

Communication and Language Learning Models (Project Deliverable no. 1)

Overall Summary

This document is intended to present some of the overall frameworks and models of the language learning scenarios that have been used under the Avalon project. Part 1, "Introduction-Socio-Cultural and Communicative Approaches to Language Learning", summarises some of the theories that constitute the starting points for the designs. Part 2, Affordances and second Life, explains how the possibilities of Virtual Worlds and Second Life in particular allow for different models of language learning. Part 3, Generic Issues, take up some general best practice aspects that have been included in all courses under the project. Part 4, Models for Task Design, gives an overview of different models of design. Finally, Part 5, Being a Teacher in SL, takes up some of the specific issues you should think about when teaching in virtual worlds.

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Overview

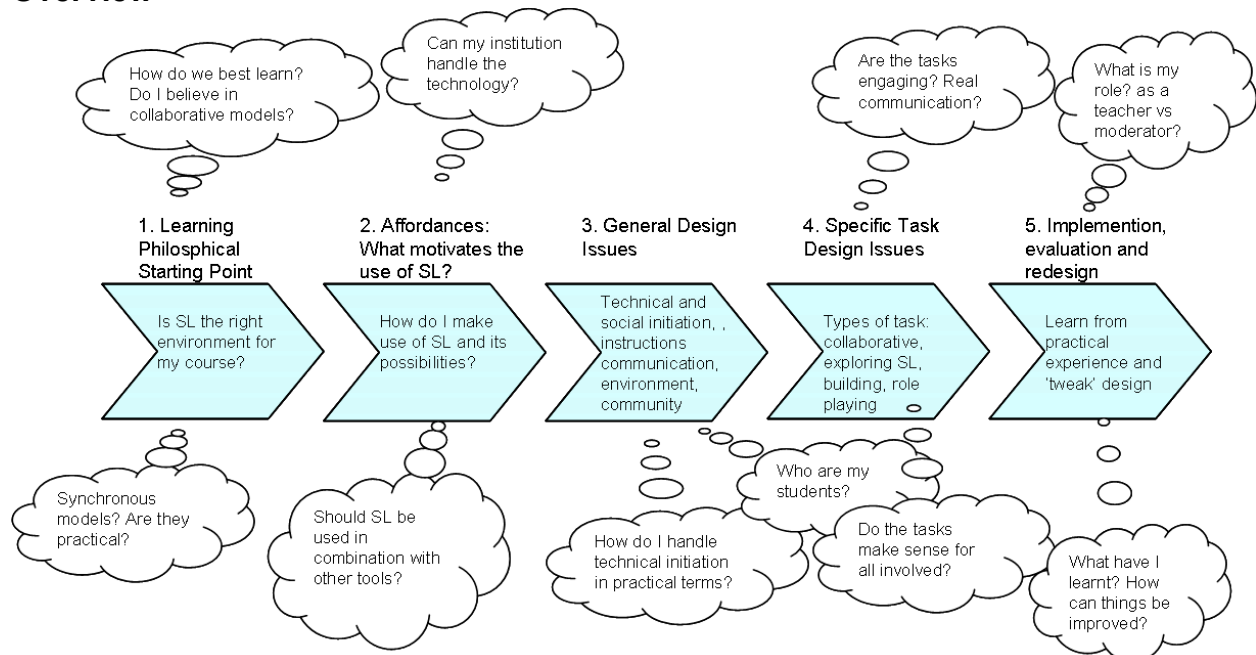


Figure 1. Overview of Processes

1. Introduction - Sociocultural and Communicative Approaches to Language Learning

Before considering using Second Life as a place to conduct language learning, we believe that it is important that one takes into account the approach to learning that one aims to adopt in a particular situation. Obviously, it is not for us to dictate to teachers what methods and approaches to language learning they should use, but we can say something about what type of approach we have experienced works best in an interactive virtual learning environment such as Second Life.

The first point to note here is the basic principle of using tools that are best suited for the job at hand, rather than trying to use tools for the sake of using them per se. If your task/course is based on an approach which primarily requires students to: a) work on their own, b) listen to/read/learn material produced by the teacher (one-way communication) and c) be examined on the basis of reproducing the information received, then there are probably better tools than Second Life available on the market. If, for example, your aim is to give a one-way lecture which you want the students to simply listen to and be tested on, then perhaps a YouTube video, or a simple voice-commented PowerPoint serves your purpose better than Second Life. Instead, virtual reality worlds render themselves to more socio-cultural and situated learning models (Vygotsky 1978; Lave & Wenger 1991; Wenger 1998). These models maintain that human activities take place in cultural contexts, are mediated by language and other symbol system, and that knowledge is constructed when individuals engage socially in talk and activity about shared problems or tasks.

Applying these models to language learning means going beyond 'by heart' learning and parrot fashion repetition. It means creating a communicative environment where all participants are just that - participants who contribute to the context. Virtual Worlds render themselves well for this purpose (see section on Affordances below). One of the traditional challenges in language education has been to provide meaningful contexts for learning. Few language educators would disagree with the claim that for most learners one of the most significant triggers of motivation in learning a foreign language is not an interest in the object itself, the language, but the yearning to communicate via the language. In spite of this, the traditional language classroom is all too often "make-believe"; second language learners are forced into constructed, artificial communicative situations on more or less relevant topics, where they can easily revert to their mother tongue. Consequently, one of the main motivational forces for language

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learning is not exploited, namely the need and wish to communicate. 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.

In the document below, it is our aim to provide some of the overall principles that we have tried to apply in the courses that have been run under the Avalon project, and some of the best practice models that we have developed. It is by no means a comprehensive list and this document should thus be seen a "work in progress", which will continue to develop as we learn more.

