

The Value of Serious Games and Virtual Worlds April 4 to 24 2007



SCoPE – SFU Community of Practice for Educators

<http://scope.lidc.sfu.ca/mod/forum/view.php?id=428>

Facilitated by
Tia Carr Williams and Therese Weel

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The Value of Serious Games and Virtual Worlds

Overview

Serious Games and Virtual Worlds

Facilitators: Therese Weel and Tia Carr Williams

Description: This 3-week seminar will be a combination of exploration and reflection on serious games and virtual worlds. The first week will focus on serious games, and the second on virtual worlds. Our final week will provide an opportunity for further discussion on the themes that emerged. Together we will share resources and experiences, chart the landscape, and explore the educational value of serious games and virtual worlds.

Events

- April 10: Meet with Ron Edwards, CEO of Ambient Performance on Boracay Island in Second Life.
- April 13: Remote and simulated, the new laboratory in town with Dr. Samia Khan
- April 16: Explore Active Worlds with Margaret Corbit.
- April 17: Tour of Mapping CURA/BCcampus in Second Life with Dan O'Reilly.

Building our resources together here:

- [Serious Games and Virtual Worlds Wiki](#)
- [Mindmeister Map](#)
- [The latest Mind Map snapshot is here](#)

Thank you

To our presenters, Ron Edwards, Margaret Corbit and Dan O'Reilly for their patience as we fumbled along at their virtual world sessions. To Corinne Brooks for presenting Industry Player. George Kurtz for contributing his gaming and learning in Second Life Mind Map. Sylvia Currie for her support and guidance behind the scenes. And mostly to the participants for their generous contributions to these discussions.

The Value of Serious Games and Virtual Worlds People

Welcome Thread

<http://scope.lidc.sfu.ca/mod/forum/discuss.php?d=519>

Profiles

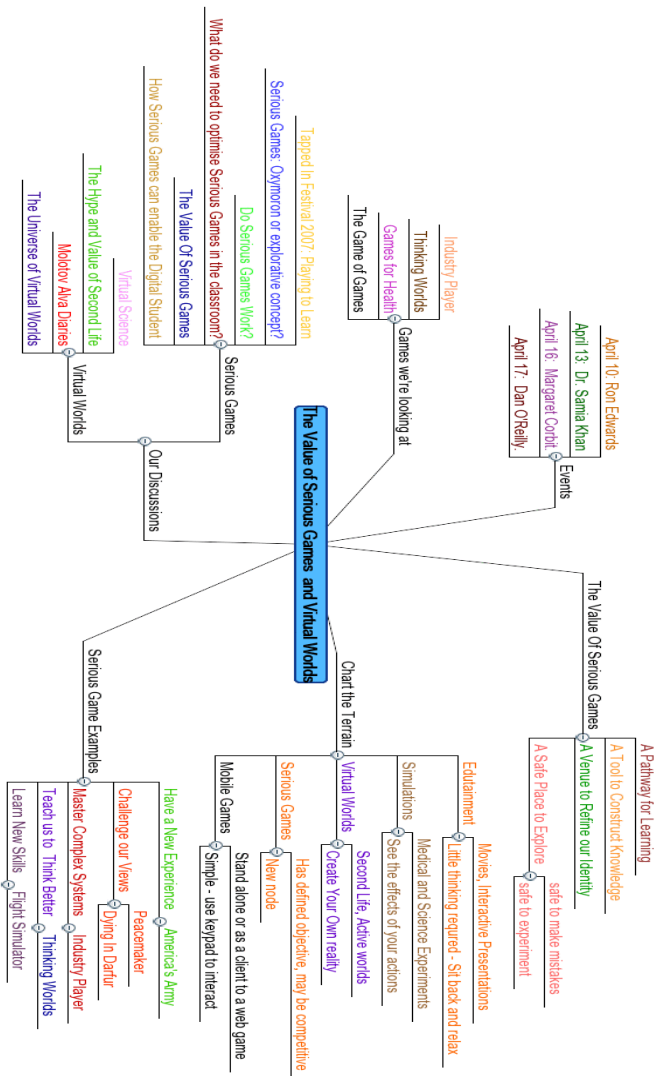
[Tia Carr Williams](#) [Therese Weel](#) [Sylvia Currie](#) [George Kurtz](#) [Corinne Brooks](#) [Dan O'Reilly](#) [David Bell](#) [Bronwyn Stuckey](#) [Cristina Palomeque](#) [Mar Ruiz](#) [Kaleem Bhatti](#) [Ian MacLeod](#) [Nick Kearney](#) [Graham Bevan](#) [Carolyn Campbell](#) [Barbara Dieu](#) [Gina Bennett](#) [Deirdre Bonnycastle](#) [John Patten](#) [Salvor Gissuradottir](#) [Jeremy Koester](#) [Derek Chirnside](#) [Cynthia Alvarado](#) [Alice Macpherson](#) [Margaret Corbit](#) [John Kellden](#) [Jim Wolff](#) [Olha Kutsevych](#) [David Brear](#) [E.A. Draffan](#) [Janet Bowen](#) [Nick Noakes](#) [Mark Baldwin](#) [margot mcneill](#) [Nik Peachey](#)

