

Virtual World Teacher Training Project 2nd workshop

23 Aug, 2016

Speakers: Natalie Nussli (DoraApfelbaum Resident), Kevin Oh (kulioh:Resident)

Participants: AkashaKokuu Resident, ArianneJP Resident, Camie Rembrandt, Chantal Snook (Nymf Hathaway), Greg Perrier (Dodge Threebeards), Jes Stannard (Jes Cobalt), MarTuSz (Patsy Stradjinski), Oronoque Westland, Wisdomseeker (Lissena Resident), Yan Lauria

Designing Teacher Training for the Use of Virtual Worlds in K-12 Education

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Presentation sheets: [http://jogrid.net/abyss/Oh_and_Nussli\(2014\).pdf](http://jogrid.net/abyss/Oh_and_Nussli(2014).pdf)

Reference paper: http://jogrid.net/abyss/Kevin_and_Natalie_August_23_2016.pdf

Yan: (voice chat) Welcome to 2nd workshop of the teacher training project.

I'm working on Orientation Area for educators who use virtual world for education, with Natalie Nussli, Kevin Oh and Gregg Perrier under support of the science circle.

We had 1st workshop of this project on 23 June. Greg gave a presentation and discussed about basic components for teacher training.

And we made is a demonstration area for Teacher Training to have an image of our project goal. These are still initial stage and we'll improve them gradually through discussion like today's workshop.

And today, we'll start 2nd workshop of this project. Today's speakers, Natalie and Kevin were published several papers about Teacher Training Plan. Their papers are start point of this project.

They'll give a presentation about their experiences of Teacher Training.

Then, Natalie and Kevin, please.

[08:06]

Summary

In our presentation, we will talk about the teacher training workshops that we have offered in the past four years. Our goal is to enable teachers to make informed decisions about the **usefulness** and classroom applicability of virtual worlds with a view to their own (future) classes. Based on the participating teachers (both general and special education pre- and in-service teachers), we have developed recommendations for the design of virtual worlds teacher training. We will talk about the **challenges** that the participating teachers have identified during their in-world experiences and fieldtrips to various educational regions in Second Life.

[08:06]

Overview of the Intervention

Virtual Worlds Teacher Training Intervention	Step 1: Preliminary Survey
	Step 2: Unique Affordances & Resources
	Step 3: Virtual Exploration
	Step 4: Lesson Plan Presentation
	Step 5: Written Reflection
	Step 6: Lesson Plan Analysis
	Step 7: Post-Survey

Figure 1. Overview of the intervention.

[08:09]

Challenges

Three key areas of concern were a **(1) lack of appropriateness, (2) distraction from learning, and (3) technical issues**. A strong trend was that the participants were very concerned about **inappropriate content** in Second Life. The participants' conclusion was that virtual destinations must be **appropriate for specific ages and grade levels**.

[08:11]

(1) LACK OF APPROPRIATENESS

- Unpleasant personal encounters with “strangers”
- Should an educational destination offer “private access”?
- Inappropriate content: ex. *Paris 1900*

[08:12] Chantal: Familiar issue

[08:12] Yan: Encounter with unpleasant person is also social skill challenge.

[08:12]

(2) DISTRACTION FROM LEARNING

(2a) Visual Stimuli: Distracting or Enriching?

While some participants found the virtual environment motivating and appealing because of the **rich visual stimuli**, others found it distracting for exactly the same reason.

[08:12] Kevin: good point Yan

[08:12] Chantal: Agrees Yan but it is something which conflicts with classes

[08:13]

Quotation

“As a teacher of elementary students, I feel strongly that all or most of my students would be so distracted by the visuals and more fun elements (running around, swimming, flying, etc.) that any academic or social benefits would be slight.”

Question: **How can we address such concerns?**

(2) DISTRACTION FROM LEARNING

(2b) Authentic or Streamlined?

The benefits and challenges of authentic (i.e., realistic) environments versus streamlined environments must be carefully considered. Authentic environments may be **too complex**, whereas streamlined environments may be **too simplistic**.

