





Guidelines for Educators (Project Deliverable no. 2)

Overall Summary

This document is an attempt to provide guidelines and recommendations for educators and administrators who are considering setting up learning events or conducting language learning modules in 3D environments for the first time. It draws on information and experiences from all phases of the Avalon project.

The first section, "Before you get started", deals with some of the learning philosophical and practical issues that motivate the use of virtual worlds from a pedagogical point of view. The second section, "Becoming Technology Ready", deals with issues such as choice of virtual world. Section 3, "Administrating your Space", deals with issues related to the managing of a virtual world space. Section 4,"Tools and Skills in Second Life", includes more practical hands-on guidance on specific technical and administrative issues related to Second Life in particular. Section 5, "Checklist", summarises the most important steps when setting up to teach in virtual worlds. Finally, Section 6, "Glossary", consists a glossary of key terms.

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1. Before you get started -Why Virtual Worlds?

Using virtual worlds for language teaching/learning is in many ways quite complex and often very different from more traditional forms of teaching, face-to-face or online. Although we would argue that moving into a virtual world learning space as an educator is an extremely rewarding experience, we would also like to point out that it is not the same thing as adopting a new version of a word-processing software or a new learning managing system. Teaching language in virtual worlds often requires a new way of thinking in terms of how to use of the environment in the learning process, and demands a completely new set of professional skills (in addition to the ones that you already possess). We would thus argue that it is thus not something that you simply "throw into a course" and hope for the best. Instead, we encourage any educator to ask herself the question "why do I want to use the environment in my language teaching?" before getting started. If no good answers to this question come up, then it is perhaps time to find out more about the possibilities the environments offer. If, after this, you still cannot find any good reason to use a virtual world environment in your particular course design, it is perhaps not the solution you are looking for. If, on the other hand, the affordances of a virtual world – the ability to connect with learners and educators from around the world in a three dimensional virtual space where you can manipulate objects and build environments together, and where you can communicate in the target language using voice and text - open up new possibilities for language learning, then it may be a step worth taking. This document is intended to help you on the way.

New Learning Paradigms

The workplace has seen many changes in recent years. In many parts of the developing world, the "factory" metaphor to describe a workplace no longer applies. The typical workplace in business or industry instead very likely contains a small group of people (very often dispersed geographically) connected to information through various information communication technologies. The people are very likely occupied with solving problems by gathering facts and applying their special expertise and experience to these, and by communicating and negotiating their findings with others. In response to this situation, society is seeing changes in the traditional learning paradigm too. Over the last decades, educational strategies in schools and universities are gradually transitioning from the lecturer-listener approach to problem-based-learning approaches, where the student is more central in the learning process and more active in contributing to the content of the learning event. Such approaches are based on theories of Social Constructivist Learning (Vygotsky, 1978), and it is argued they lead to more meaningful learning, allowing recipients of learning to apply new knowledge to situations outside the classroom. Virtual world environments are in many ways well adapted for this type of learning. They offer good tools for communication and creative activities where a 'learning by doing' approach is arguably easier to implement than in real life where such approaches can be extremely costly and logistically complex. In language learning contexts, they are of particular interest as the following excerpt illustrates:

"In bringing together learners from different language backgrounds, on-line environments, such as SL, increase the scope for cross-cultural interaction to the extent that the target language becomes the only viable option for meaningful communication. If, in addition, tasks are designed in such a way that the information needed is contained in the knowledge capital of the student group so that the students themselves become the source of the course content, two of the potential problems related to second language learning situations are addressed: motivation for using the foreign language and subject relevance." (Deutschmann, Panichi & Molka-Danielsen 2009).

New Learner Profiles

In addition, there are new challenges presented by the changing profile of the student population. Today, we see a growing number of students who are in fact life long learners, with the need to combine education with their work lives. For these students, it may not be possible to be a student 100% of their time, and they may even need to access educational opportunities that are not local. Thus, society sees a growing demand for distance education, and many educational institutions find that providing such programs to be a strategic necessity. A great challenge is thus to provide a collaborative and creative setting even in those cases when students a geographically dispersed.