For some extra material on SL and education see the external resource page:
<http://avalonlearning.pbworks.com/w/page/7682814/external-resource-page>

2. Affordances and Second Life - What does SL allow you to do, and how does one best exploit these possibilities?

Before we go on to specific details related to teaching in Second Life, it is relevant to address the question "why?". Why use the tool SL in the first place in language learning contexts? More specifically, what qualities or affordances are built into the environment, how do we make use of these and what possibilities do these affordances open up for us in terms of language learning?

Table 1. Summary of Affordances (for more information see text below)

Affordance	Possibilities	Limitations and Dangers
i) An Open CMC environment	Allows us to bring learners from various language backgrounds together in authentic communicative situations. Also allows for the unexpected meeting since the environment is open.	There are potential dangers related to abuse/misuse and some degree of control is probably desirable, especially in the early stages of a course.
ii) Communicative tools including voice chat, text chat, instant messaging, notecards etc	We can combine real time communication with a certain degree of asynchronous communication. We would, however, emphasise the strengths of SL as an environment for synchronous communication. There are probably better tools for asynchronous information exchange.	Too many technical possibilities can be distracting, especially for beginners, and can result in a technical rather than linguistic focus. (it could also be argued that this is a good thing if it is taking place in the target language).
iii) 3D environment	The physical space can be baked into a task/learning scenario (asking for directions etc). 3D can also be used pedagogically to strengthen the scenario. As a presenter you can position yourself in front of an audience, for example.	People get lost and sometimes have problems with movement. This can lead to rather chaotic situations, especially early on.
iv) The avatar	Gives the learners a certain degree of anonymity which in return reduces anxiety. The appearance of the avatar can also be manipulated to fit a certain learning scenario.	Going 'too far' in terms of how you manifest yourself can be distracting/offensive in certain situations.
v) Building	Environments can be created that fit our learning scenarios. In addition building as an activity can be the focus of collaborative cross-cultural projects where authentic	Building is complex and requires several additional skills.

	communication becomes a must.	
vi) Access to a Community	We can use the Second Life community as a resource in our learning scenarios. We can thus send our students 'out there' in order to investigate other SL-environments and in order to communicate with native speakers using the target language. There are several tools in SL, such as search engines and contact management systems that help us in this pursuit.	There is always the danger of net-abuse and learners as well as teachers should be aware of this and discuss risks and dangers before entering freer use of Second Life.

i. An open CMC (computer mediated communication) environment

The technology represented by SL allows us to bring together people who would otherwise not be able to share a learning event. There are several other tools that do this, but Second Life is in many ways unique since it is an open environment, where you can actually gain access to an active community that goes beyond the participants of the particular event. For example, we were giving a planned on line seminar on Second Life with some university teachers from various locations in Europe a while ago. We had planned certain activities, finishing off with a free question time/discussion session. As it turned out, another Second Life educator, whom we knew, just happened to be on Avalon at the time and he entered the conversation giving valuable input into the discussion. This was totally unplanned, but resulted in a more rewarding discussion. This type of spontaneous meeting would not have been possible in a more traditional, closed on-line conferencing tool. The possibility of bringing participants from various parts of the world with different language backgrounds together is thus one of the strengths of Second Life. In addition, this type of meeting can be further enriched by the unexpected meeting, since, just as in real life, you never quite know who you might 'bump into'. A word of caution here, however, is that this potentially also means that you may meet avatars that you do not want to expose your students to. Initially, then we recommend a reasonably private and secure environment such as Avalon for course activity.

ii) Communicative tools in Second Life

Just like many other CMC tools, Second Life allows us to use several options for communication. There is the public text chat and the voice chat, allowing us to communicate using both text and voice at the same time. There are also many additional possibilities allowing us to communicate more or less privately through the use of: i) instant messages directed to one or more people in a group; ii) note cards that can be sent to participants, which can be kept for later use or which can be used as ways of providing information to larger groups or communities iii) the possibility to have a private voice chat with another person which no-one else can hear.

Again these types of tools do exist in many systems and are thus not unique to Second Life, but since Second Life like many other MUVES (multi-user virtual environment) has good tools for managing contacts and see when someone is on line or not, it is relatively easy to reach the particular recipient you want to communicate with. From a language learning point of view, the different communicative tools obviously offer great possibilities. The Asynchronous (note cards, for example) can be combined with the synchronous (both text and writing). Another less obvious communicative tool is the avatar and the environment itself. Many concepts that may be difficult to put in words can be communicated visually. A word of caution at this stage is however the fact that too many technical possibilities at an early stage can

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be inhibitory. Students may feel overwhelmed by the technical complexity. Our experience tells us to focus on one or two simple tools initially, and then introduce more complex uses of the affordances as students become more familiar with the environment.

iii) The three dimensional nature of Second Life

One of the greatest strengths of virtual world environments is the availability of a three dimensional environment in an on line context. This can be exploited in language learning on all levels. With beginners, for example, spatial concepts can be communicated through various practical exercises (treasure hunts, giving and following directions to a certain place etc). Pedagogically, the three dimensions can be exploited just as they would in a physical setting: you can, for example split a larger group into smaller discussion groups and send them to different physical locations on the same island. Incidentally, the voice chat in Second Life, supports the 3D design so that the sound of avatars close to you is perceived loudly while sounds further away are more faint, or not audible at all. The virtual 3D room can obviously also be used strengthen the plausibility of simulated events: a public speaker can actually stand in front of an audience, a round table discussion can be just that, a mingling event can include all the spontaneity of moving from person to person that a similar physical event would; The use of the three dimensional space in teaching situations in SL opens up various possible scenarios that go beyond traditional on line learning tools, but one should also be aware of the fact that it can complicate matters: people do get lost and find it hard to find locations that you have decided to meet at. Rooms do get too crowded and avatars do bump into each other. Again these are aspects that we should be aware of when introducing students to SL. In the courses we have run, for example, we have tended to have initial meeting in large open spaces that are easy to find.

