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## Task design for audiographic conferencing: promoting beginner oral interaction in distance language learning

### ABSTRACT:

This paper presents the challenges involved in designing a full set of online tutorial materials for a beginners' Spanish course for distance language learners utilising an online audiographic conferencing VLE for synchronous oral interaction. Although much has been written about task design and task-based learning and teaching (TBLT) in language learning (Johnson, 2003; Klapper, 2003; Ellis, 2000; Nunan, 1989, among others), the shift to an audiographic Computer Mediated Communication (CMC) medium presents a number of challenges to task design which are only just beginning to be documented (Hampel 2003, Hampel & Baber 2003, Hampel & Hauck 2004). Here we will discuss what the challenges are for the design and implementation of activities suited to the development of oral skills in a foreign language in such an environment in the light of current theories of SLA (Skehan, 2003; Doughty & Long, 2003; Doughty, 2000; Long, 1996), task design, and CALL (Warschauer, 1997; Chapelle 1998) and how those challenges were met for the production of a full set of materials for a beginners' Spanish distance learning course at the Open University using a tool that had been deemed unsuitable for that level (Kötter, 2001). We will also present the findings of the developmental testing of a sample of these activities and recommend a model for tasks in an audiographic VLE to promote oral interaction at beginner level.

## 1 INTRODUCTION:

In this paper we first present a brief overview of audiographic CMC, then we discuss current theory on task design for CALL materials and distance language learning before arriving at the challenges in the design of audiographic conferencing materials for language learners. We proceed to present how those challenges were met in the case study of a beginners' language course at the Open University, which can be applied to the design of further activities to support both language providers and students.

## 2 AUDIOGRAPHIC COMPUTER-MEDIATED COMMUNICATION.

Computer-mediated communication (CMC) has evolved alongside the shift from a behaviouristic approach to CALL to a constructivist approach (Warschauer & Healey 1998), thus changing the role that the computers play in interaction. The computer is no longer the source of language input, or one part of the communication chain (human-computer interaction) but the medium through which learners communicate (human-to-human interaction via the computer). Therefore we can define CMC as "communication that takes place between human beings via the instrumentality of computers" (Herring, 1996). While at the beginning CMC was restricted to text, audio conferencing has been commonly available since the mid 1990s, thus allowing remote users to communicate orally and synchronously with one another. For language learning the benefits are obvious, since learners are offered opportunities to interact in the target language with other learners or with native speakers. The learner/learner or tutor/learner relationship through the computer affords a collaborative learning environment within the principles of social constructivism (Ellis, 2000), where learners learn by engaging with one another.

The inclusion of graphic support systems in synchronous audio CMC systems has evolved generally towards video conferencing. Whether audio or video conferencing is preferable for distance language learning is under discussion (see Wang 2004 for a review). The main benefit of video conferencing

consists in allowing for paralinguistic cues, such as facial expressions or body language, which undoubtedly help communication and understanding. However, there is no evidence that the use of video conferencing improves performance and the use of video also tends to decrease the quality of the audio or slow it down. In addition, audio conferencing systems have been developed further with the addition of images, whiteboards, text editors, text chat facilities and/or web browsers, that is, features which can improve communication and interaction. Audiographic conferencing has thus developed into a multi-modal tool (including visual, verbal and written elements).

As the use of audiographic online conferencing for language learning is in its infancy and most research on CMC has been on written CMC (Chun, 1994; Kern, 1995; Warschauer, 1997; Lamy & Goodfellow, 1999), the audiographic medium presents a number of challenges. These have only recently begun to be documented (Kötter, Shield, & Stevens, 1999; Erben, 1999; Hauck & Heazewindt, 1999; Hwer & Shield, 2001; Cramer, 2001; Hampel, 2003; Cziko & Park, 2003; Hampel & Hauck, 2004; Lamy 2004; Stockwell, 2004). However, the literature agrees that synchronous audiographic CMC “is an ideal medium for collaborative learning through social interaction both with tutors and with peers” (Hampel & Hauck, 2004, p. 68).

### 3 TASK DESIGN

The meaning of “task” in SLA has been discussed at length (Johnson, 2003) and in this context it will refer to the general meaning that can also be referred to as “activity” or “exercise”: “what we give our students to do in classrooms” (Johnson, 2003, p. 4). We subscribe to the definition of task as “meaning-based activities closely related to learners’ actual communicative needs and with some real-world relationship, in which learners have to achieve a genuine outcome (...) and in which effective completion of the task is accorded priority” (Klapper, 2003, p. 35). What is understood as “effective completion of the task” will depend on previously-agreed set goals, the aims and priorities of the teacher or the curriculum, and whether the tasks focus on accuracy,

fluency or both. Task design usually reflects the theories of learning that are current at the time of development in the context where they will be used. In this context, we are aiming for a constructivist approach with communication as a main goal, and for this we will use theories from second language acquisition field (SLA), reinforced by theory on distance language learning and computer assisted language learning (CALL).

From the fields of cognitive and interactionist SLA, the principles of task design for language learning we follow are based on Task-based Language Teaching (TBLT) enforced by concepts such as noticing, negotiation of meaning, learning by doing, focus on form and collaborative learning (Skehan, 2003; Doughty & Long, 2003; Doughty, 2000; Long, 1996; and others), where tasks which encourage the learner to notice through communicative interaction are the necessary basis but need to be supplemented by instruction that focuses on form and raises awareness of functional, grammatical and lexical issues (Klapper, 2003, p. 40).

Within the frame of interactionist CALL, Chapelle (1998) advocates activities that have a communicative goal, achieved when, to complete the task, the learner constructs and interprets linguistic meanings. Interaction is good for the learner because it is used to negotiate the meaning of the input. Therefore, a good CALL activity will engage the learner in a communicative activity in which the input received is modified into linguistic output after focusing on linguistic form.

This psycholinguistic perspective views SLA as processing input and output and therefore sees tasks as providing the data necessary to promote learning, in which the language used and the opportunities to use it are determined. From a sociocultural perspective we can link the concepts of interaction and learning with activity (Erben, 1999), and the sociocultural approach “provides a useful framework for understanding collaborative learning in the language classroom and for evaluating the potential of online education to assist that process” (Warschauer 1997, p. 472). From the sociocultural perspective, the activity is co-constructed and its outcomes determined during interaction by

the learners' socio-history and locally determined goals and circumstances. Ellis (2000) argues that task design should incorporate the concepts from a psycholinguistic perspective but also those from a sociocultural perspective as these are not incompatible. According to this, Ellis concludes that "the psycholinguistic approach provides information that is of importance to **planning** task-based teaching and learning" whereas the sociocultural approach is concerned with the performance of the task and "illuminates the kinds of **improvisation** that teachers and learners need to engage in during task-based activity to promote communicative efficiency and L2 acquisition" (p 193).

Here, we will adopt the principles that language learning tasks should be:

- interactive and include reporting back of the communicative outcome (Skehan 2003),
- collaborative, interesting, rewarding, and challenging (Meskill, 1999),
- meaningful and engaging rather than repetitive or stressful (Oxford, 1990),
- provide opportunities to produce target language (Chappelle, 1998),
- make use of authentic materials (Little, 1997),
- be appropriate to the medium used (Furstenberg, 1997).

In addition, research shows that learners' performance improves in they feel in command of the situation, and if they are familiar with their environment (Oxford, 1990).

