

## Second Life and School: The Use of Virtual Worlds in High School Education

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### Abstract

This paper explores the possibility of the use of virtual worlds in high school education to teach or supplement classes. Scholars have for some time discussed the benefits of role playing, technology, and social learning in the classroom, while games have been used recently as models in the classroom. The author interviewed the players of major virtual worlds about their views on using virtual worlds in classes, while also interviewing teachers for their professional advice. The fact that virtual worlds combine technology, social learning, role playing and games make them a “sleeping giant” in education, despite concerns of cost and widespread acceptance.

### Overview

The American public has many interests involving children. The most prevalent of these interests seem to be the inadequacy of education throughout all grade levels,<sup>2</sup> and how children are spending too much time on the internet playing games or chatting.<sup>3</sup> Education critics often link one to the other, pitting education against these virtual interactions. However, these forces can actually work together. Virtual worlds<sup>4</sup> could supplement education, modeling ideas that are abstract and making them interesting, relevant, and concrete (Williamson & Facer, p. 267, 2004). Virtual worlds might also allow safe places where children can interact and socialize, without worrying about “stranger danger” and other physical dangers.

This makes me wonder, how might virtual worlds and games be used in high school to teach or supplement classes? I will look at technology use in the classroom, and how media are used for social and cultural learning. I next review role playing and its use in learning. Finally, I examine current research about using videogames for educational purposes. This leads to a series of interviews with teachers who have experience using virtual worlds or games in their classes, hoping to find a common theme in their use. I also interview players of various MMOs for their views on education and virtual worlds. Finally, I synthesize my findings and offer a suggestion on how these virtual worlds can improve the education of high school students.

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<sup>2</sup> An editorial about the decline in the state of education ([http://www.reviewjournal.com/lvrj\\_home/2006/Mar-02-Thu-2006/news/6125447.html](http://www.reviewjournal.com/lvrj_home/2006/Mar-02-Thu-2006/news/6125447.html))

<sup>3</sup> See editorial about the concern of children's exposure to media (<http://parentcenter.babycenter.com/expert/preschooler/pgames/69631.html>)

<sup>4</sup> I am defining virtual worlds do be persistent, multi-user online domains accessed through computers. For more information, look at (<http://en.wikipedia.org/wiki/Mmorpg>).

## Literature Review

### Technology in the Classroom

Recently, there has been much discussion about the virtues of technology use within the classroom. Since most students find technology to be interesting, there is an increase in their levels of engagement in a topic utilizing technology, and with the increased engagement students were more likely to retain information (Cooper and Brna, 2002, p. 125). For example, in a NIMIS (Networked Interactive Media in Schools) class, students were reading, writing, and performing mathematical skills at a higher level than those in similar grade levels without the NIMIS.

Birmingham, Davies, and Greiffenhagen (2002) observed a literature class that used computer software to study Shakespeare plays. They discovered that students found the technology useful in many ways for studying Shakespeare (p.141). The software allowed students to easily search and compare the text, view different versions of the play, edit the play, and also gave the students a place to discuss and present their findings to others. The software allowed the students to interact with Shakespeare in a way to make the subject relevant to them, making it more engaging and thus learn more about Shakespeare. They were able to construct virtual plays and manipulate characters in terms of their placement on the virtual stage and their dialogue with other characters. The students would have to know about one character's relationship with the other and relevant dialogue in order to make logical placements, thus making the child learn Shakespeare in an interactive manner.

Kimber and Wyatt-Smith (2006) expand on the notion of having students become engaged by creating something using technology. They find that when students are asked to design something on a computer, they have to make critical judgments on their knowledge of the subject "synthesized from multimodal sources" (p. 26). They also argue that when students participate in design, they become more engaged than other students in similar studies (p.27). Kimber and Wyatt-Smith (2006) and Kyun and Davis (2005) agree that using technology in design also create a dialogue between the students and the teachers, thus allowing the students a chance to be engaged even without the technological aid.

But how would students feel about having a class that is based primarily in the web -- that is, instruction is done over the internet? Jason, Kennedy and Taylor (2001) operated a web-based psychology class and had their students comment and evaluate the course. They found that "students on average felt very positively about the web-based course" (p. 158). They also found that students saw the benefits of the web-based class, citing the advantages of accessibility of the information. This concept of a web-based course can apply directly to using online virtual worlds as a classroom. Virtual worlds are persistent, so students can access information or content at any time of the day without worrying whether the professor is present or not.