Some of aspects of this challenge are highlighted in the following excerpt:

"The rapid development of Information Technology (IT) and the World Wide Web (WWW) brings about new possibilities for distance collaboration, not least due to the development of Web 2.0 applications such as wikis, blogs and social - network sites. The use of IT and WWW has certainly also affected the higher education in general and distance education in particular. Distance education is now often using web-based material and applications; concepts like online education and elearning are now used more frequently (Hrastinski, 2007; Garrison & Anderson, 2003). In addition, the number of students enrolled in distance courses is significantly increasing (Hrastinski, 2007). At the same time universities are making great efforts to further develop their e-learning systems in order to provide students with adequate learning environments. In spite of these actions, it has been shown that online courses often have low retention rate (Carr, 2000; Simpson, 2004). One of the reasons for this may be the lack of the social dimension in these e-learning systems, since students do not actually meet fellow students face-to-face and are therefore not able to communicate spontaneously and in real time (Lombardi & McHill, 2004). It has been discussed that the use of Web 2.0 applications may offer new opportunities to improve online/distance education (Anderson, 2007). In order to facilitate the social dimension, the most promising applications are the Virtual World environments (Dickey, 2003)." (Creelman, Petrakou, and Richardson, 2008)

While a greater support of distance education must be addressed by both the educational institution and by the teaching team in a number of different ways, we would argue that the use of virtual worlds can go towards creating a common space for isolated learners and a sense of presence which is hard to match with other e-learning tools. This social presence is arguably a key motivational issue for online language learners in particular who want to use their newly acquired language skills in real communication.

2. Becoming Technology Ready

So having decided that virtual worlds are places for you and your institution to pursue language teaching, what is the next step? Where do you start? Here we would strongly advice you as an educator or administrator to first become familiar with the environment you intend to use but before you can do this, however, you have to decide which virtual world you want to use.

Deciding what virtual world to use

In the Avalon project, we have primarily been using Second Life as learning environment. There were several factors that made us decide on this particular environment:

- · Some of us had used the environment previously and were familiar with it;
- We had a reasonable budget so that we could buy our own space;
- The environment was freely available for our students (but not to us as creators of new environments);
- Some of us had extensive contacts with an educator community that operated in Second Life and that we could exchange experiences with;
- The environment housed an active community of regular users which was important for our ambitions of getting students to communicate with peers;
- We deemed that our students had reasonably good access to high speed connections and modern computers;
- The design and culture of the world did not dictate what we could or could not do. Unlike worlds such as World of Warcraft, for example, there was no game design that we had to adapt to;
- The affordances of the environment met our needs. These included communicative tools such as voice, chat and IM, as well as the possibility of movement, and creating object and environments that we needed for our purposes.

This list illustrates the sort of questions that may be of importance when you decide what world to use. For example, had we been addressing our projects non-adults, Second Life would not have been a realistic alternative since there is an 18-year age limit in Second Life. Similarly, if we had wanted to use the game design of the world in order to pursue our learning goals, Second Life would not have been a good option since it does not have such an in-built design. Also, the fact that many of us were familiar with the environment was an important contributory factor. In this way, we had a realistic picture of what







we could or could not do in the environment. One of the most important factors to consider, however, is the existing community in the world. In the case of Second Life, the fact that there already existed an active community of educators, which we could exchange experiences with, was extremely important.

Different worlds have different affordances and it is beyond the scope of this document to give a comprehensive review of all the worlds that are 'out there' but the following links may help you in this pursuit:

- A brief comparative study of some environments conducted under the project: <u>http://avalonlearning.pbworks.com/WP4-4+Comparative+study+of+3D+environments</u>
- Virtual World list with recommendations and links to different worlds:
- <u>http://www.virtualworldsreview.com/info/categories.shtml</u>
 Some virtual world reviews: http://www.virtualworldsreview.com/
- Virtual Worlds Online Review Center, which gives a fairly good overview of the types of worlds available: <u>http://www.virtualworlds3d.com/</u>

Note that since we primarily used Second Life in our project, most of what follows is specific for Second Life. The general principles, however, are applicable to most worlds.