[08:14]

TECHNICAL ISSUES

The fear of technical issues emerged as a key factor why the participants reported being hesitant to incorporate virtual worlds into their own teaching.

The main technological problems identified were **bandwidth, firewalls and other IT policy issues, hardware requirements, and audio problems**.

[08:15]

How to prevent technical issues

- Use a hard-wired internet connection
- Use Skype for voice communication
- Ensure the support of a technical facilitator
- Very frequent updates of Second Life viewer (including doing a 'clean install')

[08:17] Oronoque: I use Firestorm instead of the SL viewer. Fewer updates and there is online support in SL almost round the clock.

[08:17]

Talk about Risks

- It seems that most of the previous research has focused on identifying benefits rather than risks. >> Identify the **potential risks** of using virtual worlds for students. These risks should be addressed in teacher training in order to have a balanced discussion of the usefulness of virtual worlds and to enable teachers to make informed decisions.

[08:18] Natalie: Yes, Oronoque. I agree. I like Firestorm too.

[08:18]

Teachers' Control over Students' Virtual Worlds Experiences

Discuss how much control on the part of the educator is necessary to ensure an effective learning experience in a virtual environment without excessively restricting the users' freedom of exploration and sense of active participation, which might lead to demotivation.

[08:19] Chantal: **We have an educator from Denmark whom uses SL and his own version of a VW to educate his autism and Asperger students...** it is very successful

[08:19] Natalie: That version of a VW would be very interesting for our teachers too.

[08:19]

SUPPORT

If possible, we recommend that the first few sessions be done with peers, the instructor, and a technical facilitator **together in a computer lab** to avoid frustrations over technical issues.

[08:19] Oronoque: **Since in education generally youngsters are being prepared to deal with the "outside world" perhaps being in a virtual world is a safer place to do that prep.** Easier to log out when you meet an SL griefer than to get away from a physical world predator.

[08:20] Natalie: Good point, Oronoque.

[08:20] Chantal: Good point, Oronoque

[08:20]

Ease of Access

Many of our participating teachers had concerns about the ease of access to virtual worlds. Would mobile access (e.g., "SECOND LIFE GO" for the iPad) to virtual worlds reduce issues related to hardware and software requirements, thereby increasing teachers' willingness to use virtual worlds?

[08:20] Chantal: :)))

[08:20]

Troubleshooting

Many participating teachers had doubts that they would be able to troubleshoot if they were teaching in-world. They recommend specific training in learning how to troubleshoot.

[08:21] Chantal: Points to the little doggy

[08:22] Chantal: she uses a phone connection at times

[08:22] Jes: Yes

[08:22]

Recommendation 1

Extensive virtual worlds training with an initial focus on navigation and communication. Then move on to more advanced features, such as *being able to access a video in the middle of a virtual world activity/game, downloading information from notecards, accessing equipment necessary for task fulfillment in their inventory (such as scuba equipment), having a private chat conversation, learning about sound parcels, and how to use camera controls.*

[08:24]

Recommendation 2

Share resources specifically tailored to the teachers' students, for example, lesson plans for students with social skills challenges or for students with emotional behavioral disorders (in special education).

Recommendation 3

Teachers learn how to locate age-appropriate and subject-related destinations by doing a practical task. In our experience, it has been **ineffective** to share resources with the participants **without incorporating a follow-up task.**

[08:25] Greg: **sounds like a role play lesson plan would be useful**

[08:25] Chantal: Patsy, wow that's a long time ago 😊

[08:25] Yan: so we need museum creators involvement

[08:26]

Recommendation 4

Use either a private region in Second Life that can be locked off to other users or a virtual world other than Second Life to avoid the risk of being exposed to inappropriate content even in regions with a rating of “general maturity.”

[08:26] Natalie: Greg, yes, **role play lesson plan would be extremely useful for individuals with social skills challenges**, for example, to practice turn taking.

[08:26] Yan: SL is safer than web site.

[08:27]

Recommendation 5

Striking a balance between authentic and streamlined environments is essential. The visual stimuli in 3D virtual worlds are very appealing to many users but can be confusing to others. Teachers may want to start with simplified regions and then move on to more ambiguous regions to practice the same set of social skills (specifically for special education).