### Social Learning

Many scholars have written about games and technology acting as a catalyst for social learning (Delwiche, in press; Williamson and Facer, 2004). In high school,

students don't just learn academic information or life skills. There is also a sharing and development of culture that is important in students' maturation into adults. Gergely and Gergely (2005) note that the transmission of culture is possible through observation and mimicry (p. 464). Most virtual worlds are graphics based, and allow other users to observe and imitate a certain culture found within the game or internet as a whole.

Several memes have established themselves with accompanying video and have spread to other users who view them and sometimes imitate them. For example, consider the case of Leeroy Jenkins. Leeroy Jenkins is the name of a avatar in World of Warcraft who foolishly rushes into a cave heavily populated with high level monsters and gets him and the rest of his group killed. This event was recorded and distributed through the internet, spreading as a meme and prompting others to pull off their own "Leeroy-esque" stunts. This shows the use of technology acting as a culture distributor, letting many learn from one person's experiences. Papa (2005) also comments on how entertainment can promote social growth and expand cultural paradigms.

Yet social learning is not accomplished solely through instruction or imitation. Sometimes, especially in a school setting, students learn about social norms through discipline and redirection. Through school students learn what is considered "antisocial" to society. Technology can aid in the construction of prosocial behavior. For example, children who viewed a television show depicting prosocial behavior were more likely to exhibit prosocial behavior when working with others; conversely, students who did not view these shows were more likely to exhibit antisocial behavior (Zielinska and Chambers, 1995, introduction para. 5). However, Zielinska and Chambers also warn against becoming too "preachy" by lecturing about prosocial behavior after the television viewing. With many virtual worlds promoting prosocial behaviors such as teamwork and trading, one might see the possibility of using virtual worlds to promote prosocial behavior in delinquents.

Mainly, scholars have written about the benefits of social interaction on learning. Zielinska and Chambers (1995) find that media use in classrooms promote "social interaction which can potentially boost the educational effectiveness of programs" (introduction para. 5). Both Delwiche (in press) and Williamson and Facer (2004) argue that players play online games not as isolated entities but rather within a social community, and that players learn because of this social context. Williamson and Facer criticize the current educational structure of isolating students in their work and examinations, claiming that in their adult life students will be working within a social network of knowledge sharing, and that games are a part of what is actually preparing students for adult life. Referencing the work of Lave and Wenger (1991), Delwiche (in press) notes that "Meaning is contextual, and learning is what happens when individuals become increasingly involved as participants in social communities of practice," mirroring Williamson and Facer's (2004) point that students become the "real" teachers in this social educational process (p. 268).

While both Delwiche (p.5, nd) and Williamson and Facer tout the benefits of learning through games and computers because of their social context, Pulos and Fisher (1993) point out that there are certain social barriers that need to be overcome before they are widely used. They find that while gifted children are more likely to have an interest in computers, most children have negative perceptions of the students who

have interest in computers. They also warn that in early education “the computer is not used as a creative or useful tool, but is treated as a new form of obligatory ‘busy work’” (p.288). This could cause students to have negative associations established against computer use.

### Learning through role playing

Many scholars have remarked on the practical uses of role playing and experiential learning in a classroom. Mitchell (2000) criticizes the traditional classroom hierarchy “where teachers monopolize the communication flow” (p.135) and make the students uninterested, and consequently less likely to learn. However, Asuncion-Lande (1978), Mitchell (2000), and Bender (2005) all remark on how role playing increases student engagement, and creates dialogue between the student and teacher and also student and student. Also, instead of letting students role play in class on their own, students need to approach topics in relatively structured sessions (Asuncion-Lande, 1978). Asuncion-Lande also warns that sometimes real emotions are encountered during role playing, and they are authentic emotions that must be paid attention to seriously.

Role playing can easily be implemented in many classes and other areas around school. Kane (1964) states that role playing is commonly used in counseling and behavioral problem solving. He also recalls the use of role play in an anthropology class. Role playing has also been a valuable teaching tool in literature studies, history, sociology, and gender studies, psychology and political science (Bender, 2005; Galloway, 1997; Mitchell, 2000). Asuncion-Lande points out that outside of learning specific subjects, students learn how to learn, and can acquire “skills, values, attitudes, and habits; how to orient themselves to different contexts; how to acquire insights into the context of problem solving” (p.27).