To this we need to add the third feature of our particular context, the fact that the tasks will take place online. According to Holliday (1999, p. 118) in CALL the medium of learning should provide learners with;

- Opportunities for interaction to negotiate meaning
- Opportunities to hear or read modified comprehensible input
- Opportunities to produce or write modified comprehensible output

- Input that allows for a focus on target features of the second language
- A rich context in which the second language facilitates comprehensible input

However, it could be argued that these are true for face-to-face tasks as well; therefore, when trying to implement the theory on task design to the online environment, we need to take into account the challenges that arise from the environment itself and the reports of experiences from previous studies.

#### 4 TASK DESIGN CHALLENGES FOR AUDIOGRAPHIC CONFERENCING ENVIRONMENTS:

The main challenge that faces the provision of distance language learning is oral interaction. It is the aim of achieving this that underpins the design of materials for audiographic conferencing. The main challenges of the audiographic conferencing environments are:

- The challenge of multimodality in the online conferencing medium (Hampel, 2003; Hampel and Hauck 2004): the fact that the medium provides a combination of visual, verbal and written elements through the computer places greater demands on those users who are unfamiliar with it - although it also affords materials that better support activities by using graphics, images, text and voice to enhance, focus, or generate input and opportunities for output and interaction.
- The lack of paralinguistic cues, such as body language or head nodding (Erben, 1999; Hampel, 2003)
- The increased probability of ambiguity (Erben, 1999).

Based on the principles that tasks must be designed to “reflect the principles of interactive, collaborative, student-centred learning based on sociocultural and constructivist theories” (Hampel 2003, p. 29) and encourage the students to participate, to design tasks for audiographic environments, the challenge is

therefore to provide materials that overcome the challenges of the medium, facilitate interaction, and lessen the isolation of the distance language learner.

Hampel & Hauck (2004) reported on a study of a group of advanced learners which built on a previous study by Hampel (2003). The main issues they found with the audiographic medium were participation and technical problems (audio quality and losing connection), technical overload on tutors and students, the lack of body language, and the fact that communication was less spontaneous. With regards to the tasks that had been designed for that particular course they concluded that;

- Students have to prepare the sessions thoroughly for the tasks to work.
- Even fluent and confident people might find the activities challenging.
- If students are too reluctant to speak, sessions might not deliver the expected outcome.
- There could be difficulties generating ideas and articulating arguments; if the sound quality is poor, students may have problems sustaining arguments.
- Ways of supporting weaker students need to be found. (p. 74)

To meet these challenges their suggestions were having more pair work and less group work (p 74); that activities should be limited to a single tutorial and require less preparation (p 76); early and comprehensive developmental testing with sufficient time built in for making changes; and ongoing evaluation of task design (p. 79).

### **Identified challenges for beginners' task design in the audiographic environment**

Previous research reports on language courses which used the audiographic software *Lyceum* with intermediate and advanced level language students, therefore the recommendations made (see above) regarding interaction or not to focus on form, for example, refer to students with a certain a level of proficiency in the language. The activities designed for the tutorials for these

courses involved extended tasks such as presentations, role-plays, debates or storytelling. This type of task was described as “possibly the best use of *Lyceum* for adult distance learners, working at A level/Higher grade and above” (Hewer & Shield 2001, p. 7 of printout). The emphasis was not tutor-led activities but rather “collaborative work in the target language suited to the task” (Hewer, 2001). In addition, the number of students these activities were aimed at was relatively quite low in comparison with the projected student numbers for the courses which are at the centre of this study.

One of the challenges of oral interaction traditionally is that it needs different types of tasks depending on the students’ level. While advanced or intermediate level students have a range of expressions and vocabulary at their disposal - and can therefore engage in longer, more open tasks, beginners can only produce very limited utterances, especially at the beginning of their studies, so they require a larger number of stimuli and more structured activities to extract the little language they can produce. Advanced levels traditionally need fewer items of input, stimuli and role play situations to be engaged in activities that produce longer and more meaningful instances of communication. The same principles apply to the audiographic environment, hence its use at beginner level contradicts comments such as “synchronous CMC places a higher cognitive load on the learner, and as such is better suited to higher proficiency learners” (Stockwell, 2004) or the recommendation by Kötter (2001), who stated that synchronous audio conferencing was best suited to “learners of at least intermediate competence in the target language” (p 347). Kötter concluded that “additional research is needed to identify more efficient ways and/or combinations of tasks for lower-level learners” and that “issues such as task design, error correction and the optimal use of tutors and students’ time warrant more research before more courses are “put on the web” (p 348), therefore setting out our research agenda. It is also arguable whether at beginner level the sociocultural factors will have an effect on the tasks: since the linguistic capacity for input is limited, these factors may not affect the co-construction of the activity as much as has been argued.

## 5 THE DEVELOPMENT OF MATERIALS

### 5.1 Context:

#### 5.1.1 *The Open University*

The Open University is a distance learning university, and the largest provider of Higher Education language courses in the UK. Courses are taught with materials developed by the course teams, normally books, audio CDs, and/or videos. Students are expected to work through the materials by themselves, following a course guide and course calendar. They are also offered contact time with an associate lecturer (or tutor). This may be personal contact through the telephone, letters or email; or by attending tutorials, where tutors revise any language issues that may arise from the materials and engage the students in language activities, especially those that promote oral interaction, as this is an area where distance language learning faces the steepest challenges. Tutors also provide feedback on their assessment and sort out any administrative issues about the course, support and encourage the students. The role of the tutor is mainly management of learning, not source of knowledge.

#### 5.1.2 *Lyceum at The Open University*

*Lyceum* is an audiographic internet-based conferencing VLE tool developed at the Open University. It offers synchronous audio as well as whiteboards, concept mapping, text editing, text chat, and a voting facility and allows users to meet online. Interactions between tutor and students or between students among themselves take place in virtual rooms which can be used for plenary and for group work. The metaphor employed to describe the structure of the conference is that of a building with different floor and rooms. As students can use the system outside scheduled tutorials and book or create rooms to meet for social or learning purposes, this allows them the possibility to collaborate (and take responsibility for their own learning). *Lyceum* does not require a

high speed connection, and quality of sound and speed is satisfactory with an average 56k modem connection.

The Department of Languages at the Open University adopted *Lyceum* as a medium for tutorial delivery in 2002 after a number of pilot studies that started in 1999 and which provided evidence of its potential for distance language learners (Shield & Hewer, 1999; Hauck & Haezewindt, 1999; Shield, 2000; Kötter & Shield, 2000; Lamy & Shield, 2000; Kötter, 2001). The main reason for adopting it was fitness for purpose: *Lyceum* was regarded as the ideal tool available to provide opportunities for interaction in L2 and to provide frequent and instant feedback (Hewer, 2001). Furthermore, the 24 hour availability from anywhere with an internet connection made it more accessible to both tutors and students, who traditionally had to travel to a regional centre for tutorials.

### 5.1.3 LZX 194 “Portales”

The course that this paper focuses on is *Portales* (Gateways), a beginners’ course in Spanish. The course aims to teach the language necessary to help students with practical situations such as visiting, living and working in Spanish-speaking areas, as well as many aspects of the cultures of those areas, and requires approximately 300 hours of study.

The course components include six books and audio CDs, study guides and assessment materials. In addition, students have access to a course website, where they have access to electronic versions of many of the course materials as e-books. They also have access to online resources and a text conferencing program, FirstClass, where they can share experiences related and unrelated to the course. Assessment consists of tutor-marked assignments (TMAs) and end of course assessments (ECAs), which students complete and send to their tutor. They meet for their oral ECA.

