TOWARDS AN EFFECTIVE USE OF AUDIO CONFERENCING IN DISTANCE LANGUAGE COURSES

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ABSTRACT

In order to respond to learners' need for more flexible speaking opportunities and to overcome the geographical challenge of students spread over the United Kingdom and continental Western Europe, the Open University recently introduced Internet-based, real-time audio conferencing, thus making a groundbreaking move in the distance learning and teaching of languages. Since February 2002, online tutorials for language courses have been offered using Lyceum, an Internet-based audio-graphics conferencing tool developed in house.

Our research is based on the first Open University course ever to deliver tutorials solely online, a level 2 German course, and this article considers some of the challenges of implementing online tuition. As a starting point, we present the pedagogical rationale underpinning the virtual learning and teaching environment. Then we examine the process of development and implementation of online tuition in terms of activity design, tutor training, and student support. A number of methodological tools such as logbooks, questionnaires, and observations were used to gather data. The findings of this paper highlight the complexity of the organisational as well as the pedagogical framework that contributes to the effective use of online tuition via audio conferencing systems in a distance education setting.

INTRODUCTION

In 2002 the Department of Languages (DoL) of the Faculty of Education and Language Studies at the Open University, UK, began a progressive move towards introducing online tutorials for all language courses using Lyceum, an Internet-based audio-graphics conferencing tool developed in house. Until then, Open University language students depended primarily on traditional distance learning methods of delivery such as print material, video tapes, audio cassettes, and occasional face-to-face tutorials in one of the university's 13 regional centres (up to 21 hours per year). Apart from one week of total immersion in the target language at residential schools in Caen (France), Jena (Germany), and Santiago (Spain), these face-to-face tutorials used to be the only opportunity for learners to practise their oral skills in authentic communicative settings. Moreover, access to a summer course in the target culture was limited to second year students for whom these are, however, a compulsory part of their studies.

To respond to the students' need for more flexible speaking practice, DoL has, since 1997, been investigating the benefits of using Internet-based, real-time audio conferencing applications. Today, the increased robustness of Internet audio technology allows us to use voice conferencing in a genuinely interactive and synchronous way. Thus, in 2002, audio-graphic conferencing was introduced as a tuition tool in a mainstream Open University German course, thereby allowing for real-time oral communication amongst students and between students and tutors.

However, audio-graphic conferencing tools have not been widely used in language teaching and learning, and few studies have been carried out thus far. We therefore saw the introduction of audio-graphic conferencing as an opportunity not only to evaluate our own experience of the delivery of tutorials in Open University language courses but also to share our findings with others working in similar areas.

Our interest was focused primarily on activity design, tutor training, and student support, all of which we investigated through multiple data collection. Firstly, the conferencing tool together with the course-related Web site and the activities were developmentally piloted. Our evaluation was based on observing students using the Web site and carrying out one of the activities designed specifically for a virtual learning environment (VLE) such as Lyceum. Students also gave feedback via questionnaires. Secondly, tutor training was evaluated through observation and a questionnaire. Thirdly, throughout the first year of presentation of the course, a tutorial group was observed, and volunteer students and tutors kept logbooks and gave feedback in a questionnaire (for a more detailed evaluation of this see Hampel, 2003).

PEDAGOGICAL RATIONALE FOR AUDIO-GRAPHIC CONFERENCING

In an attempt to integrate research and practice (Garrett, 1998), we drew on a conceptual framework to support the design and use of conferencing systems in language learning and teaching, and situated the design and implementation of online tuition at the Open University in the context of previous studies done in this area. Our first port of call was theories of second language acquisition. For language acquisition to take place, students must be provided with comprehensible input (Krashen, 1981, 1985), they have to be able to interact to negotiate meaning (Gass & Varonis, 1994; Varonis & Gass, 1985), and they must produce comprehensible output (Swain 1985).