iv) The Projection of the Self as an Avatar

In Second Life, the self is symbolised by the avatar. This in itself can be advantageous in a language learning context. The avatar is something we can use to represent our personality, but it is also something which we can hide behind or even experiment with when we want to project ourselves in ways which do not necessarily correspond with real life. This can help to create a greater sense of privacy and reassurance, thus lowering anxiety. Many students have actually pointed to the fact that they feel less shy when 'hiding behind the avatar' and that this helps to reduce anxiety. A low anxiety environment is deemed by many researchers to be a critical success factor in second language learning (cf. Krashen 1987). The avatar is also an artifact and a prop for interaction and communication; it is, in this sense, a design object which influences the environment. Students will, for example, comment on each others appearance by complimenting, on clothing for example. This is an important factor in the initial stages of communication, often constituting an excuse to break the ice and to establish more meaningful discourse. Manipulating the avatar image also allows us to experiment with physical appearance and how this in turn affects communication. One could, for example, use this possibility when highlighting more complex sociological language issues such as race and gender. While the avatar does give a symbolic representation of the physical appearance of human beings, it is also important to note that there are serious limitations in this representation. Facial expressions and body language, for example, are absent, or at best extremely crude. Although potentially limiting to communication, this fact also means that extra focus has to be put on language skills in a communicative situation. On a final note related to the avatar, we would like to point out that although Second Life offers almost endless possibilities to experiment with the outward appearance of your avatar, we should perhaps not take this too far initially. It may be difficult for students to relate to you as a teacher if your avatar is a pink dragon with green eyes.

v) Building - the possibility to create/manipulate the environment

Unlike many other MUEs (World of Warcraft for example), the environments in Second Life are actually created by the users themselves. This affordance offers fantastic possibilities both in terms of creating environments especially designed for a particular learning scenario, but also for projects where the building of artifacts and landscapes is the central activity. On Avalon there are some examples of how we have designed certain parts of the island for certain learning scenarios: the business barn and the hotel are two examples. In the latter case there are several examples of cross-cultural projects where student groups have collaborated from different countries in order to create objects inside Second Life. In such a

situation, language skills are obviously central, but baked into a greater scenario, so that the focus is on the thematic activity, say designing a building. This is a good example of the application of a communicative approach to language learning and renders itself well to more thematic immersive language learning models. Note however, that building in Second Life is complex and nothing we would recommend for beginners, or even intermediate users of Second Life.

vi) The Availability of a Community

Second Life is more than just a tool. It does in fact represent an active community of users from all over the world and a virtual geographical space that goes far beyond the learning space that we occupy. We can exploit this in a language learning context. We can, for example, send out students to explore environments that represent cultural manifestations of a target language community, or to communicate in the target language with people outside the course context. There are also several groups and learning communities with related interests that may be at our disposal and that we can connect with in Second Life. Second Life has excellent search engines for finding places, people, groups, communities etc. The software also contains several tools for managing contacts and groups so that users can be part of several groups at the same time and also organise their contacts. There are also tools for offering friendship and once this is done getting an overview of which contacts are on-line or not. The teleport function also means that it is easy to offer other avatars transport to your present location. All of these affordances can be worked into a learning scenario but again we must caution educators that as with all social software there are users as well as abusers out there, and learners as well as teachers need to be aware of this.

3. Generic Issues Related to Course Design

When conducting a language learning event in Second Life we believe there are certain general issues that should be included in the design, regardless of course content and level. These generic issues are summarised in the table below and discussed in more detail in the text that follows.

Table 2. Summary of generic design issues (for more information see text below)

Item and motivation	Examples of activities	Dangers if not included in design
i. Technical Initiation: A prerequisite for students to be able to partake in the learning scenario	<p>a) "one to one" model where teachers and/or technical staff lead each student into the environment prior to a course using tools such as telephone or Skype</p> <p>b) making use of more experienced students as mentors for newbies in the technical initiation</p> <p>c) pre-designed information packages and 'quests' that assure that basic knowledge about the tool has been achieved</p>	<p>In a worst case scenario total breakdown where students are unable to attend learning event.</p> <p>More commonly technical initiation, if not carried out prior to the course event, will take a substantial part of ordinary learning time and disrupts the planning radically and also leads to negative first impressions that can affect the entire course.</p>
ii) Clear instructional frameworks: the students need to receive well structured and easily accessible information about all the details of a course prior to and during a course	e-mails, blogs, or homepages including basic information such as course overview, contact information, timetables including locations for meetings in the form of SLurls and session by session instructions.	Confusion, chaos, misunderstandings and general frustration which can lead to learners not returning to the environment or "switching off" to the entire learning experience.

<p>iii) Social Initiation: A secure social environment is a pre-requisite for collaborative learning</p>	<p>Simple presentations around a camp fire might well be enough, but there are obviously a number of examples of fun and games that can serve the same purpose. Should not be a graded activity.</p>	<p>No room for socialisation, risks hindering authentic spontaneous communication in learning activities of course.</p>
<p>iv) Communicative framework: Signalling involvement and managing conversation to ensure active participation.</p>	<p>making sure that verbal back-channeling is done in voice chat using pragmatic markers and phrases such as: uhu, aha, yes, I see, that's interesting etc. The text chat can also be used for the same purpose. Addressing these issues explicitly in a course is recommended.</p>	<p>Conversation risks 'dying' if no involvement is signalled. Some individuals take over if conversation is not managed.</p>
<p>v) Prior Attitudes: It is important to communicate how virtual world environments are being used in education and research in order to avoid misunderstandings</p>	<p>An informative film or article on education in virtual environments. Perhaps a discussion.</p>	<p>Risk of prior attitudes, expectations and established behavioural patterns disrupting learning events.</p>
<p>vi) The environment - innovation vs. traditional settings: Balance needed between the 'new' and the 'traditional' in terms of environment and pedagogic design.</p>	<p>In cases where the teaching follows traditional formats, there is arguably a merit in using traditional settings/symbols/environments. The setting is itself is an important factor in helping students to make sense out of the learning event.</p>	<p>Too much innovation can lead to disorientation and difficulties in trying to make sense out of a learning event.</p>
<p>vii) Learning Community: trying to include students in contexts related to their course that go beyond the specific course group and course activities.</p>	<p>Exposing students to other contexts such as academic events outside their course, alumni networks and other student groups in similar situations.</p>	<p>Without these areas of contact the motivation for participation risks being purely instrumental</p>