There are two versions of the course, identical except in the provision of tutorial time and oral assessment. L194 students have face-to-face tutorials and oral ECA, whereas LZX194 students use *Lyceum*.

## **5.2 Meeting the challenges**

After the consideration of the aforementioned challenges and context, the LZX194 course team started the development process to create the strategy for the design and delivery of the audiographic tutorial materials. In this section we will describe the development process, the tutorial materials provided, activity taxonomy, and discuss other considerations.

### *5.2.1 The development process*

The process of development of the set of tutorials followed the three-stage route of 1) planning, 2) preparing for writing and 3) writing and rewriting (Rowntree, 1994).

#### *5.2.1.1 The planning stage*

During the planning stage, the main considerations were the syllabus, the schedule, student numbers, delivery methods, and the format of the tutorials.

Five principles for the design of distance language learning materials were followed, which are that they must be designed in such a way that learners make sense of target language, discover how language works, practise the points they have been taught, obtain frequent feedback, and develop four skills (Hare, 1994, p. 2). This is consistent with the recommendations in the literature on TBLT mentioned above. Although they refer to self-access materials, these principles still apply in this context and they summarise the philosophy of the project (except that the skills for this part are limited to speaking and listening). Given that the tutorials are designed to offer students the opportunity for oral interaction, it was clear that the materials should mirror the course syllabus and the objectives of the online tutorials (as is the case

with face-to-face tutorials) would be

- To practise what has been learnt
- To reinforce what has been learnt
- To promote interaction among students
- To deal with any learning or “administrative” issues

Associate lecturers (or tutors) who teach languages at the OU receive the same materials that the students receive as well as all the necessary supplements to provide guidance and assess their tutor group. The content of the tutorials has traditionally been left to each tutor’s judgement: many OU language tutors make excellent materials designers. For the LZX194 presentation, however, the course team decided to provide a full set of materials for the tutorials. This decision was made to support the tutors, who in their first year of presentation would have to familiarise themselves with the course, assessment strategy, and the Lyceum software. Furthermore, it was an opportunity for consistency in tutorial strategy and standards, and an initiative that supports equal opportunities for learners, who on occasion question the differences between the learning experiences of some students and others depending on the tutor they have been allocated. In the case of LZX194, the tutors are still free to decide whether they use the materials provided and it was always the intention of the course team that the tutors make use of them in whatever form they considered most suitable to their tutor group’s needs, thus giving them support for their Lyceum inexperience but acknowledging and making the most of their teaching experience and also offering flexibility.

Training on how to use the software for both tutors and students is provided by an animated tutorial which is installed with the software. Users also have access to a helpdesk which can be contacted via the telephone or in a dedicated area of the VLE itself. Tutors take part in a tutor briefing and receive three 1-hour training sessions on technical issues, how to use the tools and the materials provided, and recommendations on the pedagogy of teaching online, with special emphasis on time keeping, giving instructions

and ensuring understanding in voice-only environments, encouraging participation, community building, and providing support for language and intercultural knowledge. For example, tutors are encouraged to use the order of the student list that displays the attendants to the tutorial as a face-to-face tutor might go around a table in a classroom, thus avoiding having to give a turn to each student and promoting student-student interaction rather than student-teacher interaction or the interruption of activities. They are also asked to encourage their students to use the software outside tutorial time both by themselves to get to know it and in groups to keep in touch socially or to practise the language.

Because of software limitations, and because research suggests that four to five is the minimum number of students to make online group work sustainable (Kötter, 2001), the course team suggested a maximum number of 15 students per group. Allowing for absenteeism, it was estimated that this would allow the tutor to have access to a reasonable number of students per tutorial and students enough peers to interact with. The course team also adhered to the recommendations by Hampel and Hauck (2004) that activities should be limited to a single tutorial and not require much preparation.

The time available for contact time with the tutor for the beginners' courses is 21 hours. The course team suggested that this time was distributed into 24 45-minute tutorials plus 3 hours to allow for any additional sessions or for the possible overrunning of scheduled tutorials. Even though most OU language courses provide monthly tutorials, the suggested schedule for these was for tutorials to take place every two weeks, to recognise the different nature of beginners' courses and support learners by giving regular, frequent contact. The exceptions are the first two tutorials, which take place in the first two weeks of the course. This is due to the fact that the first tutorial in particular focuses on getting to know the *Lyceum* software, as pilot studies had found that "students needed time and their tutor's help to familiarise themselves with *Lyceum*" (Kötter and Shield 2000, p. 6), which is also consistent with Oxford's recommendation for familiar environments where students can be in control of the situation.

### *5.2.1.2 Preparing for writing*

During this second stage, the format of the activities was designed, sample materials were produced and then put through a developmental testing process.

The activities developed for previous higher-level courses led to full tasks such as presentations, role-plays, debates or storytelling. This meant that their tutorial format of a short warm up activity followed by the core activities and finally a wrap-up activity had to be reinterpreted for the beginners' courses, as the language to be exploited, especially in the early stages of the course, is extremely limited. Hence, the beginners' tutorials start with a soundcheck, which serves the purpose of making sure everyone can hear one another and icebreaking whilst waiting for all the students to "arrive". After the soundcheck, a series of activities follows. Teaching in the course books uses some TBLT principles, where learners are encouraged to notice the language they need in a given context before focusing on form, but includes some traditional cognitive practice activities. As the tutorial time is the time for practice of structures that, in theory, have already been acquired (or at least noticed), the approach for the tutorial activities is slightly different. Thus, the majority of activities start with the presentation of the topic followed by an elicitation of the vocabulary and language structures needed to complete the communicative task. These tasks are designed to build on one another and consolidate knowledge, and have a cohesive general theme, such "going to University", "at the office", "at the restaurant", or "planning a family event". The themes allow the tutor to bring up intercultural issues that may arise around it. At the end of the tutorial, five minutes are allocated to allow some time for questions, announcements, discussion of issues related to the course, etc.

At this stage, before major writing was undertaken, it was deemed appropriate to go through the process of developmental testing, with plenty of time to make changes depending on the results, following the recommendation from

Hampel and Hauck (2004). Enough sample materials were produced to simulate three tutorials and the testing was carried out by the Institute of Educational Technology at the Open University with 10 adult testers with no previous knowledge of Spanish.

The testing was very successful and brought to light many issues (Price, 2002). It concluded that “Lyceum has the potential to provide a useful environment for students studying languages” (p. 20). The main findings of the developmental testing process related to the type of activity, the need for structured materials which are consistent with course materials, the need for very clear instructions (both for tutors and students), the desire on the part of the students for a lesson plan to be available in advance, some “class rules” for behaviour online (again both for students and tutors), and that activities should maximise the opportunities for interaction.

The developmental testing also identified the need for a further development to *Lyceum* itself: the installation of a system of recall of students once they are in breakout rooms, and the option of target language interfaces, which were implemented in time for the beginning of the course. The latter provides consistent use of the target language during tutorials and was something that course teams, tutors and students had requested. Of course being able to develop the software (albeit at a cost) is one of the biggest advantages when using software built in-house; and as *Lyceum* was developed as a tool for learning, the development continues to be guided by pedagogical principles within the possibilities of the software.