Faces



The Value of Serious Games and Virtual Worlds

Mindmap



The Value of Serious Games and Virtual Worlds

Activities

April 10: Meet Ron Edwards in Second Life

Ron Edwards, CEO of Ambient Performance was our guest on Nick Noakes' Boracay Island in Second Life.



It was wonderful to meet and explore Boracay. It also illustrated some challenges in coordinating a second life experience with Skype. Still, there were some good conversations, experiences and friends found.

Here is the [SLURL](#) and the [skypecast](#)

April 13: Remote and simulated, the new laboratory in town with Dr. Samia Khan, University of British Columbia

Watch this 1 hour illuminate presentation on using remote and simulated labs in science education and share your comments in [this thread](#)

In addition to hands-on labs, we can engage our students in processes of scientific inquiry with simulations, animations, collaboratories, virtual reality, and remote experimentation. This webinar explores how remote and simulated experiences can be designed to contribute to our pedagogical goals in science. How can these technologies be integrated in science instruction?

What is their potential value? When are they preferred to hands-on experiences?

The Value of Serious Games and Virtual Worlds

Activities

April 16: Explore Active Worlds with Margaret Corbit.

Margaret Corbit has been involved with long running projects such as The VLearn3D Initiative which began in 1998 as part of the Contact Consortium to address the current trends and needs of educators who are developing, adopting and pioneering virtual environments for education. Margaret and her team has set up a demonstration site set using Active Worlds and will take us exploring.



April 17: Tour of Mapping CURA/BCcampus in Second Life with Dan O'Reilly.

Odysseus "Dan" Chandra is a maverick. He showed us the educational objects he collected and deployed for the CURA project (Community-University Research Alliance). A chat box, a movie, a sky platform with audio globes and a holodeck. We also got Cura t-shirts to wear which is good because it was a snowy winter's day. In the discussion we also talked about ways to overcome SL's navigation issues. No one got lost!

Some Snaps from Sylvia's Flickr Account



The Value of Serious Games and Virtual Worlds

Conversations

[The Future of Virtual Worlds](#)

[Second Life places of interest](#)

[Special Invitation to Tapped In Festival 2007: Playing to Learn](#)

[Virtual Science](#)

[The Conference at a Glance - Our Mind Maps and Wiki](#)

[Thank you Dan](#)

[Margaret Corbit - 3d Environments for K-12 - Science and Social Studies](#)

[Welcome To Virtual Worlds Week](#)

[The Hype and Value of Second Life](#)

[Molotov Alva Diaries](#)

[The Universe of Virtual Worlds](#)

[The Value Of Serious Games](#)

[Second Life Gaming & Learning Group Mind Map \(GaLiSL\)](#)

[Meeting in Second Life](#)

[IndustryPlayer discussion](#)

[Resources, links and suggested reading](#)

[Serious Games: Oxymoron or explorative concept?](#)

[A Conversation with Ron Edwards, CEO of Ambient Performance on Borocay Island in Second Life.](#)

[Forming Community in Online Games](#)

[DO SERIOUS GAMES WORK?](#)

[How Serious Games can enable the Digital Student](#)

[What do we need to optimise Serious Games in the classroom?](#)

The Value of Serious Games and Virtual Worlds Conversations

Measuring The Effectiveness of a Serious Game

Janet Bowen

In order to identify the potential skillsets identified in the statements can be achieved by establishing observable terminal learning objectives prior to the development of the games. To me serious games are simply extensive scenarios that are developed to apply concepts that have been explained or shown in the "storyline" of the game.