A few scholars have come up with ideas to keep in mind while using role playing. Asuncion-Lande asserts that the role playing experience must mirror real life scenarios, must include the whole class in an active participation, have the teacher provide instant feedback, and be flexible in its flow. Mitchell affirms that the roles need to have real life representations, but also adds that emphasis has to be placed on consequences following actions, and students need to have a time of reflection upon their actions and consequences.

Bender (2005) states that “[r]ole playing can work well in the traditional classrooms of higher education, but it seems exceptionally well suited to an online learning environment.” Bender goes on to say that this is because students feel more comfortable in expressing themselves in virtual settings compared to what they might feel in a physical classroom. Online role playing is engaging for students, offering them greater levels of discourse and creativity that students would not experience in a traditional classroom. It also allows students to connect course material to personal experiences, while developing presentation skills while discussing their findings with classmates.

## Education and games

There is a multitude of research material about using videogames for educational purposes, especially in the classroom. Most research places uses of videogames into three categories: the use of videogames as models, the use of videogames as an enrichment or understanding booster, or videogames used as a way to build social skills.

Williamson and Facer (2004) and Foreman (2003) argue that videogames, specifically virtual worlds, could be used as different ways of presenting the material, just as a science lab or video might be used as a way of demonstrating the information in the physical realm. Physics was listed specifically by Williamson and as an abstract topic that could benefit from a virtual model through a game interface. For a projectile problem in physics, one could use a program such as *Second Life*, and simply adjust variables such as density of the air, surface area, initial velocities, and even things out of our physical control such as gravity. Such a model would not only help the students comprehend and remember the material, but they might also have fun as well (Bartle, 2003, p. 617). Conklin (2003) goes even farther than just science, and lists subjects such as economics, social sciences, humanities, languages, fine arts, math, computer science, and the natural sciences.

Another factor for using games in the classroom is for enrichment and understanding, specifically through role playing. Bender (2005) and Delwiche (in press) claim that just like visiting museums and attending plays, games could be used with role playing to better understand the material at hand. For example, if someone were studying Shakespeare and the Elizabethan times, one could construct a virtual world that students could explore and interact, both with each other and through non-playable characters (Bender, 2005). Not only would this interaction allow students to discover information on their own, but students could also construct multiple meanings from material presented, which one might not necessarily be able to do with just lectures (Abbott, 2005).

Videogames also can be used to adjust, control, or facilitate different social situations that are not possible within the physical classroom. While a particular student may be shy speaking in front of a physical classroom, they may find themselves more socially active within a game's chat functions. Games could also be used to build relationships and social skills, depending on the type of game. A game for example could facilitate collaboration with other students, or motivate a burnt out student (Bartle, 2003). Bartle also suggests that, since a game would be easy to govern as an instructor, behavior would also be easy to control. One can imagine a child in a kindergarten classroom using a game to learn how to share through trade, making friends online, and learning to work with others through party systems. One can also imagine a school almost without prejudice or cliques, as players in a virtual world could choose their virtual avatar's appearance, without an indication of socioeconomic, political background, or even gender.

## Study design

In order to find out how virtual worlds can be used in high school education, I wanted to talk to teachers who have experience with virtual worlds. I sought out

education forums that teachers regularly posted on, especially if they had to do with technology or “E-learning”. I found two teacher forums and posted a recruitment message (see Appendix 1). I also found an email list for educators who play the virtual world Second Life, and so I emailed the list also asking for teachers. And just to get a volume of participants, I posted a recruitment message in the non-game play forum of the official Everquest II forums.

Unfortunately, I had very few replies. I had to search on the web for teachers who used virtual worlds and contact them personally through email and ask if they were interested. This generated a few more, but not many. I can only guess that there is not much overlap between virtual world players and teachers who are players. Although this is a setback, this proves to me that this is a topic that has received little attention and has great potential.

I asked the teachers questions about their experience in virtual worlds and their thoughts on potential educational applications (for a list of questions, see Appendix 2). One teacher Laura Gulledge asked to be interviewed through email, so I respected her wishes.

Laura Gulledge is a teacher who teaches video production, media literacy and journalism in high school, and English courses at a community college. She recently wrote an article for womengamers.com about mothers who are also gamers, and about raising children with videogames<sup>5</sup>. Though she doesn’t have much experience with online virtual worlds, she is interested in games like Final Fantasy, Fable, and Myst.