### *5.2.1.3 Writing and rewriting*

The third stage involved the following writing process:

- The key points to be practised in each tutorial were identified.
- A draft for the session was created on paper.
- Draft materials (whiteboards, concept maps, or documents) were created. Graphic materials were obtained or created.

- The draft session was tried in the VLE by the author and first drafts were created of all the tutorial materials to be provided for the tutors.
- The draft tutorial materials were reviewed and activities tried in the VLE by the course team, subsequently, activities were revised and rewritten, as were stimuli and documents.
- The session is completed. All tutorial materials to be provided for the tutors are finalised.

The content of the tutorials was tailored according to the language and cultural content covered in the course materials at the time of the tutorial, the time available to practise, and students' needs. In accordance with the theory on task design above, the aim throughout the design process was always that the tutorials should focus on the learning outcomes, and not on the technology.

### *5.2.2 Tutorial materials provided*

To deliver the materials developed, the tutorials are made available to the tutors both on paper and on a specially-created CD-ROM, the first time this medium has been adopted in the Department of Languages for the delivery of *Lyceum* materials to tutors. The materials provided for the tutors, following the recommendations of the developmental testing, consist of 1) an overall lesson plan, where they can see at a glance what the outline, learning outcomes, procedure and materials for the tutorial are, 2) a detailed lesson plan, where each activity that takes place during the tutorial is explained in detail, 3) images of the specially-created modules available to the tutors and 4) a copy of the preparation document for each tutorial. This preparation document is distributed to the students via their course website and they are asked to print it and have it with them for the tutorial. It is hoped that it will support the learner at many levels. Firstly it provides them with an outline of the activities that will take place during the tutorial, hopefully reducing anxiety. It also states the objectives for the tutorial. The third part is a section for language revision. This should allow the students to participate even if they are behind with their learning, can act as a revision document, and also serves as a condensed

source of information during the tutorial (as opposed to being in front of the computer with a book, a dictionary, and a grammar book), thus, it is hoped, making the process easier.

### *5.2.3 Activity taxonomy*

The types of activity developed include language games, personal information exchanges, interviews, role plays, descriptions, collaborative narrative, giving directions and instructions, sequencing, grouping, matching, gap filling and information gaps. Each type of activity is not exclusive and some of them overlap. Some of the activities are best suited to one particular type of module (whiteboard, concept map, text, or chat) which best supports the activity and offers stimuli to foster interaction and elicit contextualised chunks. The activities provide an example or model answer and then offer opportunities for students to talk about their own experiences and circumstances, and are offered opportunities to engage in collaborative learning and notice, negotiate meaning, learn by doing, and focus on form.

Whilst the activities utilise elements of traditional CALL software, such as dragging images, and using visual elements as stimuli, in this context they are not used for individual work, but to generate interaction between peers in group or pair work. In some cases, the visual stimulus provided is not actually necessary for the completion of the activity, but its main function is to provide visual support and focus attention. The main concern in the design of the activities was creating tasks that, whilst still providing stimuli for oral interaction, require little technical skill but also ensure the gradual development of their ICT and audiographic software literacy. Throughout the course the students are taught in the context of different tasks how to move between modules, create and access breakout rooms, use the chat tool, type in the whiteboard or text module, drag objects in concept maps and whiteboards, place pins on pictures, and to copy and paste pictures onto a whiteboard. It is essential for the technology not to create anxiety, impede completion of tasks, or put students off by being too challenging.

The tutorials are designed not with the idea of replicating the activities that work in the face-to-face environment, but of providing activities that suit the medium and achieve the same results. For example, one of the activities designed for the developmental testing was a “hangman” game. When tried out with the testers and tutors in a whiteboard module in the VLE, the activity proved too technically challenging for the students, who had to draw lines for each missing letter with the pencil tool, write letters with the typing tool, and use the drawing tool to draw the hangman every time a letter was said, therefore this type of activity was abandoned. It is essential that the formulation of activity instructions and training the students to use certain features of the software do not take longer than the time for interaction. In brief, the limited time for oral interaction should not be compromised for the sake of the technology.

As recommended by previous literature, most tutorials include plenary group work and work in pairs or smaller groups in breakout rooms where the students engage in the interactive tasks, which they later are encouraged to report on in many instances. This, and the use of different modules, is intended to support the different preferences and learning styles that students may have. The multimodality afforded by the tool allows us to “select modes to suit the task in hand as well as catering for different learning styles” although at the same time it “makes greater demands on the user because of its more dynamic and unstable nature” (Hampel, 2003, p. 25). This, however, is addressed by the gradual pacing in the introduction of the different modules and features throughout the course.

The types of activity designed for each module are as follows:

Whiteboard	Concept map	Document	Chat
<ul style="list-style-type: none"> <li>- Describing pictures</li> <li>- Following and giving directions on a map</li> <li>- Sequencing</li> </ul>	<ul style="list-style-type: none"> <li>- Listing vocabulary</li> <li>- Listing ideas or arguments for discussion</li> <li>- Word order</li> </ul>	<ul style="list-style-type: none"> <li>- Form filling</li> <li>- Presentation of information for information gap exercises or giving</li> </ul>	<ul style="list-style-type: none"> <li>- Spelling</li> <li>- Writing numbers to demonstrate oral comprehension</li> </ul>

<p>pictures</p> <ul style="list-style-type: none"> <li>- Describing a scene</li> <li>- Describing routine based on pictures</li> <li>- Creating a narrative based on pictures</li> <li>- Placing pins on a map to talk about nationalities</li> <li>- Moving objects to demonstrate oral comprehension</li> <li>- Presentation of information</li> </ul>	<p>activities</p> <ul style="list-style-type: none"> <li>- Ordering dialogues</li> <li>- Placing words in categories by semantic field</li> <li>- Brainstorming</li> <li>- Matching</li> </ul>	<p>opinions</p> <ul style="list-style-type: none"> <li>- Pronunciation practice (spelling vs. pronunciation)</li> <li>- Presentation of grammar summaries</li> <li>- Presentation of sample dialogues</li> </ul>	
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For some samples of these types of activity and how they are intended to promote oral interactions see the appendix.

In addition, other features such as the voting system (which allows students to indicate a “yes” or “no” preference) are used as part of the activities (for example to give feedback to a peer, or show agreement) and for tutors to check comprehension of instructions quickly without students having to each actually take a turn to say “yes” or “no”.

The 24 tutorials were written mainly by the author of this article and reviewed by the course team during a seven-month period. The activities were then edited, and the CD-ROM was checked for compatibility and quality assurance, mastered and copied in three months.

#### *5.2.4 Other considerations*

The course team wanted to provide consistency and equal opportunities for the students taking the course. For this reason it was decided that the oral assessment should be carried out in the same medium as the tutorials. That is, students who attend face-to-face tutorials would have their oral assessment face-to-face, and students taking the *Lyceum*-taught strand of the

course would take their oral exam via *Lyceum*. Given the geographical, physical, or psychological reasons why people take the *Lyceum*-taught version of the course listed above, and the stress of taking an examination, it was felt that it would be unfair to add the “new” element of actually being face to face. The format of the end of course oral assessment is the same for both strands of the course: a one-to-one interview and role-play with the tutor. This was the first time that *Lyceum* had been used for assessment purposes and it required a lengthy administrative process to obtain approvals. In addition, because of quality assurance, all oral exams are recorded for monitoring purposes; therefore coordination with the exams office was crucial as a system to deal with the audio recordings as audio files (as opposed to the traditional cassette platform) had to be set up.