One way to effectively measure the before and after states would be the presentation of the end objective in a manner that presents no explanation to being able to create a solution without proceeding through the learning environment and gaining tools to solve the problem. This would give you the before state. After the attempt has been made, the learning opportunity is presented and then a similar task to resolve is presented to test the after state. If learning occurred then there will be significant change in the outcome of the task.

Thoughts on Second Life

Therese Weel

If all there is to do is fly around and look at things, It's easy to get bored. Changing your appearance is fun. But it is not fun by yourself. I think that being in an environment like second life is best in a small group where you can laugh and talk and help each other along.

The VW interface is cumbersome and time consuming at this point in time - most (all?) require clients and a lengthy startup procedure. I look forward to the day when an ordinary web browser has richness of a virtual world.

Blogging, My Space and You Tube have proven that there is an appetite for "about-me-web" Virtual worlds are the next evolutionary technology to be taken up by the teens and 20 somethings. (At least I assume it is as I have no statistics to offer). If my assumption is true then Virtual Worlds must be very much on the radar of people who are tasked with educating this generation.

The Value of Serious Games and Virtual Worlds Conversations

Thoughts on Second Life

Sylvia Currie

I'm still in that camp of trying to figure out how I might use SL in my own practice. Don't get me wrong -- I've had a blast hanging out there! But so far the value has been mostly social. And I see how SL experiences would help to build learning communities. Sitting around a campfire during a chat like we did during Nick Noak's seminar does add ambience and we had some good belly laughs. But it isn't exactly an easy task figuring SL out and for me the second name and avatar doesn't help too much with connections. I find I'm constantly translating who this person and that person really are! Help, is it my age? 🤔

Thoughts on Second Life

Corinne Brooks

I think SL still is a mystery to me because it suffers dreadful lag. It also seems to be too big to be useful. I'm sure I'm missing great parts of SL that can be useful but just can't navigate there well, and get frustrated when I get stuck somewhere. It also seems that when you teleport somewhere it takes you somewhere close to where you are going not to the actual place (Boracay being an exception to this). eg I went to a music area, got stuck on the roof of a building where I had landed and had to negotiate my way down and out of the building and look around before I found the music and dance floor etc.

Active Worlds however seems much easier to actually get around, has less lag and there are quite a few "boards" at the start giving ideas of where you can go.

Both would benefit from mouse driven movement - as switching from mouse to keyboard gets tiresome, and I find I either hit keys too often and overshoot where I want to go, or not enough and take 20 minutes just to turn around.

The Value of Serious Games and Virtual Worlds Conversations

Thoughts on Second Life

Nik Peachey

At present I'm working on a business English course which will be delivered in SL. The course will be delivered in what looks like a typical office rather than classroom environment, with its receiving tasks to do in various parts of the environment, having meetings and discussions and sharing their experiences. We have a voice client, which is an enormous benefit for language development. SL's own voice beta is excellent though and when that becomes part of the standard build it will enable so much more communication.

Other than the basic course tasks themselves I'm trying to build in a sense that the avatars of the sts on the course will 'live' within this environment for the duration of the course making it in a sense 'residential'. They will have their own rooms and study areas, there will be a social program of events and field trips, collaborative in world team study tasks as well as team building tasks and an over arching kind of roleplay the outcome of which will feed into their evaluation at the end of the course.

I believe that SL has huge potential if we can think beyond the kind of classroom teaching/ learning experiences that are familiar to us all. We need to see SL's weaknesses though (and there are many) and try to exploit its strengths.

The Value of Serious Games and Virtual Worlds Conversations

Technology for k-12

John Patten

(Sorry for the ramble, i bird walked a bit below...)

