys play video games more than girls do, and especially the violent games, although a more equal gender balance seems to be underway.

The main takeaway here is that the students who played Assassin’s Creed really enjoyed it, which means that it has a high appeal quotient. In fact, they were crazy about it. But does this mean that it’s good for learning? How could it be used in class? To answer these questions, we asked the students about how the game helped them learn in class.

Different classroom uses across teachers

We begin with the responses to our first research question on how Assassin’s Creed was used in class for learning.

Based on the classroom observations, the uses were diverse. For example, Teacher T1 used the game to compare the virtual world with the historical record. Visuals from the game were presented to make connections and comparisons with historical events, sites, and personages. The blackboard was divided into two sections, one with examples from the history course and the other with the virtual counterparts. The teacher compared the two and highlighted the associations and disparities.

Teachers T2, T3, and T4 took greater advantage of the game’s multimedia features: gameplay sequences, extracts, trailers, and so on. They based their courses on scenarios that connected the game to the real world (or the historical record), and they combined decisions and comments drawn from the modern world and from the game’s virtual world. They also included elements of the game in their student assessments. This could be conceived of as total immersion: course content was aligned with game content, critical thinking was aligned with gameplay, and assessments were aligned with the gaming experience.
In sum, the teachers, all of whom were teaching the same grade level, made different uses of Assassin’s Creed for classroom teaching and learning.

**Students greatly appreciated using Assassin’s Creed in class**

The results showed that only 9.13% (less than one in ten) of the students didn’t like using the game in class, whereas 58.73% thought it was very interesting or really fun.

When the students were asked to compare their traditional courses with courses that incorporated the game, the results showed that the game had more impact on learning history than geography: 12.30% felt that they learned less about history compared to 17.46% for geography.

The students apparently felt that they were learning something. But what exactly? And what benefits were specifically associated with the game?

**Gaming teaches more about historical events and personages**

The responses on what the students learned included geographic places such as Boston, historical events such as the Boston Tea Party and the Taking of the Bastille, and facts about historical personages such as George Washington and the Borgias.

To simplify the results presentation, we applied a categorical analysis. The results revealed cognitive impacts on five main areas: events, personages, places, monuments, and cultural aspects. Figure 4 shows the distribution of the students’ perceptions of what the game helped them learn.
FIGURE 4. Students’ perceptions of what the game helped them learn

**Five main benefits perceived by students**

The results showed that, overall, the students perceived five main benefits for classroom learning, as shown in Figure 5:

a) Greater motivation to learn (43.21% of students)
b) Appealing visuals and multimedia effects (24.28% of students)
c) Variety of learning materials (modernity) (20.99% of students)
d) Being able to use a game to learn (5.76% of students)
e) Being able to see and compare historical facts virtually (5.76% of students)
FIGURE 5. Five main benefits for learning

These results were confirmed by the results of the student interviews.

Assassin’s Creed motivated students to learn

In the interviews, the students said that they enjoyed using the game in class: it motivated them to learn, made them want to learn more, and made it easier to visualize facts.

Others said that the connections between the game and their history course were particularly motivating, because they could have fun while they learned:

“It’s awesome to put learning in a game; history in a game; it’s super interesting.”

“It makes learning history more interesting.”

“It’s better to have fun when you learn.”

The students also found it easier to memorize facts and ideas: “It helped me understand; history isn’t only learned by heart; you have to see it; the video game can help you.” Furthermore, “You can memorize more easily”; “It helps you retain the information.” Some students found that the game was good for “memorizing things better and seeing things in different ways”; “It’s a

---

2 All students’ statements are translated from the original French transcripts.
little easier to remember things because it’s interesting, and this makes us want to do it.”

This motivation was evident in the students’ descriptions of how they enjoyed the game: “It’s fun”; “It’s more entertaining”; “It’s cool to use the video game for a change”; “To do things differently.” The game made the class “more interesting, and we can picture everything.” The students evidently appreciated the fact that they could have fun while learning, which they considered a big plus, especially for comprehension: “It helps me understand.”

**Multimedia features as drivers for learning**

The students found the combination of the storyline with the cinematics and interactive features highly appealing, and it encouraged them to learn, according to some of the interviews: “It’s interesting to see how the developers made it almost like real life.” They appreciated the game because “You can ‘experience’ it; you can learn in a different way.”

Some students said that they had problems detaching from the game, even though it helped them learn: “I felt like I was really there.” This was tantamount to immersion in an historical era, which the students enjoyed: “It’s interesting to see how things were before; we realize that people dressed differently”; and “It lets you visualize things better; it’s more interesting.”