The tutorial format, materials, and strategy described here were evaluated by the external assessor of the course, who found them “highly effective” (Estébanez, 2003) and in 2004 the author received an Open University teaching award for their development.

The system used for the development of the activities, its length, timeframe, and support documents for both tutors and students is now being used throughout the Department of Languages as a blueprint for future courses with audiographic components.

## 6 COMMENTS, CONCLUSION, AND RESEARCH AGENDA

In this paper we have described the challenges presented to providing synchronous online tutorials and the provision of materials for a cohort of students who previously had been assumed to be beyond the realm of benefiting from audiographic CMC. By providing the materials it is hoped that tutors will be helped to rise to the challenge of using the audiographic conferencing tool and students will be enabled to learn in circumstances that are new to them. With the provision of the right materials which support both tutors and students, audiographic CMC can be as suitable for beginners as it has been for higher levels.

The tutorials have been developed with a structure that supports the learners through the different stages of their learning, in the light of current SLA research. The variety of stimuli, module use, staggering of software features, and materials provided offer the opportunities for students to feel comfortable in the situation and quickly become familiar with their environment.

The activities have been designed with a format that, it is hoped, will challenge students without overwhelming them, and is supported with documents, concept maps and whiteboards containing especially-selected or created images and texts. The use of the different modes available within the tool allows for the provision of materials that will appeal to students with different learning styles. These provide excellent opportunities for students to develop their language skills, interact orally, and to have access to cultural information. The relatively large number of tutorials and their frequency was chosen to ensure regular frequent contact among students and the tutor. The nature of beginners' language abilities and their development should benefit from these as opposed to longer sessions.

In summary, the approach that we propose for beginners in an audiographic VLE to promote oral interaction in distance learning (based on the principles of TBLT, previous research on audiographic conferencing, and our own experience in the writing process) is that activities should:

- Provide opportunities
  - for oral interaction based on provided stimuli, where learners can receive input, negotiate meaning, and produce modified comprehensible output
  - for participation for all the learners
  - for questions and feedback
  - for learners to incorporate their own experiences
- Engage learners with materials

- that revise and practice what has already been learnt rather than introduce major new elements
- that focus on the specific task objectives in the target language
- that help them discover and appreciate the cultures of the target language
- Offer a variety of plenary group work and small group or pair work
- Make the best of the multimodal nature of the VLE and engage students in activities that involve the visual, reading, and a small amount of writing as well as listening and speaking
- Be supported by a preparation document to guide and support the students
- Be part of a varied pool of materials for each tutorial session
- Not be too long, to avoid tiredness.
- Introduce the different features and tools in the software in a staggered contextualised manner, where using those features is part of a language activity and not the aim of the activity itself.
- Allow for modification of the materials by the tutor
- Allow the learners to store them for future independent use by themselves or with peers.

Audiographic software continues to facilitate interaction and provide access, and brings new roles to tutors. It also has the potential - as yet unused in Open University courses - to be used with native speakers of the target language as other synchronous conferencing tools are (Cziko and Park, 2003). There is much left to research in the field of audiographic CMC: interaction, roles, oral competence, attitudes... Whilst the tutorial development is done within a strong theoretical framework, adopting the theories of SLA, further research is needed into the actualisation of the theory and design in the tutorials: what actually happens during the tutorials? Are learners really being enabled to achieve? What do tutors do with the materials provided? Do they use them at all? Will they adapt them or use them as they have been presented? It is our assumption that for the first year of presentation the tutors will use the materials provided as they will have to cope with the software and

the course for the first time. In subsequent presentations, we expect the tutors to make the materials their own, adapting, changing, cutting and adding to their own teaching style, their students, and the success (or lack of) of previous attempts, as they build their confidence not only as audiographic conferencing users but also materials designers. By following the presentation of the course, we could gain an insight into how much the tutors' and learners' sociocultural circumstances affect the outcomes and the actualisation of the tasks, since Ellis (2000) argued that it is in the improvisation that these factors would have an effect.

Other issues worth researching are the tutor and learner impressions of the software, the course, and the tutorial materials, as well as the students' motivations for choosing the online version of the course. Shield (2000) found that the reasons the learners had for using VLEs fell into two main categories: to practise using the target language in synchronous, spoken interaction within a meaningful framework, and to reduce the isolation of being a distance learner who does not attend face-to-face tutorials (pp 7-8 of printed version). Although there is only anecdotal evidence, the data available leads us to suspect that the main reasons why students choose the *Lyceum*-taught version of the course are because:

a) it provides access to tutorials that otherwise would not be available to them for reasons of

- their geographical location – if they live far away from the regional centre where face to face tutorials are offered and therefore to reduce their sense of isolation.
- limited time availability (Lyceum tutorials tend to be scheduled on weekday evenings and do not require the time to travel to the regional centre).
- physical disability that may make their travelling difficult.

b) they like ICT and the idea of using their computers for their learning.

c) they may feel more comfortable “shielded” behind a PC and not making mistakes in the physical presence of others.

d) they wrongly assume that the whole course is taught online, rather than the tutorials only.

Therefore, it would be a major advancement to the field of CALL and for conferencing for language learning purposes in particular to carry out a study of the learning experience of students using the audiographic conferencing tool for tutorials and assess their experience against the usefulness criteria (Colpaert, 2004) of usability, usage, user satisfaction and didactic efficiency, as would a comparison of the learning experiences of those who take the face-to-face version of the course with that of those who use the audiographic software, using assessment scores or an analysis of the interaction between participants. Similarly, research into the experience of the audiographic tutors would be useful to establish the skills required to teach online, the different roles the tutors take on, and their impressions of using the software.

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## Appendix: activity samples by type of module

### Whiteboards:

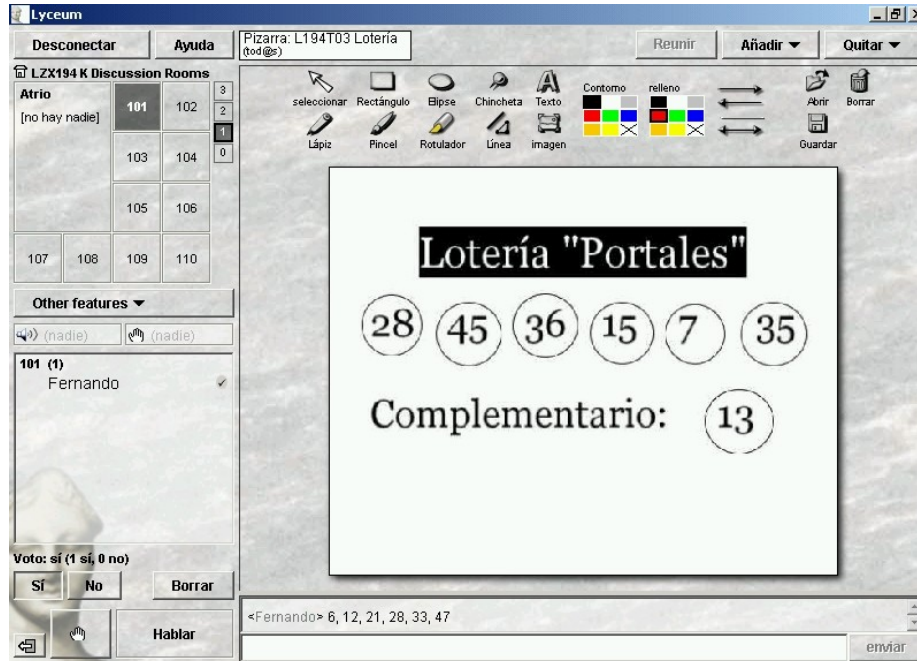
In this activity, students are in a lift and they ask one another which floor they wish to go to. Students are expected to use ordinal numbers up to 10. The student who asks checks comprehension by dragging the picture of the finger pushing the button above the number stated.