Some studies have shown that in written forms of computer-mediated communication (CMC), or so-called text chat, students produce a greater quantity of discourse than in an oral classroom (Kern, 1995; Ortega, 1997). CMC can also lead to more equal participation between students (Warschauer, 1996). Pellettieri (2000) claims that written learner chat has the same potential for developing grammatical competence through negotiation of meaning (comprehensible input and modified output) as oral interaction does. CMC also allows "students to play a greater role in managing the discourse" (Chun, 1994, p. 17). The question is, however, whether these communicative skills acquired in a written environment are transferable to oral communication. Most studies are rather tentative on this point and only go as far as to say that the written interactional competence may gradually be transferred to spoken discourse competence (Chun, 1994). Recent developments in audio-graphic conferencing can now complement written CMC by offering the possibility of going a step further and supporting oral language acquisition as well.

At the same time, we see sociocultural learning as a key form of learning. Learners progress through successive "zones of proximal development," guided by the teacher or more advanced peers. According to Vygotsky (1978), the zone of proximal development is seen as "the distance between the actual developmental level as determined by independent problem solving, and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers" (p. 86). Based on Vygotsky's theories, new learning approaches like constructivism, problem solving, and collaborative learning have been developed, all of which have in common the fact that they represent a "move away from the static transmission models for knowledge and skill acquisition that are based on traditional cognitive learning approaches which emphasise learning as an incremental mathematically-facilitated process" (Felix, 2002, p. 6). Instead, they focus on learner orientation, process orientation, and learner autonomy (Rüschoff, 2001), in the belief that learning

- must be regarded as an active and collaborative process of knowledge construction;
- is to be seen as an autonomous process, to be regulated by the learners' expectations, goals, existing schemata and intentions;
- is a process of experimentation based on previous knowledge and experience;
- is a process of socially negotiated construction of meaning; and
- is a process which must be supported by a rich learning environment rooted in real life and authentic situations. (Rüschoff & Ritter, 2001, p. 224)

These new approaches also stress the importance of authentic materials and situations (Chapelle, 1999; Felix, 1999; Rüschoff & Ritter, 2001).

CMC is an ideal medium for collaborative learning through social interaction both with a tutor and with peers. It can be used to encourage students to construct their own knowledge (Furstenberg, 1997; Levy, 1997; Felix 1998). In their LEVERAGE project, which used a task-based approach via audio- and video-conferencing, Zähner, Fauverge, & Wong (2000) have shown that there is "clear evidence that the LEVERAGE system was effective in supporting collaborative learning" (p. 202). Students can also be encouraged "to conduct actively 'meaningful tasks and solve meaningful problems in an environment that reflects their own personal interests as well as the multiple purposes to which their knowledge will be put in the future'" (Collins, Brown & Newman, 1989, p. 487, cited in Warschauer, 1997, p. 477). Meaningful tasks include the use of authentic settings and authentic materials, which in a VLE are easily accessible via the Web. Pilot projects at the Open University with Lyceum and other software that preceded it suggest that audio-graphic conferencing can be successfully used for collaborative learning, for giving more control to the students, and in changing the role of the tutor (see Hauck & Haezewindt, 1999).

As we move from relatively simple text-chat applications to more complex software that supports synchronous audio communication online, another aspect that has to be taken into account is the multimodal nature of these new environments (see Kress, 2000a, 2000b; Kress & van Leeuwen, 2001). VLEs like Lyceum offer learners a combination of different modes such as the visual, the verbal, and the written, thereby realising the "meaning potential of language" (Halliday, 1986, p. 92). Such a view is reflected in what Chun & Plass (2000) have to say about networked hypermedia environments

> that not only present learners with information in various modes (visual, audio, and verbal/textual), but also require learners to engage in productive tasks and activities in a variety of modes, both synchronous and asynchronous methods of student collaboration, and they employ video, images, sound, and text for both the presentation and the negotiation of information. (p. 152)

While such environments offer great opportunities, we must not ignore the fact that they also make greater demands on the user. All these pedagogical considerations have influenced the development of online tuition at the Open University, including the way in which the VLE is used, the design of learning activities and the provision of tutor training.