i) Technical initiation

Technical initiation to the basic functions of SL is a must before any course. Based on experience, we know that not including this in the course design and expecting students to take care of this themselves is potentially disastrous. Obviously, prerequisites to give a technical initiation differs from institution to institution, but in a best case scenario, we would argue that a model where the teacher on the course him/herself has been inside Second Life with each student in order to make sure that the students master the basic skills required is ideal. The technical initiation thus also constitutes a personal meeting between teacher and student which can build trust and cater for a more secure learning situation once the course starts. In addition this model also allows for clarifications related to course structure etc. so that other queries that the mere technical details can be dealt with. In many of the courses run under Avalon we have been using Skype or telephone as initial mode of communication in order to guide students in the process of installing the program and reaching a certain location in Second Life.

Obviously the above model is time consuming and not always realistic given the tight time frames many of us are working under. An alternative model is to use students as mentors and assistants in this

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process. Here one can envisage the process being one whereby only smaller number of students are given the initial initiation and are then made responsible to initiate some of their fellow students who in turn initiate others etc producing a sort of chain model where each student is initiated and also initiates. This type of initiation has certain advantages in the sense that it establishes group feeling at an early stage, but it is also important to monitor the process in order to make sure that all students get what they require. For a more detailed description see the following link:

<http://dooku.miun.se/mats.deutschmann/Avalon/getting%20started%201/index.htm>

Another alternative is to leave the initiation to the students themselves, but providing the best possible instructional material for this. Quests can also be worked into the initiation that ensure that the student has some check points that test the basic skills. We would not recommend this scenario but given certain circumstances it may be unavoidable.

For more details, ideas and instructional material related to technical initiation see Introductory Multimedia kit for learners and Check-in Email - Business Course 1 .

ii) Clear instructional frameworks which still allow for flexibility

A general point worth making here is the need for clear, easily available instructional frameworks for a course prior to and during the course. Such material should minimally include the following:

a) an overview of the course structure, the aims and the goals so that students can place individual activities in a broader context; b) contact lists, which include various modes of contact such as e-mail, Skype i.ds and Second Life identities c) a clear time-table which shows where and when each meeting takes place in-world (a SLurls is a good tool to use here; d) basic instructions for each sessions so students know what is expected of them and what they need to do in preparation for each session; e) Information about formalities such as grades etc where applicable. For some examples of how this information has been structured in Avalon courses see Developments of Scenarios. Tools that can be used for this include traditional e-mail list, blogs, or homepages.

While clear information is important in any on line learning context, it is also important to cater for some flexibility so that students themselves can feed into the content of a course. The principle is thus to set up a clear framework, without dictating the exact content. For example, including a personal presentation element in a course, should not entail giving exact instructions on what details to include in this presentation. It may differ from student to student and this in itself adds to the dynamics and creativity of the group.

iii) Social initiation

Virtual World environments render themselves particularly well for synchronous learning events where participants interact on line in real time. It is easy to underestimate the importance of social factors in on line learning situations. In a face to face situation, as teachers, we often do not actively have to take command of socialisation processes; they happen anyway outside the class room, during coffee breaks and in corridors, and we only have to intervene when things go wrong. In an on line context, the virtual learning space is, initially at least, the only point of contact between learners in a group. We have to acknowledge this, and actually allow for socialisation to take place and flourish. Jumping straight into planned curricular course activity, without allowing time for participants to communicate informally about themselves, can be very counter-productive. If in addition, as we have allocated in the present document, we are using a social/collaborative/communicative approach to language learning, the social dimension is in fact a prerequisite for successful learning activity. During, the first courses we conducted in Second Life, we made the mistake of not working socialisation into the course structure. The result was that students never quite established relationships, and spontaneous conversation was inhibited. Symptomatically, there were also great drop-out rates for these early courses.

Orchestrating socialisation in a course can obviously be done in many ways and it's beyond the scope of this document to provide a comprehensive list of all potential activities. In general, however, it can be said

that initial socialisation activities should be of low anxiety, focussed on the personal interests of the students, and should not be graded as part of the ordinary course. Also note that a social initiation does not have to be a complex issue but can merely involve an informal chat around a camp fire where the participants have a chance to get to know each other. Important to note too, is that socialisation does not end with the initial introduction. Creating interdependence between students during the course also helps people bond. Thus group work, peer reviewing activities, peer support models etc all form part of the socialisation and ultimately the collaborative learning model.

iv) Communicative frameworks- the importance of signalling involvement

As mentioned above under affordances Second Life does have its limitations. There is a very limited possibility to signal involvement through body language and facial expressions and students as well as teachers should be aware of these limitations and use alternative strategies. During our courses some students have expressed the feeling that speaking in Second Life is a bit like talking into empty space initially. They are unsure if they are being heard, and if the involvement of teachers and peers is not being communicated chances are that production will cease. It is easy to test this hypothesis in real life situations: if you do not signal any involvement in a conversation in the form of nods, smiles and verbal back-channeling such as pragmatic markers (uhu's, aha, confirmatory 'yes' etc), chances are that your conversational partner will fall into silence. The same principles apply in SL, but here we have to make use of the affordances available and back-channel verbally (using voice or chat). Pointing these aspects out during a course makes sense. It may thus be a good idea to include a little discussion on communicative norms at the beginning of a course. Here ethic issues can be included too.