The screenshot shows a Lyceum whiteboard window titled "Lyceum". The main content area is titled "El Ascensor" and contains the text "¿Adónde va?" followed by "Voy a la primera planta" and "Voy al primer piso". To the right is a grid of elevator buttons: 8, 9, 10 in the top row; 5, 6, 7 in the second row; 2, 3, 4 in the third row; and a red button labeled "EMERGENCIA" and "PLANTA BAJA" in the bottom row, with a "B" button and a "1" button to its right. A yellow hand icon is positioned to push the "1" button. The interface includes a toolbar with drawing tools like "seleccionar", "Rectángulo", "Elipse", "Chincheta", "Texto", "Lápiz", "Pincel", "Rotulador", "Línea", and "Imagen". On the left, there is a "LZX194 K Discussion Rooms" panel with a grid of rooms (101-110) and a chat area showing "101 (1) Fernando".

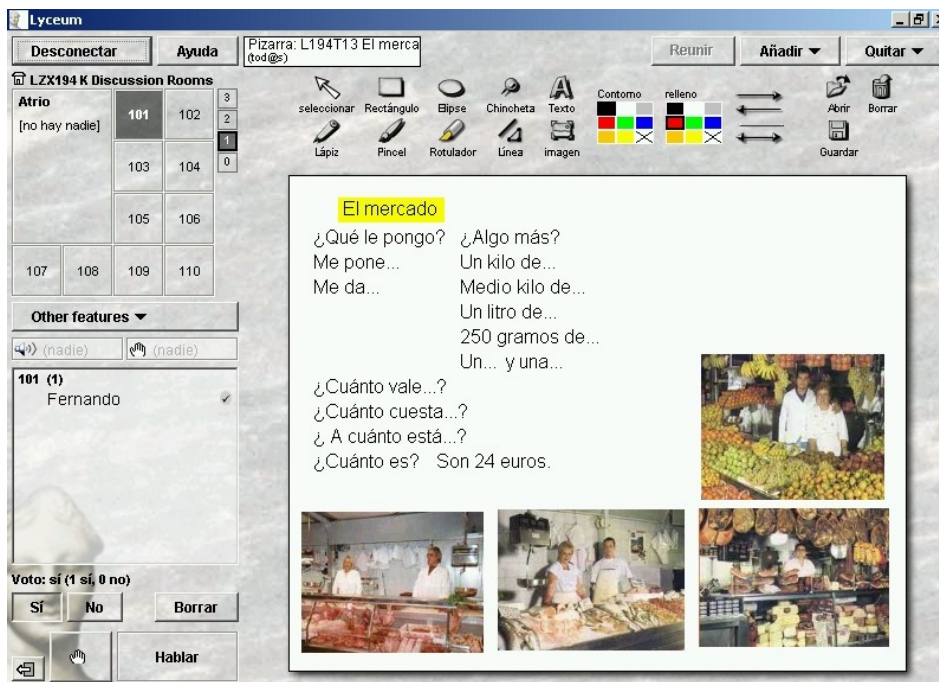
In this whiteboard students ask one another their country of origin and nationality. To ensure comprehension they place a pin with their name on the country they have selected.

The screenshot shows a Lyceum whiteboard window titled "Lyceum". The main content area features a map of Europe with a list of countries on the left: Gran Bretaña, Irlanda, Portugal, España, Francia, Italia, Alemania, Austria, Polonia, República Checa, Croacia, Suiza, Holanda, Bélgica, Dinamarca, Suecia, Noruega, and "...". A red pin labeled "Fernando" is placed on the Iberian Peninsula. The interface includes a toolbar with drawing tools like "seleccionar", "Rectángulo", "Elipse", "Chincheta", "Texto", "Lápiz", "Pincel", "Rotulador", "Línea", and "Imagen". On the left, there is a "LZX194 K Discussion Rooms" panel with a grid of rooms (101-110) and a chat area showing "101 (1) Fernando".

In this activity students do not engage with the elements of the whiteboard. Instead, the image is used simply as a visual stimulus. After reading the numbers on the screen, the tutor asks students to read out their lottery numbers. The next student on the list writes the numbers in the text chat to ensure comprehension.



Using pictures and presenting a sample dialogue, this whiteboard helps tutors elicit useful vocabulary and expressions for shopping and then provides the stimuli for shopping role plays in the different market stalls.



## Concept maps:

In this concept map different parts of a conversation between two students at a language school have to be dragged into the correct order. Students then save the module and re-enact the dialogue with their own personal information in pairs in a breakout room.

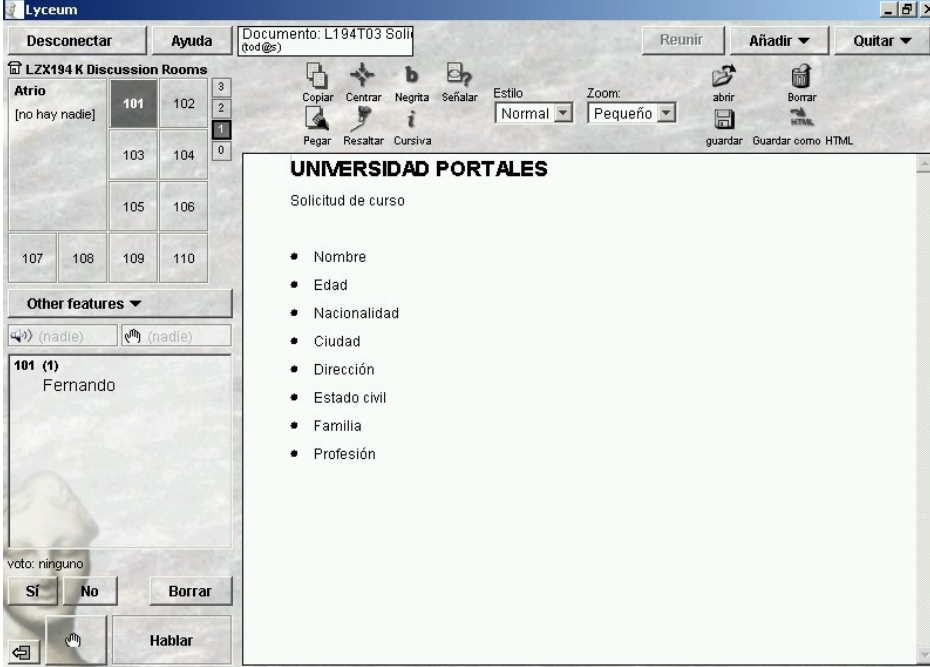
The screenshot shows the Lyceum software interface. The top menu bar includes 'Desconectar', 'Ayuda', 'Reunir', 'Añadir', and 'Quitar'. Below the menu is a toolbar with icons for 'Seleccionar', 'Conectar', 'Cuadrícula', 'Inicio', 'Zoom', 'abrir', 'Borrar', and 'Guardar'. The main workspace is a grid with a yellow background and a grid of small squares. A central text box contains a dialogue between Didier and Seiko. The dialogue is currently out of order. The dialogue text is: '¿Hablas francés?', 'Hola', '¿Cómo te llamas?', '¿De dónde eres?', '¿De dónde?', 'Hola', 'Soy japonesa', 'No, hablo inglés y japonés', 'Me llamo Seiko', 'De Tokio'. The interface also shows a sidebar with 'LZX194 K Discussion Rooms' and 'Other features'.