Here is the U.S. teachers are very much consumed with teaching to the standards and promoting higher achievement on standardized testing. With the amount of standards teachers here in California have to teach/cover, it is very difficult for teachers to even begin to fathom looking at using technology, specifically technology based games and simulations. That's different thread though...

The amount of technology primary grade students get in school, and probably at home, is very limited. This is probably due to the fact that digital media that links to what teachers are required to teach in an engaging fashion is not readily available, and the amount of time it would take for teachers to, 1. Learn the tools to construct their own resources and, 2. Develop their resources/instruction based on sound "gaming/simulation" pedagogy that is engaging to students, is very great.

I have my own middle school student, and even though we have always had a lot of technology in the house, he has not really shown much interest in it. Up until real recently, he was much more likely to spend hours reading a book, than playing computer games. I would say it was only the last couple of years, grades 5 and 6, that he even showed any interest in the PS2. However, I did introduce Teen Second Life to him this year and this did catch his interest as much as PS2 gaming. It's become a good homework incentive 😊

He has primarily been a "consumer" in TSL. He has made many friends and participates in a couple of groups. His initial use has been primarily meeting others and trading and trying out goods from these friends. Only recently has he begun to explore the creative process in TSL...He's been attempting to attach his rockets to a house and create... 😊 This little project of his has slowly begun to introduce some of the concepts around scripting and programming, and physics. Granted, this is all "work" outside of school. His use of TSL I would wager is pretty typical of how a middle school student would begin using this resource.

The Value of Serious Games and Virtual Worlds Conversations

Technology for k-12
John Patten Continued

His interest in books over technology is typical in how students develop strengths, and yes being both educators there have always been just as much exposure to books in our house as there has been technology.

Okay...where am I going with this....??? I think we are all pretty adaptable. We seem to feel that students today are these multi-processing, do fifty things at a time, little individuals. We all adapt to our environments pretty well. We are all multi-processors.

Many people seem to believe that children today are "hard wired" differently than their parents due to being exposed to technology at an earlier age, but my question would be how much exposure would it take to make those changes in a developing mind? Once you have a middle school student, the "hardwiring" is probably pretty much set. Have the "millennial" generation been exposed to technology long enough at an early age to create a physiological difference in their development that would predispose them to advantages in learning with technology that their parents do not have? It would seem that at least in my child's case, there was plenty to keep him occupied at primary level (in and out of school) that technology did not become an interest until secondary school.

Bottom line, students need to be exposed at an early age to tools that provide them with the big picture. They need to become skilled in communication, ethics, responsibility, empathy ...to name a few. Can these skills be taught without technology? Possibly (many of us have acquired them). Could technology help students acquire and comprehend these skills earlier than some of us did? Probably. We are all interdependent on each other. Technology, global exposure, gaming, and simulations, would appear to provide an avenue to address these types of skills. Cell phones and instant messaging alone do not teach these necessary skills.

Thanks!

The Value of Serious Games and Virtual Worlds Conversations Technology for k-12

Janet Bowen

As an American educator myself, I see the trend of teaching to the test all too often. I tutor students online and most of the curriculum consists of what they will have to do on the test. I have found that if I can inject levity and relevancy into the standard curriculum, my students learn more and retain it longer. I have a greater success of getting the "ah ha" light when they have "played" a game that uses the skills and concepts we're working on.

All of my children have grown up with technology. One of them is very dependent on it to function in everyday life. The advancements and proper use of these technologies has broadened his ability to participate in life in a meaningful manner. He has been able to understand logic and analytical thinking much easier by "playing" games that require him to analyze a situation in order to achieve an end. Even his hand-eye coordination has improved beyond expectations because of gaming.

While gaming and technology are important aspects, all three of my children also have a good foundation in good old fashion teaching aspects of books and pen and paper. While the schools here in America are leaning more toward the digital age to "compete with global entities", the loss of fundamentals is also very evident in the abilities of students graduating from our schools.

I do not feel that it is entirely the schools responsibility to teach some of these fundamentals to the students. This falls to the community and family. As you pointed out much of the learning occurs before the age of seven. The primary influence in the lives of these children at that point is family and community. I guess I'm more grassroots than anything. However, integrating the fun of gaming into the learning atmosphere of family and community can be achieved with the responsible decisions made by parents.