As an educator it is also important to manage conversations, at least initially, in order to make sure that all participants become active. Directing eliciting questions is one strategy that can be used. In other words, rather than asking a general question which anyone can answer, it might be strategic to direct the question to particular participants that you want to become active in the conversation: "What do you think about this Helen?" as opposed to "Does anyone have an opinion about this?". As an educator, it is also important to make sure that the students become the main contributors to a communicative event (unless it is a lecture situation, when mere information is being imparted). This again involves conversation management, but also being aware of one's role and 'stepping back' letting the students take command. For some examples of studies on these matters see Deutschmann et al 2009, and Deutschmann & Panichi 2009.

v) Taking prior attitudes into consideration

A virtual environment such as SL is not culturally/historically neutral. Students will have different expectations on how to approach learning in this kind of environment depending on their prior attitudes. For example, some may be active users of virtual world environments as places for leisure activities, such role play games (e.g. World of Warcraft) and on-line combat games (e.g. Counter Strike). Others may associate the software with adult content. These prior attitudes may well influence expectations and behaviour in SL education. Some students may feel that it is difficult to take activities seriously as the world appears too game-like, while others may transfer their behaviour from their leisure activities onto the course activities because they are unaware of the behavioural code differences. Although this may be a minor issue, it is advisable to signal how SL and other virtual world environments are being used in education. Perhaps a little film or an article can be attached to introductory material and if needed, there should perhaps be an open discussion of the why's and what's (such as behavioural codes).

vi) The environment: innovation vs. traditional

There is a danger that we dismiss all traditional models when developing innovative solutions to a learning problem. Our wish to innovate, however, may disregard the importance of established cultural norms in any learning situation. To give an example, we might feel that the new affordances and environments represented in SL mean that there is no need for environments such as lecture halls, tables, chairs, etc. We could, in theory, just as well conduct a discussion flying over a sea in Second Life, or give a presentation as a horse in field, so why the need of such artifacts as chairs, tables, presentation spaces etc? This is a relevant question, but before dismissing the traditional, it is important to acknowledge the power of culturally established symbols. In real life, the environment dictates, at least to

a certain extent, what is appropriate behaviour or not. We do not dance in a church, or play football in a lecture hall. Similarly, we adapt our language and behaviour to fit the occasion and the physical environment does play an important role in defining this 'occasion'. Arguably, the rules/habits of real life are transferred into a virtual world environment, at least initially, until new norms can be established. For example, experiments show that people behave as if their avatars were real people to a large extent. We orient ourselves spatially when conversing with people as we would in real life, apologise if we bump into each other etc (see Friedman, Steed and Slater 2007). In the same way, we are affected by the surroundings. We would argue that students will take a business discussion more seriously when conducted in a virtual board room, and where the participants are dressed appropriately. The same type of activity conducted under the sea where the participants appear as fish, is less likely to make sense. Having said this, does not mean that innovation cannot be worked into the environment. Arguably it should, but we also have to be aware of the power of existing structures and how the environment reflects these. Not doing so, especially initially, can lead to confusion and disorientation.

vii) Fostering a learning community

A final generic issue is the fostering of a learning community that goes beyond the specific learning event. Pedagogic research into success factors of on-line university education has shown isolation and lack of context to be an important factor influencing students' success/failure. Collaborative learning models have been designed to counter this problem, but all too often the collaborative models do not go beyond the individual class/course. Broadening the area of contact in relation to learning is however beneficial in raising motivation and making sense out of the learning in a way that goes beyond simple instrumental motivation. There are several ways of incorporating students in a learning context that goes beyond the course. Examples include: exposing students to extra-curricular academic events such as seminars, symposia and conferences; creating a learning community where present students can get in touch with former students and thus be part of a network; creating collaborative events where students can interact with other students on similar courses in other institutions. Many of these type of activities are accounted for under Avalon's reward models, and community building.

4. Models for Task Design

Lim 2009 (<http://journals.tdl.org/jvwr/article/view/424/466>) presents six general 'learning frameworks' for virtual world learning:

- Exploring: learners explore a virtual world's locations and communities as fieldwork for class.
- Collaborating: learners work together within a virtual world on collaborative tasks.
- Being: learners explore themselves and their identity through their presence in a virtual world, such as through role play.
- Building: learners construct objects within a virtual world.
- Championing: learners promote real life causes through activities and presentations in a virtual world.
- Expressing: learners represent activities within a virtual world to the outside world, through blogs, podcasts, presentations and videos.

These frameworks can in turn be translated to task types/scenarios that involve language learning more specifically in Second Life. In our list of task designs below we partly try to relate the different task types to this general framework but also our own framework made up of three main categories, namely tasks exploiting the: 1. Social and communicative dimension; 2. Affective and creative dimension, and 3. The spatial and physical dimension (Deutschmann & Panichi 2009).

Table 3: Models for Task Design (see text below for further explanations)

Task type	Comments	Examples from the Avalon course portfolio
i) Authentic Communication	Can be achieved through many different designs but a key issue here is to bring learners together in such a fashion that the target language becomes the only viable means of communication. Activities have to make sense for all involved. Relates to Lim's category 'Collaborating' and our own Social and Communicative dimension.	Debating course
ii) Mutual Language Exchanges: Tandem Learning	The Tandem Model, whereby native speakers of different target languages pair up for mutual language exchanges, is an obvious model that can be adapted to the affordances of SL. Relates to Lim's 'Collaboration' framework and our Social and Communicative dimension.	Catering Course
iii) Exploiting the spatial dimension	Particularly useful in beginners classes where concepts can be illustrated in virtual reality 'real life' situations.	Beginners Italian/Sami courses
iv) Exploiting SL as a source for learning	Using SL as a source for course activity is a common way of engaging students in the environment. There are many ways of doing this that involves 'field trips' both in terms of exploring other environments, as well as drawing resources from the SL community at large (interviews, surveys etc etc) Relates to Lim's 'Exploring' framework and our own Physical/Spatial dimension and Social/Communication dimension	Business Talking
v) Role playing in SL	Make sure the role play is well prepared and that participants are in on the game.	Business Talking
vi) Exploiting the creative potential of SL	For example, making a machinima film in SL as done in the Sami 2 course (see WIP under course scenarios)	Sami 2 course

i) Authentic Communication:

There are a number of ways of bringing about authentic communication, but typically this type of tasks involves bringing students together from different parts of the world and thus often from quite different institutional settings. The greatest challenge here is thus the logistics in creating a learning scenario which takes the different individual goals into account, but still manages to find points of common interest. In trying to do this, Activity theoretical models can help. Activity theory was developed by Leont'ev (1978) and it uses the concept that an activity is initiated by a motive, need or drive as a starting point. This motive might look quite different depending on which actor in the process you use as a starting point. Activity theory also takes a number of other variables into account when analysing the success/failure of a particular activity, including such aspects as rules systems, the mediating artifacts, division of labour etc. The model below gives a brief overview of some of these:

**Mediating Artifacts – teaching practices,
Teaching materials, Second Life, ICT...**

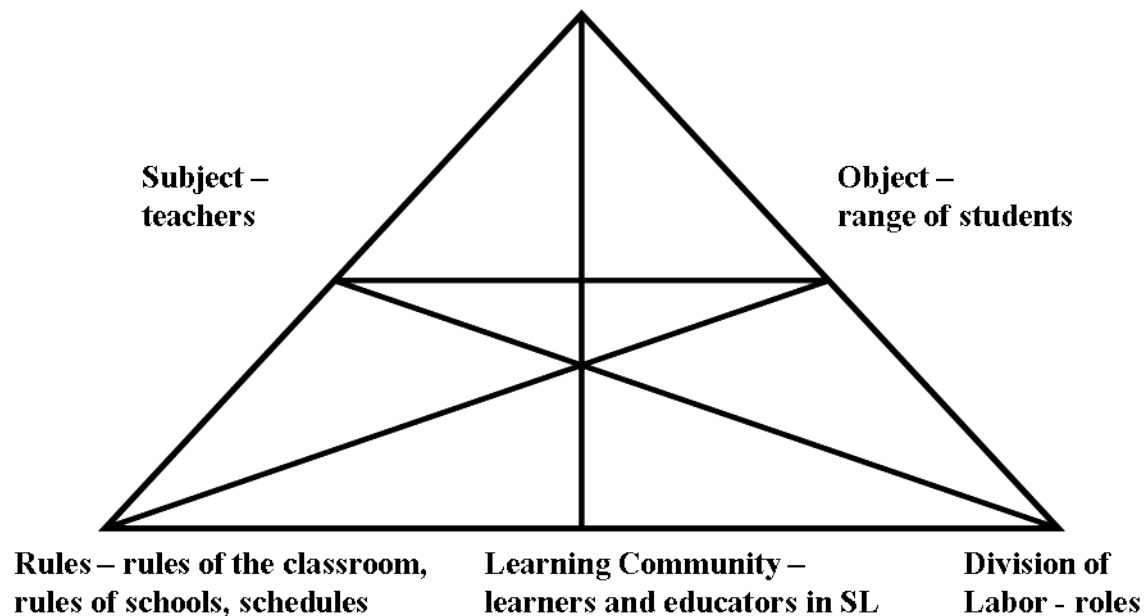


Figure 2: Activity Model

To exemplify how a process of planning might look like when designing an event of authentic communication using a cross-cultural/institutional model, we can look at the Debating course given under the Avalon framework.

Here the object (or subject depending what angle you look from) consisted of 4 groups of students all attending different programmes at different universities: Campus Students from Manchester university attending a course on on-line teaching, Internet students from Mid Sweden University attending a course on Language Proficiency and Academic Presentation, Campus students from the University of Central Missouri attending a Composition class on the topic of cyber culture, and campus students from the University of Pisa attending a Language Centre in order to improve their English proficiency. The different student groups thus had different motivations for attending the learning scenarios and this was taken into account when designing the activities. In this way the central activity, the preparation and presentation of a group debate, was chosen with all student group interests in mind: The teacher-trainees from Manchester obviously had an interest in the entire pedagogic set-up, but also the subject matters being debated, more specifically cyber culture in relation to education, communication etc; The American students were specifically interested in the subject matter as this was part of their course, but also had an interest in matters related to text structure (in this case spoken) since they were later to use the information debated in the course in a term paper; the Swedish students were motivated by the content related to text structure, but also in having the opportunity to communicate with native speakers in English; finally the Italian students were motivated by being able to use and practice their English in authentic situations. The groups were all organised in such a fashion that they contained students from all institutional settings. All student groups had different examination tasks which fed into their individual programmes. The set-up is summarised in Figure 3 below.