This contributed to more meaningful lessons: “I find that it’s a better way to learn because you get the impression you’re in the middle of things when you play; you have to get involved in the quest.” Thus, the engaging visuals and quests captured their interest, made situations more memorable, and helped them grasp ideas.

The advanced graphics made a welcome change from the more traditional teaching materials such as textbooks with photos, as one student explained:

“The images, there’re from a long time ago [...] when in the workbook, it’s just paintings and so on, and so it’s as if I was there. I’m less able to imagine myself in a painting than in the game [...] It takes me into a whole universe.”
A course with Assassin’s Creed: like—yet so unlike—a textbook

Can Assassin’s Creed actually replace or supplement regular teaching materials? From the students’ perspective, there was a huge difference between textbooks and the latter-day video game. They found their schoolwork “more interesting; it makes a change, and the workbook is kind of boring.” Another student commented: “It’s more interesting to look at than a book.”

Gaming brought new materials to the course, for a new look: “It’s different; it’s a game”; and “It’s more diversified, more interesting,” particularly because, “The images, they help you remember more information.” The students also felt more immersed in the course material: it was “almost like being there, you’re much more into it.” Some students said that the game gave them “another way to learn,” because, “We see another side of history than in the workbook.” The combination of the game and textbook versions enriched their understanding: “If I read about it and I see the images too, I’m going to have a screenshot in my head.” In this way, the gaming visuals complemented the course content by depicting the notions more vividly, and thereby entrenching them.

Gaming for learning: a digital shift that some students found beneficial

In the interviews, the students said that they found it easier to learn with multiple stimuli such as music and images: “It helps me understand what happened in the past.” They noted repercussions in their daily lives as well. One student who went on a family trip to a city that appeared in the game said, “When you go to Boston, you recognize things, and then you can explain them to your parents.” In other words, there was knowledge transfer. In addition, the game added further knowledge to the traditional courses:

“[It’s] really great when you can see the things that you learned at school again.”

“The images helped me memorize; they helped me remember what I saw in class.”

The questionnaire results also indicated the importance of this connection to the students’ home lives: “This way, we use the same things that we’re going to use after school [...] because the textbooks [...]; and “It’s great to
be able to connect what we do at school and on our own time.” Their families also noticed the effects on the students:

“It’s so cool when I tell them what I’m doing at school, and it’s the same thing at home; it’s cool.”

**The potential of the virtual world to engage students**

Besides giving the students a taste for learning history, the virtual gaming world sparked their curiosity. One student said that, “It makes me want to learn more about the subject,” and that “It’s more fun to learn history, because this way we make connections; it makes us explore a little.” This had direct repercussions on classroom learning and behavior, as one student explained: “I tend to listen more when it’s more interesting.” Another student felt inspired to “do more research to see if it actually happened.” This reinforced learning in turn, as it enabled “making connections with other things.”

The students felt that these connections made the course more immediate and memorable, and helped them understand how the world had evolved:

“I can separate the game from reality. It helps me understand how places have evolved. It helped me see that, throughout history, a lot of things have changed.”

Some students improved their information seeking skills in order to find out what was true and what was invented:

“The game gives you different ways to learn, but we can do research; we can compare; we can make other choices; it’s not like we’re stuck with just the video game.”

Here again, it is not the game by itself that contributes to learning, but instead how it is integrated into the classwork and used by the student.

The interview results supported that the game encouraged learning and curiosity in many ways: “It makes the course more interesting; we can do something different.” The game made historical fact and events more immediate, so that the students could “see history from another angle” and make connections: “The periods that we saw during the year, we found them
in Assassin’s Creed, for example, the French Revolution and the Industrial Revolution.”

In this way, the students were able to recognize “the scenes from the game, the people, the cities.” This helped them “study” because “We can review the ideas that we saw in class.” This was yet another opportunity to merge school and daily life:

“It’s a great way to live like the characters did, for example, the ones who went to war.”

Using Assassin’s Creed at school changed how it was played at home

One student admitted that using the game in class had altered the way he played it at home. He said that he had changed his view of the game and the way he had played it before: “Before, I played to kill people, but now I’ve learned about history.” Another student added, “At first, I was just playing the game, and without knowing that it was real history, and I didn’t understand that it was a true story.” Thus, using the game in class acted to extend the educational setting, with repercussions on the students’ gaming habits. This has significant implications for the development of critical thinking in students’ digital activities, a proposal that merits further exploration.