[08:28]

Recommendation 6

The training includes interactive experiences with hands-on objects to observe visual outcomes of one’s actions, for example, injecting bacteria into mice in a virtual biology laboratory (*Genome Island*).

[08:29]

Recommendation 7

The training includes a discussion of learning effects (*when is instruction in virtual worlds superior to other modes of instruction?*)

Recommendation 8

Striking a balance between teacher control and letting students explore seems essential in order to take full advantage of the potential of virtual worlds to enhance students' motivation.

[08:32]

Recommendation 9

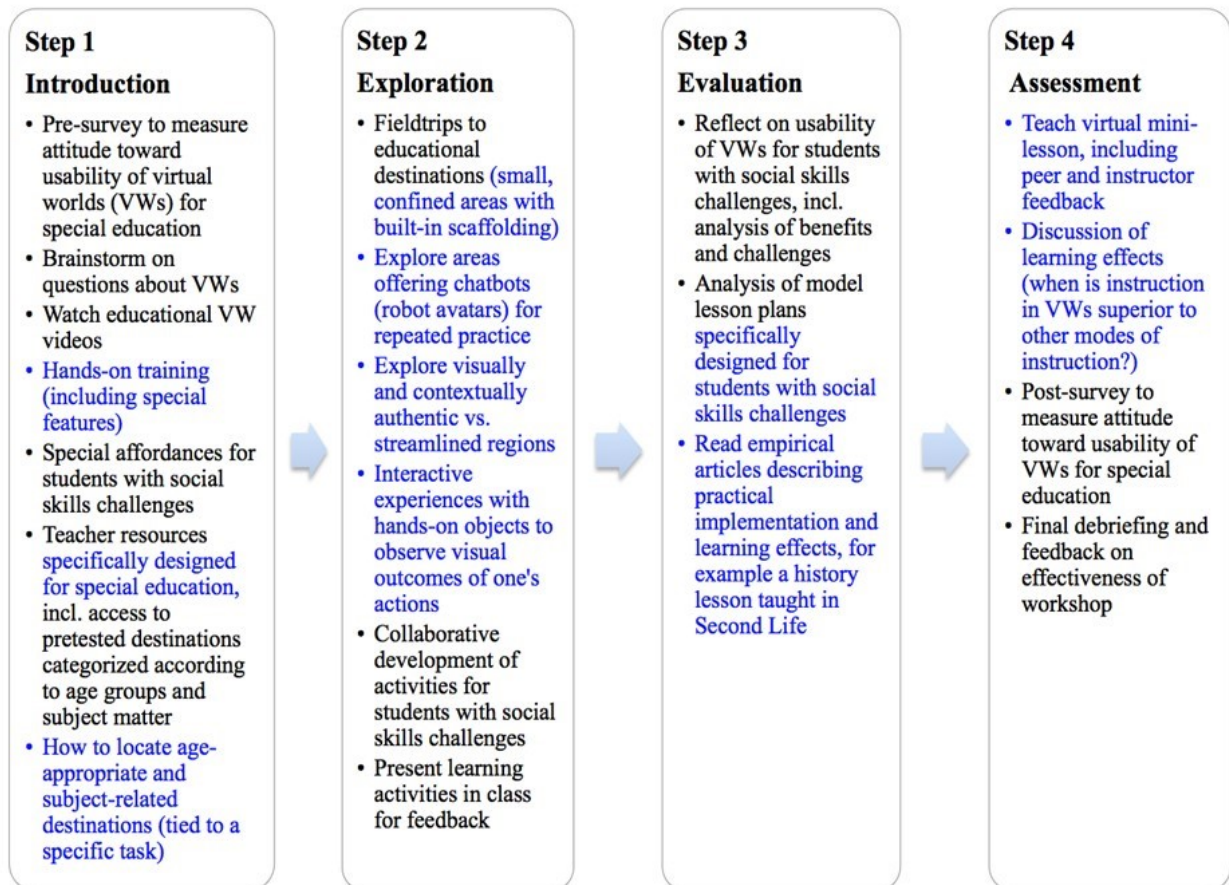
Start an online repository of lesson plans specifically designed for their student population, for example, for students with social skills challenges so that other educators will not have to start from scratch.