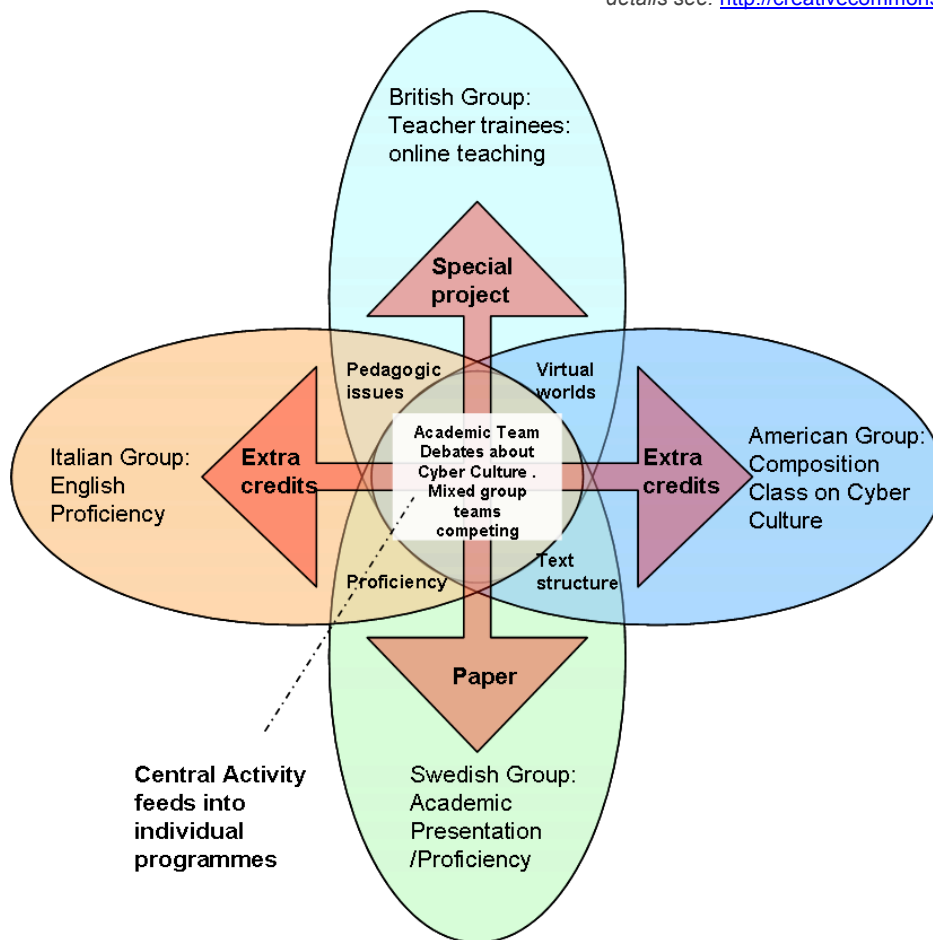


Figure 3: The Design of the debating Course

The point here is then that a learning event involving authentic communication has to be planned bearing the different motivations for attending such an event in mind. It is arguably not enough "just to get a bunch of students together to communicate". Chances are that they will not. They have to have something to communicate that can be motivated in their educational setting.

ii) Mutual Language Exchanges: Tandem Learning

When looking at Tandem models there are some important basic principles that need to be taken into consideration (also see Little 1999:

http://www.eric.ed.gov/ERICDocs/data/ericdocs2sql/content_storage_01/0000019b/80/17/91/0f.pdf), namely Autonomy, Reciprocity (interdependency) and the principle of Equality. In a tandem situation the learners are basically interacting, learning from each other so autonomy is a key prerequisite. Although there may well be teachers monitoring processes, the whole point of a tandem exchange is that the learning processes is in the hands of the students themselves and this needs to be made clear. Reciprocity is also important, ie that the students involved are interdependent on each other, that they both give and receive. In the Catering Tandem, for example, Spanish waiters are equally dependent on the expertise of their English counterparts as vice versa. In practical terms this means pairing up students so that they both find themselves on equal levels in terms of the L2, and that they also are equally motivated. The final principle, equality, becomes important for social reasons. If there is a power

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imbalance in a tandem situation chances are that social distance between the pair will hinder open communication. Of course, as in the case of the Catering tandem, common areas of interest are of added benefit here.

iii) Exploiting the Spatial Dimension

SL being a 3D environment can be used, just as a real life environment can, to illustrate several linguistic concepts that are otherwise difficult to illustrate to beginners. Prepositions is one such example. One can, for example, illustrate the use of prepositions by moving and positioning oneself in the 3D environment and also test if students have understood the concepts by giving directions and seeing if students respond appropriately: "Walk through the door", "Stop by the waterfall", "Sit under the table" etc can all be tested and enacted (in a "Simon says" game for example) in SL. Here grammatical aspects such as the use of the imperative in the target language also can be worked into the exercise (see Italian Beginners course for example).

The environment can also be used as props for vocabulary exercises. In the Sami course, for example, the plan is to construct various culturally specific artefacts to illustrate vocabulary. This is a useful way of using SL. It is actually very hard to illustrate what a 'káta' (wig wam like hut used by the Sami traditionally as temporary summer residence) is without props.

iv) Exploiting SL as a source for learning

There are various ways this can be done but one tried model from the Business Talking class is buddy system whereby some more experienced students take newbies on tours in various parts of SL that they have discovered. In the case of Business Talking these guides have the added advantage of being native speakers while the newbies are English learners adding an extra dimension. Of course the roles can be reversed, ie that the language learner acts the guide. In Business talking the initial tours serve double purposes: 1. as a way for the students to familiarise themselves with the affordances of SL under the guidance of an expert, and 2. as an input into a later exercise when the students have to give accounts of their experiences to their fellow students. Experiencing an environment and then talking about it is obviously a realistic language exercise and something that we do in real life on an almost daily basis. One can certainly envisage how such models can be used in language course catering for the tourism industry (guides for example) where simulated environments and activities can mirror real life situations.