Five main challenges in using Assassin’s Creed in class

Unsurprisingly, some challenges arose in the uses of the game for learning. We asked the students about actual and potential problems.

The results showed that the main drawback was lack of interest in the game and in video games as learning tools (27.86% of students). Some students viewed the video game with mistrust. It is possible that they habitually rejected this type of learning tool, especially from a social perspective, because the teachers used them only sporadically. The second main challenge (22.14%) was that some students felt that there was a basic problem: the game didn’t help them learn. For example, they would find that some of the characters didn’t teach them anything, or that there wasn’t enough information provided, or that there wasn’t enough connection to the
Some students also complained about the fact that the game was too different from a traditional school course (21.43%). This was not unexpected, because the game was designed as a commercial entertainment, and not for learning purposes. In addition, there were clear disparities between the game content and the official school curriculum, despite the many alignments. Other challenges were the fact that the game repeated some content that the students were studying or had already studied (16.43%), and the fact that they would have preferred to play the game instead of looking at images taken from the game (12.14%).

FIGURE 6. Main challenges of using the game in class

Many students wanted more

The results showed that 52.22% (slightly over half) of the students wanted to use the game more in class. In contrast, 8.91% didn’t want to use it more, reminiscent of the 9% who didn’t like using the game in class.

At the same time, 66% of the students recommended that other teachers use the game to teach. The majority of students therefore appreciated and/or recommended the game for learning purposes.

Determinant teaching practices

We wanted to determine differences between the teachers’ uses of the game as perceived by the students. Some significant differences were identified, suggesting pedagogical avenues for the future.
One teacher stood out from the rest. The students’ responses to the question “Do you like the way your teacher uses Assassin’s Creed in class?” were significantly less enthusiastic for T1 than for T2 and T3.

Similarly, the responses to the question, “Would you like to use Assassin’s Creed more often in class?” were significantly less positive for T1 compared to T2, T3, and T4. When asked if they would recommend that other teachers use the game in class, T1’s students were again more negative compared to T2’s and T3’s students.

These divergent perceptions could be due to the differences in how the teachers used the game. T1 used visuals from the game to draw parallels between how the textbooks and the game depicted history and geography, or basically a comparison of images. In contrast, T2, T3, and T4 made strong use of the game’s multimedia features such as video clips and gameplay sequences, and they re-used them in their assessments.

We will reiterate here, once again, that what counts is how the learning tool is used, and that this determines whether or not students will embrace it for learning.
DISCUSSION AND CONCLUSION

The objective of this exploratory study was to examine how the video game Assassin’s Creed is used in class and the impacts on learning in a large sample of high school students.

We identified several uses for learning. One teacher simply extracted visuals from the game to draw comparisons with textbook content, while others took advantage of the game’s interactive multimedia features to align with the course content and brought game elements into their assessments. This led to differing student perceptions of how the game impacted their learning. It appears that the more the game was contextualized, connected, and integrated to the course, the greater the students’ appreciation, and hence the learning potential.

We also wanted to explore the students’ perceptions of the benefits and challenges of using the game in class. The students mentioned five main positive impacts: motivation to learn, the visual and multimedia appeal of the game, the variety of learning methods and materials, the fact that they could learn while gaming, and the ability to ‘experience’ and compare historical facts in a virtual world. It appears that gaming can indeed help students learn, and that they enjoy this type of learning.

On the other hand, some challenges were noted. For instance, some students did not find the game to their liking. A few students felt that the game content was either too similar to, or conversely, too different from their regular classwork. Many students wanted to play the game instead of just using the visuals or video clips for comparison purposes. The upcoming educational version, Assassin’s Creed Origins – Discovery Tour, promises to combine the best of both worlds: digital and traditional. It is designed to provide a combat- and violence-free journey into the past, something like a virtual museum. However, it will still be a sandbox environment where students can wander freely at their own pace, allowing them to engage with different historical places and periods.

In conclusion, we found that Assassin’s Creed does have benefits for classroom learning. Nevertheless, in order to capture maximum interest, the game must be thoughtfully adapted for learning. We should keep in mind that this type of game serves as a teaching aid, and that all teaching aids must
be suitable for the course and adapted appropriately. Otherwise, they will fall short of their educational potential.

Teachers and researchers should undertake further such initiatives to gain a deeper understanding of the connections between gaming and learning in order to help students succeed at school.
REFERENCES