Getting to know the community

In the process of getting to know a virtual world and what is happening in it, we strongly recommend that you try to get to know the community of educators that are working in the environment. There are many active groups that will be invaluable for support and contacts as you are developing your ideas. Getting to know the community can of course be done in many ways: talking to others who are interested in the same way of working in your close vicinity (at your own university, for example) and asking to be invited to events; at conferences such as EuroCall there are often special interest groups related to virtual worlds; there are many international communities with active mailing lists such as the SLED group (second life educators); you can always joint he Avalon network on the "NING" that we have created for this purpose:

- Avalon NING: <u>http://avalon-project.ning.com/</u>
- SLED: https://lists.secondlife.com/cgi-bin/mailman/listinfo/educators
- EuroCall SIG: <u>http://www.eurocall-languages.org/sigs/vwsig.html</u>

Finding a home and moving in.

Deciding on what in-world space to conduct your teaching will depend on a number of practical issues. These may include economical aspects as well as pedagogical issues. If your course design is such that communication is primary and you have few building needs, for example, it may be enough to use an already existing space. If, however, you want to build your own environment for the learning activities you will need more control of the environment and renting or buying space may be the only option. When deciding what type of space you need it is thus a good idea to first examine the type of language learning activities that you are to conduct. For this purpose the Communication and Language Learning Models developed under Avalon may be of use:

http://avalonlearning.pbworks.com/Communication-and-language-learning-models

However, for the individual learner, either as teacher or student, to truly get started in SL it is important to have a virtual home, a place of one's own to learn and experiment. In spite of this, it may not be realistic to buy land initially. For those that want to get started all the same we have provided a list of spaces which are more or less open for educational activity given that you have reached an agreement with the owners of the spaces in question. Click on the following link for a list of educational Second Life environments with descriptions and contact details:

http://avalonlearning.pbworks.com/w/page/List-of-Second-Life-Environments

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Should you decide that you need your own land there are two options: buying or renting. Before deciding on this it is important to consider some key issues related to your project such as:

- Project goals
- Stakeholder groups and their needs
- Sustainability
- Form of deliverables (i.e. shared classroom)
- Scope of deliverables (how many will use a space)
- Direction of deliverables (is the activity or development in SL for internal private groups or external organizational communication purposes)

Renting Land

To rent a land has some advantages and many disadvantages. It is great for a small project with a rather short timeline. It is low cost and is, in this sense, a good way to get started. The disadvantages is that, just as in the real world, there are many unserious estate managers, and you could easily be fooled if you don't know who you are talking to and how much you should expect to pay. The best advice if you want to rent is to spend time talking to people and companies "in world" (in SL) that you trust and that already rent land. Also get prices from various land owners and make sure you establish a contract before you commit. Further, some sims have a set of rules that you have to obey. For example, some sims are only for residential use and the owners do not wish to rent out to commercial use and vice versa. Another aspect to consider is the neighbourhood that your sim is located in. You may not want a strip club as your closest neighbour! Also there is a big difference in performance on the sims as well. Some of the sims are placed on older servers, which will slow down performances. Check this out before deciding to commit.

Buying Land

Buying a sim has many advantages. You are free to decide the use of the whole sim. You get listed in the search engine on the map, so people will find you easier, and you have enough prims to make the sim look as you imagine. Most rented places have a very limited amount of prims. Also, you do not risk getting thrown out, getting neighbours that do not fit in with your ambitions and so on. As sim prices have dropped the last few year, the initial cost is no longer so much higher than that of renting. So if you intend your SL presence to last for a while, and do not have a strict time frame on your project, it would be recommendable to buy a sim. This is done for general purpose purchases by going to the Land Auction private for existina land or to the Land Portal for purchasing new regions (http://secondlife.com/land/index.php). From the date of order it normally takes from two-four weeks until your land is delivered. Educational sims have up till now been half price that of regular sims, but this is about to change as this document is being written, so double check on this issue. To achieve educational status, you need to be able to prove that your company or institutions are in fact an educational institution. Private persons cannot buy this type of land. Documentation is done by faxing documents to Linden Lab directly. The educational sims are not sold or purchased through the regular land portal. Educational sims cannot be used for commercial purposes.