TOWARDS AN EVALUATION OF AUDIO-GRAPHIC CMC

Johnston (1999) claims "that on-line learning has appropriated notions such as flexibility and efficiency and skewed their meanings so as to make it appear that on-line learning is the panacea for all our ills" (p. 86). In his view, the only flexibility offered by online courses is that of time asynchronicity and self-pacing. However, several studies have shown that additional benefits may be derived from using computer-mediated communication (CMC). Kelm (1998), for example, states

> that electronic network communications follow many of the principles expressed in language acquisition theories, especially in the ability to present a natural language environment with concrete referents, promote communication among peers, provide expansive feedback, allow correction to be independent from communication, treat network communications as experiential learning activities and allow socialization and communication to take precedence over form. On balance, the implementation of electronic networks has the potential to assist language instructors in reaching their goal of bringing individuals together so that they might communicate across linguistic boundaries. (p. 19)

As we began preparing to implement online tuition we were aware of the challenges and tried to learn from previous experience. We were able to draw on studies on written and audio CMC, including a

number of small pilot projects at the Open University where audio and more complex audio-graphic conferencing tools have been used to deliver tuition.

Examination of the relevant findings in written CMC brings to light a number of issues. Although some studies show that CMC can encourage classroom interaction and student participation, limited and irregular participation with small groups of students has been identified as a risk (see Perkins, 1999). Also, as Warschauer & Lepeintre (1997) point out for written CMC, dominant individual students can take control of the communicative situation, thereby excluding other members of the group.

In the literature, there is a growing demand for authentic communicative tasks using authentic materials (Chapelle, 1999; Felix, 1999; Kern & Warschauer, 2000). Task design needs "to identify 'viable' rather than 'artificial' purposes for electronic interaction amongst students and staff" (Selinger & Pearson, 1999, p. xii). However, as Chun and Plass (2000) state, one of the things that remains "relatively unexplored is the development of 'networked multimedia' materials" (p. 152). They also identified the danger of overloading the students when using authentic Web materials.

As pilot studies at the Open University have found, teaching in a virtual environment can be challenging for the tutor, whose range of roles widens to include that of confidant, nervous parent, trouble-shooter, student, and human being (Hauck & Haezewindt, 1999, p. 51–52).

Another issue that emerges is how to compensate for the lack of body language. Learning in a VLE can become more anonymous and less spontaneous than in a face-to-face situation, and the process of communication can be depersonalized (see Lecourt, 1999). Thus, Kress & van Leeuwen (2001) point to the fact that the technological developments may "signify the most profound loss of embodiment we have seen yet" (p. 92). There is also the practical side of the multimodal technology, which makes certain demands on the learners who have to operate several modes in one medium and make choices between modes to suit both the task at hand and their own learning styles (Kress & van Leeuwen, 2001, p. 2). In addition, the technology requires a certain degree of technical expertise and users must be prepared for the experience beforehand and supported throughout it.

In order to realize the potentials of audio-graphic CMC and to circumnavigate the pitfalls, we felt that the successful development and implementation of online tuition in Open University language courses depended to a large extent on task design, tutor training and student support. The effectiveness of these areas was measured in the following ways:

- evaluation of developmental testing of the VLE through a feedback session and a questionnaire (completed by 13 participants);
- evaluation of tutor training through a feedback session and a questionnaire (completed by 19 tutors); and
- evaluation of student and tutor experience of the VLE in the first year of presentation through a voluntary group of 12 students (from different tutorial groups) and 6 tutors (out of 20 overall), who kept logbooks and filled in a questionnaire, and through observation of one tutorial group throughout the course.