Finally, I made an online survey for players to take regarding their experiences with virtual worlds and their views on the educational potential. I posted in the Everquest II official forums<sup>6</sup>, the Second Life education forums<sup>7</sup>, and the Ragnarok Friends<sup>8</sup> forum to get a wide variety of responses. The final sample included nine participants from all three games, and was collected over the span of two days.

## Results

I received a lot of insightful comments from the players who responded to my online survey. Many players stated that they have already learned things of value by playing in virtual worlds. **Omega99** says that he learned about 3-D modeling and design from playing Second Life. Many high schools are offering 3-D design classes or graphic design classes as computers and software prices decrease. As traditional art classes may have a gallery with paintings and sculptures, so might a 3-D design class use a virtual world “gallery” and have people from potentially all over the world view and critique the art. This could potentially help the artists learn more about art by hearing critiques from people outside of the student’s own culture.

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<sup>5</sup> <http://www.womengamers.com/articles/confessions.php>

<sup>6</sup> <http://eqiiforums.station.sony.com/eq2/board/message?board.id=Non-Gameplay&message.id=340601>

<sup>7</sup> <http://forums.secondlife.com/showthread.php?t=105453>

<sup>8</sup> This is a fictional name in order to protect the identity of the online community, as the real name or forum location might have lead to legal issues.

**KillerKing** writes that:

Current events are often a major topic so I'll find out many things through word of mouth in game just as I would out of game. Also, with the wealth of occupations present it is rare that I can't mention a common problem, be it legal, mechanical, or whatever without someone being able to point me in the right direction.

This reflects the importance of a virtual world's shared environment, where resources and information often needs to be shared in order to advance. However, I never expected non-game information to be commonly shared as well. Perhaps a project on current events in a history class could utilize virtual worlds to find socially relevant events and ask the players what each situation means to them.

One player, **Fireblood**, plays on an international game server, and says that "from interacting with players across the globe, I have learned information from other cultures, including Finland, England and Australia." This has direct correlations with cultural anthropology classes. Instead of reading about other cultures and seeing pictures and perhaps a movie of another country's culture, virtual worlds can be used to talk and interact with people from other countries, taking note of mannerisms conveyed through their talking and avatar placement within the world.

**General Wubs** found that by trying to figure out his damage in battle-calculations involving damage multipliers, percentages, and additions – he saw an increase in his math skills. Imagine a math class where the teacher gives a word problem pertaining to virtual worlds and asks students to solve it. The student could then simulate the battle and see if they were correct. Since most battle damages are done with a range of random numbers, students in statistics might answer questions such as "What is the average number of hits you would have to do to enemy X?" and then check their answer in the game.

The players also had some insights on what might prevent virtual worlds from being good teaching tools. **Lionheart** and **FireBlood** warn that in a large virtual world environment, the world may be populated by "annoying players". **Lionheart** also thinks that in some instances the violence might distract players. Laura Gullledge had similar feelings. From her own teaching experiences, she said

You know, there are a lot of Oscar-winning films and amazing books from which an enormous amount of perspective can be gained about various subjects--but many of them can't be used since they're considered too violent, too graphic, etc. for educational use . . . video games suffer the same fate.

She would like to see game developers make a game that is engaging and compelling for students, but still "fall in line with educational standards and curricula".

**KillerKing** had similar feelings, hoping that developers can keep from making the games too boring and too sanitary.

**Darkblade** feels that there needs to be a shift in thinking about virtual worlds. He thinks that most virtual worlds are seen as places for competition, and for virtual worlds to succeed as an educational medium, they will have to shift away from competition to cooperation. **General Wubs** thinks that MMOs might be too distracting with quests or PvP, and that class work might not get done

Many respondents indicated that they would be more interested and perform better in a class that was taught with virtual worlds. **Omega99** was one such participant, but warned that chat might become cluttered and suggested a voice medium such as Skype. **Darkblade** said that he has Attention Deficit Disorder (ADD), and it has interfered with his performance in public places. He adds that virtual worlds would make him feel more comfortable in school, and so he would perform better. **General Wubs** agrees, stating that he would learn more in virtual worlds because he's used to them and comfortable with them.

**FireBlood** suggests that class could be more interesting and motivating if students were rewarded with skills or equipment for doing well on quizzes and tests. He thinks this would motivate students to study in order to see concrete rewards for succeeding in class.