[08:32]

Special Education

Increased use of chatbots (robot avatars), in a safe, confined virtual space. Chatbots can provide 24/7 communication and interaction, thereby offering repeated practice opportunities for social skills training without the stress associated with face-to-face communication.

[08:33]



[08:34]

How to contact us

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Publications in the Field of Virtual Worlds

Nussli, N. (2014). *An investigation of special education teachers' perceptions of the effectiveness of a systematic 7-Step virtual worlds teacher training workshop for increasing social skills*. Doctoral Dissertations. Paper 113.
<http://repository.usfca.edu/diss/113>

Nussli, N., & Oh, K. (2014). Effective teacher training in the use of three-dimensional immersive virtual worlds for learning and instruction purposes: A literature review. *Journal of Technology and Teacher Education*, 22(2) 213-241.

Nussli, N., Oh, K., & McCandless, K. (2014). Collaborative science learning in three-dimensional immersive virtual worlds: Pre-service teachers' experiences in Second Life. *Journal of Educational Multimedia and Hypermedia*, 23(3), 291-322.

Oh, K., & Nussli, N. (2014a). Teacher training in the use of a three-dimensional immersive virtual world: Building understanding through first-hand experiences. *Journal of Teaching and Learning with Technology*, 3(1), 33-58.

Oh, K., & Nussli, N. (2014b). Challenging, eye-opening, and changing. U.S. teacher training in Korea: Creating experiences that will enhance global perspectives. *Journal of the Scholarship of Teaching and Learning*, 14(4), 67-87.

Oh, K. & Nussli, N. (2014c). Technology-enhanced language learning: A case study of a global classroom in Second Life. *International Journal on Advances in Life Sciences*, 6(3&4), 240-251.

[08:34] Yan: Thank you!

[08:34] Camie: Very interesting, thank you

[08:34] Greg: **The K-12 environment offers special challenges for ed in SL**

[08:34] Oronoque: Thank you.

[08:34] Wisdom: I missed this -- will these slides be available?

([http://jogrid.net/abyss/Kevin and Natalie August 23 2016.pdf](http://jogrid.net/abyss/Kevin%20and%20Natalie%20August%2023%202016.pdf))

[08:35] Greg: **Most K-12 have moved to OpenSim or Minecraft**

[08:35] Arianne: May I ask you a question, do you need permission of parents to use VW in class?

[08:36] Camie: When you're saying VW are you referring to SL or to OpenSim as well?

[08:36] Natalie: Greg, thank you for the suggestion. I think that we might have to explore Open Sim. Yan has been kind enough to share a list of educational regions with us.

[08:36] Arianne: Doesn't they want some contro; like parental control ?

[08:36] Greg: I know of two high schools in the USA that use SL

[08:36] Greg: would be useful to visit them

[08:36] Yan: I also think OpenSim suits for K-12.

[08:36] Chantal: In OpenSim you have all control over your students.

[08:37] Yan: SL is for social skill challenge including encounter with bad person.

[08:37] Camie: So you're training teachers to bring young children into SL?

[08:37] Greg: and no adult content in OpenSim yet

[08:37] Arianne: Did you try remote sensing camera for watching pupils?

[08:38] Natalie: Arianne, we have not tried that yet. We would have to explore this.

[08:38] Yan: Teach how to avoid sexual relation

[08:38] Natalie: **Does anyone know if there are lesson plans specifically designed for special ed students?**

[08:38] Greg: What age are the students?

[08:39] Yan: depend on age

[08:39] Camie: Regarding technical difficulties, **I'd suggest using Singularity viewer - especially for users without powerful computers and/or very good internet connection**

[08:39] Natalie: Camie, thank you for the suggestion. I will try it out.

[08:40] Wisdom: Several old timers in SL who are taking my course have suggested Singularity as well.