THE LEARNING AND TEACHING ENVIRONMENT

Lyceum

In Lyceum, the audio-graphic conferencing software developed by the Open University for teaching and learning, students and tutors use headsets and microphones (which they have to provide themselves) to work together in real-time, an approach which enables them to simultaneously hear each other and talk to each other, but not to see each other. Apart from the voice facilities, Lyceum offers a traditional on-screen *whiteboard,* a so-called *concept map* suitable for brainstorming exercises, word associations as well as other vocabulary-building activities, and a *shared document* for collaborative writing activities (for a

more detailed introduction to the tools see Hampel & Baber, 2003). A text-chat box providing limited space for additional written input can be opened to supplement the voice conferencing.

In addition to offering a set number of sub-conferences (so-called "rooms") within each conference, the software allows learners to create their own virtual rooms where they can meet in pairs or small groups to engage in real time interaction. Thus, students are empowered to study in collaboration with others and to take on responsibility for their own learning experience. Given that the capacity to take control of one's own learning is seen as one of the determining factors of learner autonomy (Benson, 2001), students are thus encouraged to work in an increasingly autonomous way.

As with other networked environments, Lyceum can be accessed on a 24-hour-a-day, 7-day-a-week basis. This allows learners to meet outside scheduled tutorial hours in order to collaborate on projects or to catch up with their peers if they miss a scheduled session. Although most students shared English as their first language, German was used for all interaction between students and tutors and we also encouraged students to use the foreign language when communicating with each other outside tutorials.

Web Site

A course-specific Web site was deemed important for several reasons. Its first identified major use was the delivery of tuition tasks, written by central academics and made accessible via the Web site to all tutors and students. Students were given a complete outline of each activity, allowing them to prepare for scheduled tutorials in advance if they wished to do so. It was also hoped that this would minimise the disruption caused by student absence from some sessions given that they would be able to find out easily what was going to happen in a tutorial even if they had missed the preceding one.

A second principal function of the Web site was the provision of course-related information, including assessment tasks and latest news. Thirdly, the site provided links to other university-wide information sources, including the library, information and communications technology (ICT) support, and so forth.

With increasing integration of ICT into Open University courses, the team had the benefit of a ready-made standard template for Web sites. In spite of this, functions, access, and design had to be customized, and completion was delayed by the lengthy process of obtaining copyright for images. Certain ideas for information that might usefully be included on the site, such as tutorial times or group lists, were thwarted by the difficulty of gathering such information and of keeping track of changes. The establishment of adequate manpower to input and maintain up-to-date documents and information is a major and ongoing consideration.

Design of Learning Activities

In order to put the pedagogical theories described at the beginning of the paper into online practice, the design of the activities was of paramount importance. In terms of second language acquisition, we tried to follow Holliday's (1999) demands, which are made in the context of qualitative computer-assisted language learning (CALL) products but which can also be applied to written and oral CMC.

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 (Holliday, 1999, p. 188)

For each activity, students were pointed to material (texts and images) from the course books and selected Web sites. The activities fostered interaction and the negotiation of meaning by guiding students to obtain information from other learners and to act on it. This led them to produce comprehensible output through

speaking and writing. Tasks also involved all students in the production of a final output such as a presentation, brochure, or radio programme. Here the VLE with its various audio, writing, and graphics tools together with the tasks and the materials helped to create a rich context for learning -- richer than more traditional written CMC or face-to-face settings.

Following Vygotsky's (1978) conviction that "problem solving under adult guidance or in collaboration with more capable peers" (p. 86) fosters development more than individual problem solving, the activities focused on collaborative learning. Shneiderman (1994) also states that "students are not strongly motivated by the goals of acquiring facts, accessing information, drill & practice ... [but] rather ... prefer to create, communicate, plan, explore, build, discover, participate, initiate, and collaborate" (n.p.). Project work and problem-solving activities were designed so that learners needed to arrange additional online meetings outside the official tutorials to exchange ideas, negotiate solutions, and prepare a joint presentation of their work. Since the aim of using audio-conferencing was to increase learners' opportunities to practise both speaking in and listening to the target language in real time, activities concentrated on oral/aural skills.