Obviously there are obstacles that teachers and administration would face before virtual worlds became widely used in classes. **Omega99** and Laura Gulledge both cite the fact that, in the words of Gulledge "Many schools are fighting for every dime they can get, so spending on expensive games/equipment can be prohibitive." Obviously computers and software can have a costly initial investment, but actually might be cheaper to use compared to the high costs of textbooks that seem to be outdated every year. **Darkblade**, **KillerKing**, and **FireBlood** also add that it could be expensive not only for the schools, but for the students at home as well. Students would have to have access to similar hardware and fast internet connections in order to do any kind of homework assigned.

**Lionheart** says that the general population might not take the classes seriously if they are conducted through the game. However, as we have seen, actual learning has taken place in virtual worlds without the aid of a teacher with a specific lesson plan. Imagine what a seasoned teacher could make out of an engaging educational experience.

**Echelon** also points out that other players might not take the class seriously and therefore might not be willing to share information as readily.

**General Wubs** notes that teachers continuously have to be trained in new technologies to keep up. He thinks that most teachers won't or can't understand games, and it is up to this current gaming generation to become teachers before virtual worlds can be used in the classroom.

**KillerKing** points out that while virtual worlds may succeed in one area, there are still national standards that have to be fulfilled. In that sense, the classes would have to be standardized in some form in order for standards to be met. He thinks that it would be difficult for each class to follow national standards.

Laura Gulledge has additional insight to add as a high school teacher. She finds that making cross-curricular connections is a difficult task for her students to make. Virtual worlds might help bridge subjects, since the worlds themselves are multi-modal and can display multiple quantities of information at once.

In terms of particular subjects with potential virtual world applications, she lists that classes like sociology, graphic design and other visual arts, and architecture as readily able to take advantage of Second Life's powerful programming code that users are able to manipulate. Gulledge also claims that online RPG games like World of Warcraft or Everquest can be used in psychology or sociology classes to study group dynamics and behavioral changes within stressful environments. She also points out that economics classes can see a physical representation of the concepts of supply and demand. Ethics of the good/evil character divides in Everquest can be used in humanities classes, and history classes can get the feeling of making battle plans and working with allies.

Gulledge thinks that "the possibility exists for all classes to be taught through virtual worlds." She gave an example of when she was gone for a leave to Tokyo, and so she videotaped her lessons to be shown in class and indicated at which places the tape would be paused for class interaction. "But pressing pause just doesn't cut it as far as interaction goes and a video doesn't qualify as a teacher," Gulledge says. If the class were taught through virtual worlds, she could simply log on to it from Tokyo and teach her lessons through the world, being able to answer any questions the students have in real time rather than waiting for two weeks for her to return, and by then the student has likely forgotten or stopped caring about the question.

However, Gulledge is quick to point out that teaching the subject isn't the only thing that teachers do. They also act as mentors and as role models. She wonders about the consequences of completely removing real world interactions from the classroom. Gulledge in the end "would embrace a partial use approach- keeping a close eye upon how well students adapt to it".

Along with the expense that Gulledge mentioned above, another problem in going mainstream is the fact that so much emphasis is placed on standardized tests and the consequential squeeze for time in teaching the subject matter and the test prep.

As most education starts at home, so should parents prepare children with games before the students start elementary school. Parents would "have the advantage of being able to make decisions about what is appropriate and acceptable", not only in terms of content, but also of its educational value and the needs of the child." Also, Gulledge thinks that schools might have liability issues pertaining to virtual world interactions and determining what content is acceptable, so it would be to both the school's advantage and the child's advantage for the parent to be involved in the child's gaming experience.

There are a few limitations to these results that I hope the reader keeps in mind. Since there were only nine respondents to the survey, we cannot assume that these nine were representative of the three large gaming communities. Also, while the views

of Laura Gulledge are quite insightful from a teacher's perspective, she was the only teacher to respond to an interview request, so her views might not reflect the teaching community as a whole.

### Conclusion

Based on the results from interviews and surveys I received, and the existing literature about games in the classroom, role playing, social learning, and using technology in the classroom, it seems that virtual worlds are in the early stages of being a practical educational tool. There are limitations to virtual worlds in the classroom, such as monetary costs, public opinion, and teacher training. However, as the use of technology, role playing, and games engage students, and social learning is crucial to the development as an adult, virtual worlds could be a valuable teaching tool in any classroom.