Another use for the concept map is to provide useful expressions and the guidelines for a debate, such as in this activity, where students will argue the advantages and disadvantages of local markets versus supermarkets.

The screenshot shows the Lyceum software interface. The top menu bar includes 'Desconectar', 'Ayuda', 'Reunir', 'Añadir', and 'Quitar'. Below the menu is a toolbar with icons for 'Seleccionar', 'Conectar', 'Cuadrícula', 'Inicio', 'Zoom', 'abrir', 'Borrar', and 'Guardar'. The main workspace is a grid with a yellow background and a grid of small squares. A central text box contains a dialogue between Fernando and Seiko. The dialogue is currently out of order. The dialogue text is: '¿Prefieres el mercado o el súper?'. Below the dialogue are three sets of 'Expresiones útiles' and 'Ventajas y desventajas'. The 'Expresiones útiles' are: 'El mercado es más... que el súper.', 'El mercado es menos... que el súper.', 'El mercado es tan... como el súper.', 'El mercado tiene más... que el súper.', 'El mercado tiene menos... que el súper.', 'El mercado tiene tantos ... como el súper.', 'Prefiero...', 'Me gusta más...', 'Lo bueno del súper es...', 'Lo malo del súper es...', 'El súper es mejor.', 'El súper es peor.'. The 'Ventajas y desventajas' are: 'caro', 'barato', 'conveniente', 'céntrico', 'rápido', 'variedad de productos', 'calidad de productos', 'productos frescos', 'empleados', 'metros cuadrados', 'el trato personalizado', 'encontrar aparcamiento', 'pagar con tarjeta', 'hacer cola'. The interface also shows a sidebar with 'LZX194 K Discussion Rooms' and 'Other features'.

## Documents:

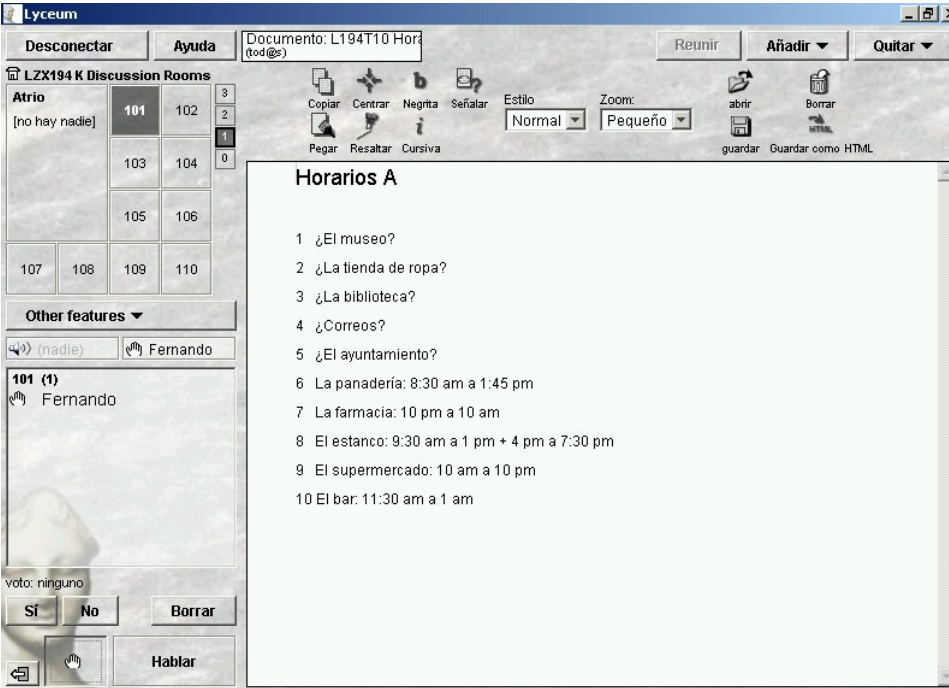
In this activity the document is used to present information, such as filling in a registration form. As the goal of the activity is oral interaction students are not expected to actually fill it in, but ask and respond orally.



The screenshot shows a Lyceum virtual classroom window. The title bar reads "Lyceum". The interface includes a top menu with "Desconectar" and "Ayuda", and a document title "Documento: L194T03 Soli (tod@s)". On the left, there is a "LZX194 K Discussion Rooms" section with a grid of rooms (101-110) and a "101 (1)" chat window showing the name "Fernando". The main document area displays the title "UNIVERSIDAD PORTALES" and the heading "Solicitud de curso". Below this is a list of fields to be filled out:

- Nombre
- Edad
- Nacionalidad
- Ciudad
- Dirección
- Estado civil
- Familia
- Profesión

Another use is to present information and questions for an information gap-style exercise. Students can take notes of the information they have and what it is they need to find out and then go into breakout rooms in pairs to exchange the information.



The screenshot shows a Lyceum virtual classroom window. The title bar reads "Lyceum". The interface includes a top menu with "Desconectar" and "Ayuda", and a document title "Documento: L194T10 Hor?". On the left, there is a "LZX194 K Discussion Rooms" section with a grid of rooms (101-110) and a "101 (1)" chat window showing the name "Fernando". The main document area displays the title "Horarios A" and a list of questions and locations:

- 1 ¿El museo?
- 2 ¿La tienda de ropa?
- 3 ¿La biblioteca?
- 4 ¿Correos?
- 5 ¿El ayuntamiento?
- 6 La panadería: 8:30 am a 1:45 pm
- 7 La farmacia: 10 pm a 10 am
- 8 El estanco: 9:30 am a 1 pm + 4 pm a 7:30 pm
- 9 El supermercado: 10 am a 10 pm
- 10 El bar: 11:30 am a 1 am

## References:

- Chapelle, C. (1998) Multimedia CALL: lessons to be learned from research on instructed SLA. *Language Learning and Technology*, Vol. 2, No. 1, 22-34. Retrieved March 14<sup>th</sup> 1999 from <http://polyglot.cal.msu.edu/lt/vol2num1/article1/index.html> now at <http://lt.msu.edu>
- Chun, D. (1994) Using Computer networking to facilitate the acquisition of interactive competence. *System*, 22 (1), 17-31.
- Colpaert, J. (2004) Design of Online Interactive Language Courseware: Conceptualization, Specification and Prototyping. Research into the impact of linguistic-didactic functionality on software architecture. Doctoral dissertation retrieved December 7<sup>th</sup>, 2004 from [www.didascalie.be/doc-design.pdf](http://www.didascalie.be/doc-design.pdf)
- Cramer, T. (2001) Distance Language Learning and Voice-Over-Internet Tools. Retrieved 7<sup>th</sup> January 2002 from <http://www.geocities.com/allbeings724/finalproject.html>
- Cziko, G. A. & Park, S. (2003) Internet Audio Communication for Second Language Learning: A comparative Review of Six Programs. *Language Learning and Technology*, 7 (1), 15-27. Retrieved 30<sup>th</sup> April 2004 from <http://lt.msu.edu>
- Doughty, C. (2000). *What do computers assist in language learning? Perspectives from SLA research and LT methodology*. Plenary address at IATEFL CALL for the 21st Century, Barcelona, Spain.
- Doughty, C. & Long, M. H. (2003) Optimal Psycholinguistic Environments for Distance FL Learning. *Language Learning and Technology*, 7 (3), 50-80. Retrieved 30<sup>th</sup> April 2004 from <http://lt.msu.edu>
- Ellis, R. (2000) Task-based research and language pedagogy. *Language Teaching Research*, 4 (3), 193-200.
- Erben, T. (1999) Constructing Learning in a Virtual Immersion Bath: LOTE Teacher Education through Audiographics. In: Debski, R. and Levy, M. (eds.), *WORLDCALL: Global Perspectives on Computer-Assisted Language Learning*. Lisse: Swets & Zeitlinger, 229–248.
- Estébanez, S. (2003) *Evaluation of the on-line conferencing system Lyceum*. Internal report for the Portales production team. The Open University.
- Furstenberg, G. (1997) Teaching with Technology: What is at Stake? *ADFL Bulletin*, 28 (3), 21-25. Retrieved 14<sup>th</sup> January 2005 from <http://www.mla.org/adfl/bulletin/v28n3/283021.htm>
- Hampel, R. (2003) Theoretical Perspectives and New Practices in Audiographic Conferencing for Language Learning. *ReCALL*, 15 (1), 21-36.