Following Vygotsky (1978), we also believe that language learning "must be 'relevant to life'" (p. 118) and we therefore chose topics that not only were integrated into the course but were also potentially meaningful to students, topics such as adoption or work environments today. We wanted to give students the opportunity to draw on previous knowledge (be it from the course or from their own experience) and to build on it, thus following the constructivist approach, which sees knowledge as "something children [as well as other learners] must construct and less like something that can be transferred" (Rüschoff & Ritter, 2001, p. 223). The aim was for learning to become "an active, creative, and socially interactive process" (Rüschoff & Ritter, p. 223).

Given that the VLE provides learners with a multimodal environment, the activities used the different modes available in Lyceum in a complementary way. Spoken input was enriched with written text and/or graphic images; one mode was used to elicit output in another mode, thus contributing to what Holliday calls a "rich context."

We also developed a number of so-called warm-up activities. These are linguistically undemanding tasks specifically designed not only to consolidate students' knowledge of the various features of the VLE but also to help them to get to know each other, to overcome their inhibitions, and to foster collaboration. In so doing we hoped to counteract the risk of anonymity and disembodiment in the VLE.

DEVELOPMENTAL TESTING

Methodology

Although previous versions of Lyceum had been tested in several pilot projects and their benefits shown in several studies (see Hauck & Haezewindt, 1999; Kötter, Shield, & Stevens, 1999; Shield, Hauck, & Hewer, 2001; Shield, Hauck, & Kötter, 2000), it was felt necessary to developmentally test the VLE as a whole, that is, the audio-graphic conferencing tool in conjunction with the newly designed activities and the course Web site.

On an administrative level, the testing was necessary in order to highlight the kind of information that students need and the ways in which they access that information. Through this, we also found ways of making written and electronic correspondence less demanding. Technically, we needed to make sure that the installation process worked and that students would not be overwhelmed by the demands of the virtual learning environment. From an academic point of view, the testing allowed us to see whether the activities were suitable for the Lyceum environment

Testing of Lyceum was carried out online with a cohort of 15 volunteers in four 75- minute sessions: an induction into the software, a set of two tutorials, and a debriefing session. The authors acted as tutors and

as online observers. Students used their own computers at home and connected to the conference via a modem. Some of the 15 students also agreed to come to campus for the testing of the Web site, and they were observed face to face.

Findings

The questionnaire for Lyceum, sent to all 15 participants, sought feedback on technical issues such as installing and using the software and helpdesk support. At the same time, students were asked to describe their experience with the main tasks as well as with the warm-up activities. Thirteen participants completed the questionnaire, and the data obtained was analysed qualitatively and, to a more limited extent, quantitatively.

Together with the online observer's report and the experience of the tutor, the results from the questionnaires highlighted a number of technical issues. These included problems of being heard or hearing others (voice distortion or total loss), non-appearance of the loudspeaker icon to indicate who is speaking, and loss of connection, especially when switching rooms. Some problems resulted from user-centred issues, or were connected with equipment (users having a variety of PCs, Internet Service Providers (ISPs), and microphones). Others problems involved the software. As a result of issues connected with the software, some significant changes were made prior to the start of the course. In addition, tips on how to resolve the most common problems with software and ISPs were collated and communicated to students in the form of printed and electronic help-sheets.

With respect to the task, students generally commented that it was very interesting and that it worked very well. Some students commented positively on the incentive to use the Web and to read German material on the Web. At the same time, students highlighted the point that the task required more preparation than they had expected. Students had been asked to work together in small groups in between the two tutorials in order to prepare the plenary in the second session (a discussion of adoption in the form of a role play). For those who had researched their area and met their partners in Lyceum, the task worked very well. However, not all students found time to prepare and therefore found it harder to contribute to the discussion.

The warm-up activities were perceived as good and useful; students felt they gave them extra practice with the Lyceum tools. As they were not very demanding linguistically, participants were able to concentrate on getting to grips with the conferencing tool. Warm-up activities also helped students to get to know the other participants and to get used to speaking German.