Now I'm rambling, but my point is that through careful consideration, gaming can become an important and effective tool in the education of all students.

The Value of Serious Games and Virtual Worlds Conversations Technology for k-12

Dan O'Reilly

I think that the distinction that some make between Digital Native (those born into the digital age - after ????) think differently about technology than those born before (Digital Immigrants) is a very blurry distinction at best and totally false at worst.

I have two daughters both born in the 1980's and both reasonably conversant in technology [I did my best to make sure they had the latest computer technology]. One is trained in humanities the other engineering. The latter has a greater computer understanding and presence than the humanities major; nonetheless, neither really is digital in the sense that I am digital. I definitely have a greater emersion in the digital age than either of my daughters. There are two really important dimensions to the digital age that frequently are misunderstood and conflated; there is a technological understanding and there is an epistemological or metaphysical understanding.

Both my daughters can technologically do more than most people my age (but not me hehehehe). Nonetheless, they do not really appreciate the issues that the digital age presents. I recently (in the last week) gave presentations about Second Life to 150 student and 30 students. The first group was 2nd year students primarily and the second group was 4th year students, neither group had ever been in Second Life (at least no one would admit to being in SL [there is a nerd factor about SL <http://one.revver.com/watch/215878>]). They saw SL either as an escapism from reality for those who do not have a real life or as an addiction. These students could not appreciate the significance of virtual worlds and these are those born in the ditital age. Granted both judgments may be true, it is an addiction and it is escapism. Nonetheless, something like SL really does reflect IMHO reality. [I am sure to the person born in the Victorian age they would see our current society as both an addiction and an escapism.] Is this the case with SL more so than the gaming world? I thinks so. Why?

The Value of Serious Games and Virtual Worlds Conversations

Technology for k-12

Dan O'Reilly Continued

I have done a lot of games. I really enjoy them. I teach logic and love teaching logic (I admit I am a nerd). I remember one of my logic profs telling me that happiness was doing a logic problem. And I gradually began to realize that he was right. I loved doing logic problems or getting into games because they took me out of reality, the stresses that I was experiencing, and let me just think just about the strategy of the game. There were no attachments to anything, one simply reflected on the strategies and possibilities of the game. I realize that games have evolved to include an emotional component (war games, grieving games, etc.), nevertheless, I have never found an environment that allowed one to really get involved emotionally until I experienced SL. It enables this emotional attachment because it is so real.

One of the producers of gaming technology released the video Heavy Rain [<http://www.youtube.com/watch?v=JafIBmdfe20>]. He is quoted as saying:

"Most video games only use very basic emotions, like fear, anger, power, and frustration," he notes, "but not the social emotions that appeared later during evolution like empathy, sadness, joy, pity, love, et cetera. These emotions are more complex to generate, but all other art forms managed to do it. I can see no reason why games should limit themselves to the same old basic ones."

I see SL now being able to bridge to these other emotions that most games just don't reach.

Well I guess I have been a bit long winded but I hope coherent.

Dan (Odysseus in SL)

The Value of Serious Games and Virtual Worlds Resources

General Resource Links

Wikipedia links

Wikipedia List of Serious Games

http://en.wikipedia.org/wiki/Serious_game#List_of_serious_games

Wikipedia List of Freeware Games

http://en.wikipedia.org/wiki/List_of_freeware_games

del.icio.us Links

Serious Games

http://del.icio.us/search/?fr=del_icio_us&p=serious+games&type=all

Serious Games People

http://del.icio.us/search/?fr=del_icio_us&p=serious+games+people&type=all

Serious Games Tools

http://del.icio.us/search/?fr=del_icio_us&p=serious+games+tools&type=all

Discussion Lists

Serious Games

<http://www.seriousgames.org/maillist2.html>

Games For Health

<http://www.gamesforhealth.org/maillist2.html>

Games For Change

<http://www.gamesforchange.org/info/Lists>

TLT presentation on Serious Games

Reference Page

<http://www.tltgroup.org/OLI/20070323SecondLife.htm>

Presentation (1.5 h)