Designing your space

The creation of a virtual world environment can be done by yourself, but this requires extensive knowledge and practice and takes time! Another alternative is to hire builders to actually do the programming of the 3D design. However, this does require ongoing communication with the builders in the design process. The educational institution must have clear objectives about what the space is to be used for, and must have an understanding of the profile of its customers (the students). It is often advisable that the building specifications are not too detailed, because often the learning objectives can be achieved with many types of visual representations and the teacher may not know (or wish to know) the building constraints of the environment (like SL).

Some questions you may want to ask yourself before you get started are:

How do you wish your sim to look? Should it be a replication or a representation? Should it be something completely new? Is there a central theme that you want to build around?







- How many participants will be meeting at once? Will you have many small events going on in parallel or fewer big events in large spaces?
- Do you need smaller private meeting spaces, group spaces and/or classroom/presentation spaces?
- Do you need a public place to build such as a public sandbox?

One example of an existing environment is the Avalon island built for this project. The design on the whole is very open with a minimum of walls and closed buildings making it easier for beginners to manoeuvre without bumping into walls etc. There is a large open welcome area where students can meet up at the beginning of a course. The environment is flexible and different spaces can be used for different activities. At other times you may need more purpose built spaces. For example, we built a Business Barn to be used with a course to teach language that engages the use of language that is typically used in a business work environment. It also has a seminar room with chairs for an audience and a media screen for presentation of materials. This can be used for activities such as the "Dragon's den" role play scenario (see Business course description) where students can present business ideas before a panel of judges. Similarly, the hotel on Avalon was built especially for a tandem course on catering English. On Avalon there are also several student huts, which can be used as private spaces for group work. They are sound proofed so that each group can talk without outside interference.

Another environment is Kamimo Island, which has been used for various language courses since 2007. The environment on Kamimo Island caters for many different types of learning activities: there are a number of more "traditional" virtual classroom with chairs facing a presenter and an overhead media board, but also other non-traditional spaces, such as a campfire out in nature.

Below you will examples of some of the types of environments we have been using during the Avalon project.



Figure 1. Open Design of Kamimo and Avalon









Figure 2. Open welcome area on Avalon



Figure 3. Lecture area on Kamimo



Figure 4. Meeting room on Avalon









Figure 5. More Informal area- camp fire on Kamimo



Figure 6. Stage for bigger events on Avalon



Figure 7. Hotel on Avalon built especially for the catering course.









Figure 8. Business barn built for the business English course on Avalon. Note the seminar section and the group areas.



Figure 9. Student huts on Avalon. These huts are sound proofed and can be locked for one particular group during a course. It thus provides a private space for group work.

3. Administrating your Space

Once a virtual "classroom" is adopted, the next logical challenges have to do with administering the course. The extended administrative abilities of Learning Management Systems do not for the most part exist within Second Life. However, the educator will be concerned with issued such as: attendance, sharing information, and evaluation of work. We will address these issues in this section.

Some of the virtual classroom management tools requested by our teachers were, "IMs, teleporting students, shutting students up, and kicking students out of the course." This was obviously a teacher that expressed a need to control a seemingly wild environment. Many of these issues can be managed through the use of "groups" within SL.

Group Management

Groups are used to manage and give access to resources in Second Life. If you right click on your own avatar, it reveals the Group tab. Selecting the Group tab give you information to the Groups of which the avatar is a member. Anyone can create a group in SL for 200 Linden dollars. The owner of a group can decide on the roles and abilities of that group. The owner can decide to let membership of the group be







open and free to join, or limited through invitation only. A group may be used to manage a sim (virtual land) and the "abilities" to work with all or parts of the sim, called "parcels" of land and with objects on a given parcel. Objects may be deeded to Groups for ownership or control of those objects. The Avalon Guardians is a SL Group that is listed as the owner of the AVALON Learning sim (land). General sim information is always found in the SL client window under the name of a sim. Under the name AVALON Learning, the sim is listed as "Group Owned".

So, let us begin with a list of abilities. As said above, the owner can create "roles" within groups. If we take the group called "Avalon Guardians" as an example, there is a role called "Avalon Educator". This role has certain abilities associated with it. The "abilities" assigned to "Avalon Educator" are listed below. We have 28 educators on the AVALON Project with these abilities. This allows educators to manage who can access the teaching area (parcel) such as who can stay or who must leave (eject or freeze), allows for the setup of meeting points (landmarks), allows teachers to build 3D objects to be used in courses and to share them with others (deed objects), allows them to set media settings to control streaming media and presentation tools on the parcel, and it allows for group and individual communications (group notices, proposals and chat through IM). These are not all of the abilities that could be assigned. Some abilities are usually reserved for the owner of the Group, such as editing terrain.