[08:40] Greg: There is a group that works with handicapped in SL

[08:40] Camie: **As for mobile - I use Lumiya for Android**

[08:40] Greg: not sure how broadly they define that

[08:40] Arianne: ID & pass words, if you give it to them, they can try SL at home , what do you think it?

[08:40] Natalie: **Does anyone know of destinations that offer social skills practice with chat-bots for repeated practice?**

[08:41] Natalie: Camie, thanks for the suggestions with regard to mobile access to VW. I will try those out too.

[08:41] Camie: **In case anyone needs this: <http://lumiyaviewer.com/>**

[08:41] Arianne: So, can they do home-works at home? lol

[08:41] Yan: same problem with internet at home

[08:42] Camie: **For young children, I find Sim-on-a-Stick a very interesting option**

[08:42] Arianne: yes both cases

[08:43] Arianne: **We need learning of parents, in deed**

[08:44] Yan: depending on use case. which is suit for closed environment or open environment

[08:44] Wisdom: say more about sim on a stick? uses?

- [08:44] Arianne: **I mean before educate students. We need to educate parents.**
- [08:45] Greg: **The k-8 schools in Virginia are using Minecraft a lot now**
- [08:45] Natalie: Camie, could you tell us more about Sim-on-a-Stick?
- [08:45] Greg: so might be something to explore
- [08:45] Camie: @Lissena, that would be a whole presentation lol
- [08:45] Wisdom: interesting that in my course for professionals they are bonding with their kids when kids are helping them enter SL
- [08:45] Yan: usage of 3D environment only is enough at stand alone
- [08:46] Wisdom: not part of the course--out of desperation on the parents' part :)
- [08:46] Camie: Oh, sorry, Natalie, didn't see your line there
- [08:46] Greg: :))
- [08:46]

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Nussli, N. (2014). *An investigation of special education teachers' perceptions of the effectiveness of a systematic 7-Step virtual worlds teacher training workshop for increasing social skills*. Doctoral Dissertations. Paper 113. <http://repository.usfca.edu/diss/113>

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- [08:46] Yan: Finding with collaboration is also enough at OpenSim
- [08:46] Chantal: **The Science Circle has offered a couple of interesting presentations about K12 in VW's...** You can find some among the media files <http://sciencecircle.org/science-circle-pdfs/> and others on our Youtube page <http://sciencecircle.org/recent-sc-videos/>
- [08:46] Kevin: that's interesting Wisdomseeker
- [08:46] Camie: <http://simonastick.com/>
- [08:47] Natalie: Camie, no worries. Thanks for your input. Lots of things to try out.
- [08:47] Wisdom: Thank you Camie
- [08:47] Kevin: Kids are actually faster at learning new technology

[08:47] Natalie: Chantal, thank you for the link. I will download the presentations.

[08:47] Camie: **Sim-on-a-Stick (SOAS)** uses OpemSimulator technology

[08:47] Camie: It works as a private simulator in your PC

[08:48] Camie: You can then save your environment and share it or upload it to a platform like Kiltely

[08:48] Camie: <https://www.kitely.com/>

[08:48] Greg: **Beth Ghostraven (avatar) can tell you a lot about ed in Minecraft.** She uses it

[08:49] Greg: **Clowey Greenwood (avatar) has a big program for biology for kids in Open sim**

[08:49] Arianne: Less fun things for students on OpenSim is a problem, I thought

[08:49] Camie: **SOAS allows kids to work/create their own environments and to experiment in a safe way**

[08:49] Camie: SOAS is not connected to the Internet

[08:49] Natalie: Thank you, Camie and Greg. for your suggestions. Kevin Oh and I definitely need to explore a variety of virtual worlds given that our experience is limited to SL.

[08:50] Camie: An entire island can be saved as a OAR file

[08:50] Camie: OAR - Open Archive Region

[08:50] Yan: by the way, you can read todays presentation at http://jogrid.net/abyss/Kevin_and_Natalie_August_23_2016.pdf

[08:50] Camie: yw

[08:50] Natalie: Thank you, Yan, for sharing the link.