The evaluation of the Web site was carried out by an initial questionnaire regarding students' previous experience of using a computer and the Web, direct observation of participants exploring the Web site with particular emphasis on retrieving information for the tutorial task, and debriefing and further questioning on users' general appreciation of the site and the task. The findings show that in general, the participants were able to use the website successfully to understand the task they had been set. However, some specific issues emerged concerning navigation and the format and nature of the Lyceum tutorial such as preparation and contribution by participants. Students also expressed concern about preparing for Lyceum activities by using Web material.

TUTOR TRAINING

In order for tutors -- most of whom had never used Internet-based conferencing before -- to use the new medium efficiently and effectively, training was organized in the 2 months preceding the course. It consisted of two induction sessions with a member from the Open University's Department for Learning and Teaching Solutions, who concentrated on the technical skills necessary to lead tutorials via Lyceum. She introduced tutors to the various tools in Lyceum and provided some basic netiquette training.

Academic members of the German team were responsible for a series of pedagogical training sessions, which took place in Lyceum through December 2001 and January 2002:

Session 1	consolidation of use of Lyceum tools and online warm-up activities
Sessions 2 and 3	simulation of tutorial tasks
Session 4	debriefing and evaluation

Thus, the pedagogical training sessions were used to familiarize tutors with the online tool and to demonstrate our pedagogical rationale for online tuition as well as to help them develop strategies for implementing it. Given that tutors had to work with the centrally written activities and did not have much experience of the tool at the time of the training, it was decided that the best mode for tutor training was for them to try out the activities from the perspective of the learners. Thus, they got more practice using the software as well as an insight into how the tasks worked. After the hands-on experience, tutors spent a whole session evaluating their experience and discussing the pedagogical implications of online learning and teaching.

At the end of the training, tutors asked for an additional session after the start of the course in order to share their experience of the reality of teaching online. This took place after tutors had held their first online tutorial and served mainly to sort out organisational and technical problems.

The tutor training (which was attended by 19 individuals) was evaluated with the help of a questionnaire, to which 15 tutors responded. We asked for feedback on the technical aspects of setting up and using Lyceum and on the content and format of the training sessions. We also analysed tutors' feedback at the debriefing and follow-up session and looked at the e-mail inquiries of participants. Fourteen tutors took part in the debriefing session which was held immediately after completion of the training, and nine tutors attended the additional meeting.

In general, it was found that tutors were really keen to try out the new technology with their students. However, a number of issues emerged, with technical problems being most prevalent.

Findings: Technical Problems

One third of the tutors experienced problems downloading the software from the Internet, but when CD-ROMs became available there were no more problems with the installation. Most users found the online guide helpful; others had problems which they felt were not addressed in the guide. One response related to a different style of absorption of information: The lecturer preferred talking through problems with a member of the helpdesk on the telephone in order to solve them rather than reading a guide.

Passwords also affected the setup. A number of the e-mails related to this problem, which was sorted out quickly with the help of the course administrator.

Nearly half of the tutors contacted the helpdesk before the initial session and many made use of the on-line user guide. The helpdesk was also contacted during the training session and between training sessions by a number of tutors. Staff at the helpdesk were described in very positive terms as (very) helpful and friendly, though not all problems could be solved. There were some cases of hardware problems where tutors needed to upgrade their computer. Another frequent technical solution recommended by the helpdesk was the change of ISP provider, which, however, did not always result in a satisfactory outcome.

The most frequent problem was sound quality. Eight tutors (out of 19) initially experienced difficulties with hearing or being heard by other participants, although the situation improved when the Lyceum software was upgraded by the developers at the Open University just before the course started. Some tutors had to install a new soundcard or upgrade their computer. Some sound problems also related to

headphones. The headphones used varied greatly and several participants could not identify which brand they were using.