Figure 10. Group Management interface.

Examples of things you can do with group management:

Membership: Eject Members from this Group Parcel Settings: change music & media settings Parcel Powers: Always allow 'Fly'







Parcel Powers: Always allow 'Create Objects' Parcel Powers: Always allow 'Create Landmark' Parcel Powers: Allow 'Set Home to Here' on group land Parcel Access: Manage parcel Access lists Parcel Access: Manage parcel Ban lists Parcel Access: Change parcel 'Sell passes..' settings Parcel Access: Eject and freeze Residents on parcels Parcel Content: Return objects owned by group Object Management: Deed objects to group Notices: Send Notices Notices: Receive Notices and view past Notices Proposals: Create Proposals Proposals: Vote on Proposals Chat: Join Group Chat Chat: Join Group Voice Chat Chat: Moderate Group Chat

4. Tools and Skills

Apart from the issues listed above there are a number of different skills you may want to acquire when teaching in a virtual world such as Second Life. The most obvious, include being able to move and communicate and instructions for these basic skills can be found under the Avalon wiki: Introductory Multimedia Kit for Learners:

http://avalonlearning.pbworks.com/w/page/7682825/Introductory-Multimedia-kit-for-learners

Apart from these basic skills there are a number of other skills and tools that you as an educator may want to be aware of. In this document we will attempt to list some of these in alphabethical order but note that the list is by no means comprehensive:

Building

Building in Second Life involves quite complex skills and a complete coverage is beyond the scope of this document. Building objects and scripts may however be an important part of the design of a course and if this is the case educators should be prepared to spend a fairly substantial time familiarizing themselves with the Linden script which is used for building. Note that anyone can practice building in so-called sand-boxes. Just make sure that you clean up after yourself! A comprehensive overview on how to build in Second Life is found here:

http://wiki.secondlife.com/wiki/Building_Tools

Displaying images on white boards and HUDS

If you want to display an image (a power point slide, for example) on a white board just drag and drop the image file (found in the "Textures" folder under my inventories) onto the white board. A prerequisite for this is of course that you have the rights to do so (the correct group membership etc).

HUD-tools (Heads-up-Display) are often used for doing longer presentations. This tools allows you to upload a number of slides which then can be displayed in sequence (by clicking) when you are close to a white board. The following instructional video is a tutorial on how to use a PowerPoint presenter with HUD:

http://vimeo.com/7523171

Instant messaging- IM

Sometimes it is a good idea to move from the public chat to send private messages. This may be merited when you want to say something to one student only (like giving them personal guidance which may be sensitive), or if you are having a parallel conversation that may disrupt the public chat conversation. IM (Instant Messaging) in Second Life offers you the opportunity to do this. To send an IM, simply click on the avatar identity in your 'people' list and click on IM and type the message into the available window.







Holodecks

One 3D tool know as a "holodeck" will allow the teacher to call up different scenarios within a box. Basically this means that you can unwrap an entire scene and space design at the click of a button. Under the Avalon project this technology has been used in quite a few courses. The technology involved is quite complex and again beyond the scope of this document but you will find more information on the following site:

http://wiki.secondlife.com/wiki/Holodeck

Recording in-world events

Often it is necessary to have a record of what has happened during a learning session. You may need this for examination purposes of to remind yourself of what has been said etc. Also it may be useful to keep a record for development and evaluation processes, or for research. A general rule, regardless of what you are recording, is that you should always inform participants that you are recording them and obtain their consent. The easiest way of recording what happens during a session is simply to keep a chat-log from the event and take some snap shots. This is often enough, to remind you of the general events that went on during a session. Instructions on how to take snap shots and how to save a chat log in Second Life can be found by clicking on the links below:

Chat logs:

http://wiki.secondlife.com/wiki/Linden Lab Official:How do I log chat and instant messages