[08:50] Camie: Thanks for the link, Yan

[08:51] Yan: and reference paper at [http://jogrid.net/abyss/Oh_and_Nussli\(2014\).pdf](http://jogrid.net/abyss/Oh_and_Nussli(2014).pdf)

[08:51] Arianne: Bring students to VW is similar to bring them to theme park , almost same risks we owed .

[08:51] Yan: please read later

[08:52] Natalie: Yan, did you want to talk about "next actions"?

[08:52] Yan: yes!

[08:52] Yan: I want to ask you next action!

Yan: (voice chat) Come on everyone to demo area.

At first, we need to define several use case (A. Presentation and Discussion, B. Achievement's archive in 3D space, C. Multi-sencing Immersive Experiences, D. Discovery leaning by collaboration, E. Opportunity of social participation, F. Special training and experiments),

Then, I want to explain advantages for each use cases and their challenges (Technical problems, How to control and guide students in VW, How to protect students from threats, etc.) and suitability for various platforms (SL, OpenSim, SOAS, Minecraft, etc.).

[08:53] Arianne: Students have right for know all about the world we can help it by every stuff

[08:57] Wisdom: working with older people, many of the same issues come up --so this helps my thinking too

[08:58] Greg: a bit

[08:58] Natalie: Yes, Yan, it's just fine.

[08:58] Kevin: yes...thank you

[08:59] Natalie: Thank you, Yan, for all your work.

[08:59] Wisdom: These are very useful

[08:59] Kevin: Yes...I agree

[08:59] Greg: Yes wisdom, you probably encounter similar issues

[09:00] Wisdom: I have gotten very helpful feedback too

[09:00] Natalie: Yan, thanks for uploading the slides for us.

[09:00] Natalie: We got a lot of input from everyone. Thank you.

[09:01] Arianne: We need more skill than students trained by many games lol

[09:01] Yan: I need to make tutorial of how to give a presentation

[09:01] Natalie: Yes, Yan. That would be great. :)

[09:02] Yan: Then, one hour passed

[09:02] Yan: Is there any question or proposal?

[09:02] Wisdom: Using the tools available here -- a key to feeling comfortable as a teacher?

[09:03] Wisdom: when I first gave a presentation using some of them, I felt I had arrived :)

[09:03] Kevin: I agree...with time teachers can feel more comfortable

[09:03] Natalie: Greg Perrier talked about machinima last time. For our pre- and in-service teachers, it would be extremely helpful to see "real" lessons taught in-world.

[09:04] Arianne: I think enjoying this great world by ourselves is a best way for learning and education onto students

[09:04] Greg: i think having some example lessons would be useful

[09:04] Kevin: thank you all for this opportunity...I gotta run to my next meeting

[09:05] Natalie: Thank you, Kevin. Bye.

[09:05] Greg: take care Kevin

[09:05] Yan: thanks

[09:05] Wisdom: When is the next meeting?

[09:05] Yan: (voice chat) I need to search next speaker. **I'll have a tour guide of demo area after reflecting past presentations in next month.**

[09:05] Camie: Thank you for a very interesting presentation

[09:05] Patsy: Thank you as well!

[09:06] Natalie: Thank you for coming and for your valuable input. Your suggestions and input will keep us busy for a while.

[09:06] Wisdom: Thank you for the work you are doing

[09:06] Wisdom: as the grandmother of a special student

[09:07] Greg: Thank you Yan and Natalie

[09:07] Arianne: Thanks to your nice arrangement Yan

[09:07] Greg: I need to head out,

[09:07] Wisdom: I took an LM for here!

[09:07] Chantal: Thank you Yan and Natalie 😊

[09:07] Camie: Thank you very much!

[09:07] Wisdom: bye for now

[09:07] Patsy: Thank you. Bye bye

[09:07] Natalie: Bye everyone. Take care and see you soon.

[09:08] Arianne: Thanks Natalie, for your great presentation

[09:08] Jes: waves paw, thanks!

[09:08] Camie: Bye everyone