The second area of technical problems related to the ISPs. Seven tutors complained about being cut off frequently, while others experienced occasional disruption. It is very likely that many of these disruptions have to do with the timing of tutorials, which usually took place in the evening.

Tutors felt that technical issues affected the online learning experience to some degree. Only four felt that they did not have a negative effect on the learning process. Five felt they had some effect, and six felt they had a strong effect on the learning experience.

Findings: The Training Sessions

Most tutors felt that the induction sessions met their needs by familiarising them with the software features. It brought home to them how students might feel about the complexity of the tool and they also got insight into what their own role would be once they started teaching in the VLE.

The response to the warm-up activities was very positive. Tutors felt that using them provided training with the tools, stimulated ideas for tutorials with the students, and that they were non-threatening, confidence-building, and fun. One felt these activities were too long. Another found some of the things mentioned by her fellow participants in one of the activities offensive. Here participants got a glimpse of the tutor's role as "nervous parents" in VLEs like Lyceum (see Hauck & Haezewindt, 1999, p. 51), that is, having to cope with the possibility that CMC, particularly in synchronous settings, is free from censure and therefore open to misuse of any kind.

The main learning activity that had been chosen for the training sessions (and which focused on the topic of adoption) was seen as a very interesting and useful activity with a clear brief. Reflecting on the activity showed how learners could (and should) be given the opportunity to discuss the rationale underpinning a given task with the tutor. Thus the learners took more initiative and gained further insights into the learning process, and the tutor's role as "confidant" was emphasized. Tutors also commented that the activity allowed for different working styles.

A number of suggestions were made about how the activities could be improved. It was mentioned, for example, that more pair work and less whole group work could be done to increase the actual time people are speaking in the target language. To help find solutions to the task, it might be useful to have a whole group discussion initially, and then for students to divide up for pair work. Some tutors also felt that more time should be allocated to work through the activities.

Below are a number of concerns raised by individual tutors regarding the activities:

- 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.

Apart from the sound issue, these concerns are the same as with face-to-face teaching and require -- as usual -- the imagination and professional judgement of the tutors to deal with them.

Summary

The general tenor of the comments was positive and suggested a proactive tutor attitude. The training and the activities were perceived as enjoyable and inspiring and tutors expressed that they were looking forward to teaching with Lyceum despite the technical problems they themselves had experienced.

In terms of the technology, tutors will need special training to work with VLEs like Lyceum to be able to give at least minimal support to the students. They need substantial technical support to start with and as "trouble-shooters" often find themselves in a situation where they need to advise students. But, as Dias puts it, "the range of things that can go wrong ... is not endless and, eventually, even the most technically inept teacher can learn to diagnose problems and give appropriate advice. Some may even enjoy being seen as technical Messiahs" (1998, p. 24). From a pedagogical point of view it increases the students' immediate sense of success if the target language can be used to solve technical problems.

Tutors felt that they were making a significant contribution in time, effort, and sometimes even money, to make the technology work. They thought that it was important that these types of contributions be recognised by the institution and that the institution could be relied upon for ongoing support. One of the practical outcomes of the tutor training was the request for a tutor group discussion area in FirstClass (the written conferencing system used by the Open University) in order to share experience and find peer support. This was subsequently provided by the Open University.

STUDENT SUPPORT

Student support is another vital element in the successful implementation of online tuition. In this paper we are concentrating on support provided by the institution, such as induction into the VLE and helpdesk support. In addition, students were supported by their tutors in tutorials (where they receive technical, pedagogic, and linguistic help). Many tutors also used e-mail to communicate with their students and to support them, passing on information about tutorials, giving feedback to tutorials (e.g., error correction), motivating students, and helping with problems.

For peer support, students were able to use Lyceum outside scheduled tutorials, and several learners formed self-help groups, which met online regularly in order to prepare tutorial tasks. Many also kept in touch by e-mail and a course-specific FirstClass student conference.