Taking snapshots:

http://wiki.secondlife.com/wiki/Snapshot_Help

Recording in Second Life:

At times it is not enough just to save chat-logs. You may also want a recording of what is being said and done. Filming in-world can also be the starting point for different student tasks, such as the creation of a short documentary. We have created a resource for recording in Second Life under the following link: http://avalonlearning.pbworks.com/w/page/33047585/Machinima%20-%20Recording%20in%20Second%20Life

Setting up in institutional contexts – firewall issues etc

Setting up Second Life in an institutional context is often more complex than doing it from a private computer. There are often problems with firewalls and old computers. On the following page we have collected some of these main issues:

http://avalonlearning.pbworks.com/w/page/7682863/Troubleshooting-in-institutional-contexts

SLurl

A SLurl is essentially a landmark in Second Life which allows avatars to enter the virtual world at a particular location. This is particularly useful at the beginning of courses when you want to direct students to a welcome area for example. In order to create a SLurl which you can pass on to students in viewer 2, do the following:







1. Click on the 'i' (information icon) in the region display (see Figure 11 below)

nicate	World	Build	Help							
	AVALON	Learning	, AVALON	Learnir	ng - Mo	derate	Μ			
										click here to I
						1	WORLD	MAP		
			_ ·				NW			N

Figure 11. Region display on top of screen in viewer 2

2. Click on the 'map' icon at the bottom of the place profile information which opens up when you click on the 'i' – icon. (see Figure 12 below)



Figure 12. Place Profile with 'map' icon at the bottom of the screen







3. Click on the 'copy SLurl' icon (see Figure 13 below)



Figure 13. Click on 'Copy SLurl' and paste where you need it.

Teleporting

Teleporting is a very useful basic skill that can help enourmously when one is attempting to gather students etc. As an educator it is thus particularly important to learn how to offer avatars a teleport. This is reasonably easy in viewer 2. Simply click on the identity of the avatar in your 'people' list. Click on the 'i' con and then choose 'IM'. In the menu that now opens up choose 'Teleport' (see figure 14 below). A message will now be sent to the avatar in question that you are offering them a teleport. If they accept this, they will arrive at your location very shortly.



Figure 14. Choose 'Teleport' once you have clicked on the 'IM' icon.







Transferring Money

Sometimes you need money in Second Life (in order to upload images for example) and it is thus useful to know how to give another avatar money (to students for example). This is relatively easy. In viewer 2, you simply click on the avatar name in your friends list (or in the "Nearby" list). Click on the 'i' (information) icon, and on the IM-icon. Choose the 'pay' alternative. Enter the sum and press 'pay'. See Figure 12 below.



Figure 12. Transferring money to another avatar – just press pay

Uploading files

If you want to display images or documents in Second life, you first have to upload the files in picture format (.jpeg, .tiff, png. or .gif- formats for example). So, if you are uploading a powerpoint presentation, for example, first convert the presentation to an image format and then upload the slides by clicking the "build" tab and choosing "upload". The uploaded images will be saved in the textures folder in your inventory. Note that each image uploaded costs 10 Linden dollars, so you will need some in-world money.



Figure 11. Uploading files in viewer 2, Second Life







Finally- an extremely useful resource for Second Life users

Much of the information linked in above is taken from the Second Life Wiki, where you will find the answers to most of your questions:

http://wiki.secondlife.com/wiki/Main Page

5. Checklist

Questions to ask yourself:

- 1. Does my learning need a virtual world type environment, or would the design benefit from this type of environment and its affordances? Yes- go to 2. No- don't bother.
- 2. What virtual world would best fit my situation? Am I teaching adults or non-adults? What bandwidth do they have access to? Do I want to use an existing game design or not? Do I need building affordances? What communicative affordances do I need? What economical restraints do I have?
- 3. Do I need my own place to control long term or will any place do? Is my project long-term or short-term? Should I buy or rent?
- 4. Do I need control over my space in terms of whom I let in and what they can do? Do I have this control and the skills needed to exercise it?
- 5. What added skills/tools are needed in my learning design?

6. Glossary

We have attempted to provide a glossary of the most important terms used in this document and others in our wiki under the following page:

http://avalonlearning.pbworks.com/w/page/33196193/Glossary

References

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