Another way of using the environment is through contact with other avatars in SL. Surveys, interviews are just some of the types of activities that are possible, but students also need to be made aware of the fact that SL is inhabited by all sorts of 'real people'. There are thus several ethic issues that should be discussed before embarking on such an exercise.

v) Role Playing

Role playing is an obvious way of exploiting the 'gaming-like' nature of a virtual world environment. There are several examples of how role play has been introduced into the course design under the avalon project (see Deliverable 7 – Storyboard plot, for example:

http://avalonlearning.pbworks.com/w/page/33433820/WP2_Deliverable7_Story_Board

When considering role play, however, make sure that the role play is well prepared and that participants are in on the game. If not, role playing can be a painful experience full of embarrassing moments.

vi) Exploiting Creative Potential- Building

There are several ways that this can be done, but be sure that you as a teacher have the skills required. Creating objects based on linguistic descriptions is one way of exploiting the creative potential. Another that arguably requires less skills is the creation of film based on events that take place in-world. In the Sami 2 Course (see Work in Progress under deliverable 4- Developments of Course Scenarios:

<http://avalonlearning.pbworks.com/w/page/7682813/Developments-of-Scenarios>) the ambition is to

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get students to enact stories they themselves have written in order to produce short Machinima films. See the Macinima resource page for further description of what machinima is and how it can be produced: <http://avalonlearning.pbworks.com/w/page/33047585/Machinima+-+Recording+in+Second+Life>

5. Being a Teacher in SL

Being a teacher in a virtual-world-learning-environment is in many ways different from other online teaching. The environments are largely synchronous, which basically means that the same principles as in face-to-face teaching apply (in communicating with students and organising them in real time, for example). On the other hand, online principles for teaching apply in many other respects: roles are less obvious, instructions have to be very clear and technology has a tendency to 'crash' when you least expect it to. Below we will address some of the issues that we feel are specific to teaching in virtual worlds and that you should be aware of before embarking on this type of endeavour.

Teacher role- moderator/facilitator vs. lecturer/teacher

The courses under the Avalon project have been based on collaborative models where student autonomy has been one of the central concepts in the design. Virtual worlds are well suited for autonomous collaborative work; there are good tools for communication and the creative aspects of the environment are well suited for problem-based-learning. Having said this, however, there is nothing stopping you from taking a traditional lecturer role in virtual worlds (although we do not support this model of using the environment). In our opinion, however, we would argue for a teacher role where the teacher supports active learning and where students themselves contribute to input, rather than the teacher being the source of undisputed information.

Regardless of what teacher profile you adopt, there will be the added role of supporting students in the environment with matters that go beyond the contents of the course. You should be prepared to help out with technical issues and you must also be aware of the fact that, at least initially, you are the one responsible for making sure that all participants become active in the environment in terms of communication etc. This also holds true for any learning environment (face-to-face as well as asynchronous LMS environments such as Moodle or Blackboard), but in virtual worlds, which are extremely technically challenging for some beginners, you should be aware of the fact that someone not answering a chat message or a voice comment may well be a direct result of technical difficulties rather than an unwillingness to participate. Here your role as facilitator and moderator is of outmost importance. We thus advice anyone teaching in a virtual world to make individual checks with each participant (sound checks, for example) in order to make sure that everyone is "onboard".

Technical issues

Based on teaching experiences and on student comments from our feedback questionnaires we know that technical difficulties and failings are the most common sources of frustration during virtual world learning events. There are a number of things that can, and do, go wrong: sound does not work, participants have no headsets and are using inbuilt microphones that cause feedback when not switched off, avatars stall and cannot move, and worst of all, the world is simply not available due to server issues. Just as in real life, it is over-optimistic to expect everything to run exactly the way that you have planned, and it is important to have back-up plans, to be able to improvise, and above all, to remain calm. A 'crash' is no disaster. Very often it is just a matter of re-booting the computer for things to work, and if participants are prepared for the unexpected (or should we say the expected) it is less dramatic when it happens. At times, this can even be a source of fun and a way of breaking the ice. On one teaching occasion, for example, an avatar was running around madly because the user had problems with keys locking on her keyboard. This actually caused a great deal of general amusement and all (including the student in question) had a good laugh.

Having said this, we still maintain that good preparation such as giving students a technical initiation prior to a course, sound checking, entering your teaching location in good time before an event and making sure that there are no scheduled maintenance shut-downs etc. can help to minimise technical hitches. We also advice all teachers to make sure that they know the basics related to issues of sound settings as

this is the most common problem in language courses. But be prepared – you will never fully be able to eradicate all problems, so ... stay cool!

Organising a class

We are constantly reminded of how difficult it is to organise logistic aspects in larger groups (more 5-6) in-world. As a teacher you find yourself pointing in real life to where avatars should go (obviously a futile exercise) and trying to push avatars together so they can listen etc. Basically, logistics in-world are extremely complicated (especially with beginners). Students may not be seeing what you see, and they may be experiencing an initial cognitive over-load on entering the environment; extra information may just be too much to take in. We advice any teacher to sort out issues such as dividing students into groups, deciding on discussion topics, exchanging e-mail addresses, allocating head-quarters etc. prior to meeting in-world. This will certainly help to keep the focus on the actual learning events at hand.

Ethics

As with any online environment there are several ethical issues to take into consideration. It is, for example very easy to record students without them being aware of it and it is easy to see and hear what others are saying or chatting about without them being aware of this. As a general rule we advice you as a teacher to be up-front with all that you do and say. Make sure that you inform students about any recordings that take place and also never say anything or type anything in a public chat that points out a particular student. If you need to correct someone, keep such comments to the private IM function. You never know who is listening in, and a thoughtless word can destroy the trust that you have built up. Similarly, it is important that you inform the students about issues such as netiquette in a course. One should also be aware of the fact that avatar identities may be very personal and many students may not want to others to know the real self behind an avatar. Thus make sure that you inform students before you publish contact lists etc.

Assessment issues

Assessing in-world activities is often a tricky process. You will need a clear strategy and instructional information about this before the event so that students can prepare themselves and so that they know what is being asked of them. One example of such assessment instructions from the Business Talking course is available here:

<http://avalonlearning.pbworks.com/w/page/31194392/BT%20-%20Assessment%201>

Feed-back and evaluations

Reflections and feed-back after a learning event is an important part of becoming a better teacher. Try to make room for such sessions in your course design and take notes. You will be surprised over the insights you may gain. Also make sure you allow for evaluations after a course. This also helps to improve the course. Some examples of evaluation forms, which are free to use, can be found under Work Package 5- Feedback Questionnaires:

<http://avalonlearning.pbworks.com/w/page/7682815/Feedback-Questionnaires>

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