<http://archive.tltgroup.org/2007/FL20070323SecondLife/index.htm>

The Value of Serious Games and Virtual Worlds Resources

GASL Mind Map Links

Gaming and Learning in Second Life

<http://groups.google.com/group/gaming-and-learning-in-sl>

Download Mindjet standard viewer at:

http://www.mindjet.com/us/download/mindmanager_viewers/index.php?s=2

Download MindManager Map Viewer for Internet Explorer

http://rcd.typepad.com/rcd/2005/09/free_mindmanage.html

Places of interest in SL

Suggestions from Scope Session Participants

<http://scope.lidc.sfu.ca/mod/forum/discuss.php?d=543>

Second Life Annotated Bibliography by Mark Pepper

<http://web.ics.purdue.edu/~mpepper/slbib>

The Value of Serious Games and Virtual Worlds Resources

Links about Second Life

- There is a news program out of Australia called Four Corners and they did an expose about SL (very interesting):
<http://www.abc.net.au/4corners/content/2007/s1873399.htm>
- This also is an interesting study of SL by researchers at the Georgia Institute of Technology:
<http://www.mattmckee.com/portfolio/second-life.pdf>
- Another good resource about SL is Reuters:
<http://secondlife.reuters.com>
- This is a research study about SL conducted by EPN, a non-profit research group investigating virtual worlds:
http://www.epn.net/interrealiteit/EPN-REPORT-The_Second_Life_of_VR.pdf

Games for Health

a game for young cancer patients to learn about and fight cancer
<http://www.makewish.org/site/pp.asp?c=bdJLITMAE&b=81934>

Blood typing is part of the Nobel Prize winner site. In this game, you have to blood type each patient and give him or her a blood transfusion.
http://nobelprize.org/educational_games/medicine/

EdHeads now has two games: Virtual knee surgery and choose the prosthetic
<http://www.edheads.org/activities/knee/>

Immune Attack teaches immunology in a fun and engaging way that is different from the traditional classroom setting.
<http://fas.org/immuneattack/index.html>

Participants might be interested in downloading the Federation of American Scientists report on gaming from this site <http://fas.org/gamesummit>

The Value of Serious Games and Virtual Worlds Resources

Social Game Resources

An excellent Learning Times Green room [overview article](#) on kinds of games, how games function in learning contexts, and games that are currently making news in education.

The articles includes a [Skype interview](#) with me about [Clarify](#) and the [Game of Games](#), which are game shells for people looking to clarify and accomplish goals.

Future Lab [Literature Review](#) on Games in Learning.
[Thiagi's site](#), virtual home of a true pioneer of serious gaming.

Serious games in Virtual Worlds

<http://www.virtualworldsreview.com/>

The "Feng Shui of Virtual Worlds" by Mike Heim a good read on design issues. <http://crossings.tcd.ie/issues/1.1/Heim/>

And the Borderlink Project developed several programs for Linkworld <http://www.borderlink.org/technologies/lw.php>, including a student written Comedia Del Arte play.

The Value of Serious Games and Virtual Worlds Resources

K-5 and Middle School Games and Resources

You can visit the courses and workshops I have developed at
<http://members.shaw.ca/dbreear/workshops.html>.

I created an educational games Web site at
<http://members.shaw.ca/dbreear/oleg.html> aimed more at K - 5 and middle school.

Recent Articles Listed at David's Site

- [Let the Games Begin](#) - written by Jenn Shreve in the April 05 issue of the [Edutopia eZine](#),
- [Game Plan](#) - (Part 1) - by Susan McLester, this article appeared in the October 2005 issue of the Technology and Learning magazine.
- [Game Plan](#) - (Part 2) - Student Gamecraft, by Susan Mclester, this article appeared in the November 2005 issue of the Technology and Learning magazine.
- [Can Games Be Used to Teach](#) - (pdf. file) article by Alix E. Peshette and David Thornburg, ISTE Magazine, Learning and Leading with Technology, April 2006, Vol. 33, No. 7.
- [Readers Respond](#) - (pdf. file) - Overwhelmingly, readers responded that games can be used as instructional tools, from ISTE Magazine, Learning and Leading with Technology, September 2006, Vol. 34 No. 1.