Specifically, we examined their uses in high school classes. We saw that many classes like math, history, sociology, economics, and others could use various virtual worlds as illustrations. However, Laura Gulledge warns against using virtual worlds as the only means of teaching, as students need the real world interactions with their teachers in their development.

There appeared to be common themes as to what properties of virtual worlds made them educationally useful. One was the collective learning and sharing of information that lets students learn from teachers and other students alike. Virtual worlds also kept the students engaged with technology. They also encourage role playing, a valuable teaching tool. As virtual worlds are a subset of games, they too can be used as models for lessons and can encourage social interaction.

Based on these facts, I believe that it is time to experiment in the use of virtual worlds in classes that would not traditionally use them. I believe that virtual worlds are the way of the future, integrating textbook, discussion groups, blackboards, science labs, and easel in one technologically appealing package.

I think further research needs to be done on the use of virtual worlds by the physically or mentally disabled. If virtual worlds are to be fully integrated into high school, these students would have to be accounted for so that they will not be left behind. Also, in a future study I would like to compare the uses and gratifications of teachers playing games versus students playing games.

Education of children is a very serious subject that tends to place blame on certain factors in almost a witch hunt fashion. However, I believe that if educators wanted to be serious about educating children, they would be fluid with the times and technology and work to use these influential forces in a positive direction and truly teach students.

## Appendix 1- recruitment message

Hi,

My name is Manny, and I am an undergraduate student enrolled at Trinity University in San Antonio, Texas. I am a communications major and am currently enrolled in a class about virtual worlds and the people who play them. Our class has been playing Everquest 2 for the past three months, and we are all part of the guild The Vindicators on the Antonia Bayle server.

As part of our class, we are required to research a topic that interests us pertaining to virtual worlds. I am interested in the potential applications for virtual worlds to be used in high school subjects, such as physics, sociology, literature, and so on. I would appreciate it if any current educators would agree to discuss with me their thoughts and experiences with this subject.

Interviews can take place through the game, e-mail, or through an instant messaging program, whichever is most convenient. Of course, anonymity and confidentiality is guaranteed for all participants.

If you are interested in helping out, please email me at [super\\_manu22@hotmail.com](mailto:super_manu22@hotmail.com)

Our whole class will share their topics and results at the end of the semester, and will be made available online to anyone interested.

If you have any questions or concerns, feel free to visit

<http://www.trinity.edu/adelwich/worlds/faq.html>

Thank you in advance,  
Manny

## Appendix 2 - Interview Questions

1. What subject(s) do you teach?
2. How much experience have you had in virtual worlds, and in which ones?
3. What areas in your subject do you find the most difficult to teach? What areas are the most difficult for the students to be interested in?
4. In the virtual world Second Life, the users are able to manipulate the environment in terms of making buildings, creating interactive objects, and allow other users to view and use what you have created. In what ways if any might this virtual world be used to help teach your subject?
5. The majority of the current virtual worlds (World of Warcraft, Everquest) are massive worlds in which the user's character fights enemies, teams with other users through battle groups and guilds, and buys and sells goods. In what ways if any might these types of virtual worlds be useful in teaching your subject?
6. In your opinion, is it possible for your class to be taught, either partially or entirely, through a virtual world?
7. What would you say are the drawbacks to using virtual worlds as teaching tools?
8. What other subjects can you see using virtual worlds as a teaching tool?
9. Do you know of any other teachers who use virtual worlds or games in education?

### Appendix 3 – Survey Questions

1. Player Information (will remain confidential):
  - Age
  - Gender
  - Location
  - Occupation
2. Game information (will remain confidential):
  - Which MMOs or games do you play?
  - How long have you played MMOs?
  - Which level is your highest character?
  - How often do you chat with other players?
  - How often do you join groups?
3. Have you ever personally learned anything from virtual worlds? What exactly did you learn?
4. What other virtual worlds might be good for teaching?
5. What in the games might prevent them from being good teaching tools (maybe interface, distractions, other players)?
6. Would you be more interested in a class if the class was taught within or used virtual worlds? Do you think you would perform better in the class? If the answer is yes, but only in certain situations, what types of situations would be most likely to make the virtual world an appealing option?
7. What obstacles do you think would be faced if there were a large scale push to utilize virtual worlds in a multitude of classes (teacher inexperience, financial, etc.)?
8. What obstacles would teachers face in trying to plan courses around virtual worlds?
9. If you would like a copy of the finished paper, include your email address here.

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