Hampel, R. & Baber, E. (2003). Using Internet-based audiographic and video conferencing for language teaching and learning. In U. Felix (Ed.), *Language learning on-line: Towards best practice* (pp. 171-191). Lisse, The Netherlands: Swets & Zeitlinger.

Hampel, R. & Hauck, M. (2004) Towards and Effective Use of Audio Conferencing in Distance Learning Courses. *Language Learning and Technology*, 8 (1), 66-82. Retrieved 30<sup>th</sup> April 2004 from <http://lt.msu.edu>

Hare, D. (1994) Designing activities for an open-learning language course. *CLAC Occasional papers in communication*. Centre for Language and Communications. The Open University.

Hauck, M. & Haezwindt, B. (1999) Adding a new perspective to distance (language) learning and teaching – the tutor's perspective. *ReCALL*, 11 (2), 46-54.

Herring, S. (1996) Computer-mediated communication: linguistic, social and cross-cultural perspectives. Amsterdam. John Benjamins.

Hewer, S. (2001) Criteria for the selection of ICT media to be employed in ab initio foreign language courses, with particular reference to Lyceum. Report for the Department of Languages. The Open University.

Hewer, S. & Shield, L. (2001) 'Online Communities: Interactive Oral Work at a Distance', in Atkinson, T. (ed.) *Reflections on computers and language learning*, UK, CILT Reflections Series, 53-62.

Holliday, L. (1999). Theory and research: Input, interaction, and CALL. In J. Egbert & E. Hanson-Smith (Eds.), *CALL environments: Research, practice, and critical issues* (pp. 181-188). Alexandria, VA: TESOL.

Johnson, K. (2003) *Designing Language Teaching Tasks*. Basingstoke. Palgrave Macmillan.

Kern, R. (1995) Restructuring classroom interaction with networked computers: Effects on quantity and quality of language production. *Modern Language Journal*, 79 (4), 457-476.

Klapper, J. (2003) Taking Communication to Task? A critical review of recent trends in language teaching. *Language Learning Journal*, 27, 33-42.

Kötter, M. & Shield, L. (2000) Talk to me! Real-time audio conferencing and the changing roles of the teacher and the learner in a 24/7 environment. Proceedings of Networked Learning 2000: Innovative approaches to Lifelong Learning and Higher Education through the Internet. Retrieved 7<sup>th</sup> January 2002 from <http://collaborate.shef.ac.uk/nlpapers/KoetterShieldNL/KoetterShield-p.htm>

Kötter, M., Shield, L. & Stevens, A. (1999). Real-time Audio and Email for Fluency: Promoting Distance Language Learners' Aural and Oral Skills via the Internet. *ReCALL*, 11 (2), 55-60.

Kötter, M. (2001) Developing Distance Language Learners' Interactive Competence – Can Synchronous Audio do the trick? *International Journal of Educational Telecommunications*, 7 (4), 327-353.

Lamy, M.N. & Goodfellow, R. (1999) 'Reflective Conversation' in the virtual language classroom. *Language learning and technology*, 2 (2), 43-61. Retrieved 30<sup>th</sup> April 2004 from <http://llt.msu.edu>

Lamy, M. N. & Shield, L. (2000) "Deux téléconférences pour l'autoapprentissage d'une langue étrangère: synchronie ou asynchronie? Retrieved 30<sup>th</sup> April 2004 from <http://www.utc.fr/~untele/volume3.pdf>.

Lamy, M. N. (2004) Oral Conversations Online: Redefining oral competence in synchronous environments. *ReCALL*, 16 (2): 145-157.

Little, D. (1997) Responding authentically to authentic texts: a problem for self-access language learning?. In Benson, P. & Volley, P. (eds.), *Autonomy and Independence in Language Learning*: Longman, 225-236.

Long, M. H. (1996). The role of the linguistic environment in second language acquisition. In W. C. Ritchie & T. K. Bhatia (Eds.), *Handbook of research on language acquisition. Vol .2: Second language acquisition* (pp. 413-468). New York: Academic Press.

Meskill, C. (1999) Computers as Tools for Sociocollaborative Language Learning. in K. Cameron (Ed) *CALL: Media, Design and Applications*. The Netherlands: Swets & Zeitlinger. Retrieved 7<sup>th</sup> December 2004 from <http://www.albany.edu/etap/Faculty/CarlaMeskill/publication/cameron.pdf>

Nunan, D (1989) *Designing Tasks for the Communicative Classroom*. Cambridge. Cambridge University Press.

Oxford, R. (1990) *Language learning strategies: What every teacher should know*. New York. Newbury House.

Price, L. (2002) Report on L194 Developmental Testing of Lyceum. Programme on Learner Use of Media. Institute of Educational Technology. The Open University.

Rowntree, D. (1994) *Preparing Materials for Open, Distance, and Flexible Learning*. Kogan page. London.

Shield, L. & Hewer, S. (1999) A Synchronous learning environment to support distance language learners", in Cameron, K. (ed) *CALL & the Learning Community*, Proceedings of Exeter CALL 1999, Exeter, Elm bank Publications, 379-391.

Shield, L. (2000) Overcoming Isolation: the loneliness of the long distance language learner. Retrieved January 2<sup>nd</sup> 2004 from <http://fels-staff.open.ac.uk/lesley-shield/Publications/Proceedings/>

Skehan, P. (2003) Focus on Form, Tasks, and Technology. *Computer Assisted Language Learning*, 16 (5), 391-411.

Stockwell, G. R. (2004, June). *CMC for language learning: Examining the possibilities*. Paper presented at the JALTCALL 2004 Conference, Tokiwa University, Mito, Japan.

Wang, Y. (2004) Supporting Synchronous Distance Language Learning With Desktop Videoconferencing. *Language Learning & Technology*, 8 (3), 90-121. Retrieved October 10th, 2004, from <http://lt.msu.edu>

Warschauer, M. (1997) Computer-mediated collaborative learning: Theory and practice. *Modern Language Journal*, 81 (3), 470-481.

Warschauer, M. & Healey, D. (1998). Computers and language learning: An overview. *Language Learning*, 31, 57-71