Induction into Lyceum

The quantity and range of issues revealed during developmental testing showed that student training was paramount. Many students were not very experienced computer users and had used a computer mainly for word-processing purposes. Thus, all students were asked to take part in an induction session to learn how to use the tools. It was also hoped that individual user or technical issues could be resolved prior to the start of the course. It was evident that without such dedicated support, initial tutorials would be disrupted and tutors overloaded. This extra ICT support was subsequently set up for the crucial few weeks prior to the start of the course; students were contacted with options of time-slots, and organised into groups. Despite the large number of sessions that were offered, non-attendance was an issue. Whilst students can be encouraged to attend such sessions and to attempt to resolve technical problems in plenty of time before sessions, such precautionary measures cannot be enforced.

Many tutors also spent the first session consolidating what students had learned in the induction session. They used warm-up activities so students were able to try out the different tools without having to deal with difficult content matter and linguistic challenges on top of the technical ones.

Helpdesk Support

The solution of technical and user problems required a continuing communication process. Whilst the Open University does have a central university ICT helpdesk, available during evenings and weekends as well as daytimes, the extra workload with these relatively new issues stretched capacity. The range and quantity of individual queries and problems generated by students and staff inexperienced in using ICT and this particular software was a problem. Queries were directed to numerous channels, including to the software developers, and staff of all categories. Because only the ICT helpdesk as able to obtain from enquirers the kind of detailed information which was likely to help identify the source of the trouble,

phoning or e-mailing other staff often resulted in incorrect or insufficient information being passed on, with less chance of a resolution.

Where common problems and solutions were identified, information was generated in one to two page leaflets. This, however, also caused concern as individual students received information they may or may not have required, with the risk that they would develop an unfavourable perception of the VLE. Whilst the intention was to avoid paper communication, it proved necessary in the early stages. Online help was in the process of development but, again, the level of maintenance and updating required proved a great strain on resources. The arrangement of additional dedicated support prior to the start of the course did, however, alleviate some of these problems. Furthermore, it has to be recognised that full control of all the factors influencing the VLE experience cannot be achieved by the provider. While estimates suggest 95% of users will find engaging with the software acceptable, 5% will not be successful because of a factor beyond the provider's control (e.g., problems with an ISP). Furthermore, even when accurate specification of the equipment needed to run the software successfully is provided, some users will use equipment without that specification. This aside, improvements to back-up and shadowing of the software mean that the security of operations can be maximised.

EVALUATION OF FIRST YEAR OF PRESENTATION

In order to evaluate both student and tutor experience in the first year of presentation, a range of methods was used. One of the authors of this paper observed one tutor group throughout the course (ten tutorials between February and July). In addition, twelve volunteer students and six tutors were found who agreed to keep logbooks commenting on each tutorial according to a given brief. They also filled in a questionnaire at the end of the course which focused on activities, Lyceum tools, use of the website, participation and speaking practice as well as technical and support issues. This was analysed qualitatively and quantitatively. The findings with respect to the activities and to student support are presented here (for general findings of this study see Hampel, 2003).

Activities

Student feedback suggests that participating in intense interactions with fellow learners as well as collaborative tasks is the most exciting aspect of learning and practising a language in a VLE like Lyceum. This is also supported by Shneiderman's (1994) findings: "The intense interactions ... have created a greater sense of interaction and intimacy among the students than many face-to-face courses" (n.p.).

Students commented that they found the warm-up activities very good, interesting, and useful as they not only helped to get into a German-speaking frame of mind but also managed to convert the voices of unknown people into real human beings. This also reflects the tutors' experience; they found the warm-up activities essential to get people talking and to create a relaxed and open online atmosphere. In addition, the tutors found the activities beneficial as they helped to introduce the students to the different tools in Lyceum.

With respect to the main learning activities, students' opinions were more diverse. Most found them interesting, enjoyable, and productive and thought they introduced new aspects of the language. Not all students seemed to agree, however, as to whether they felt that the activities related sufficiently to the relevant sections of the course. A drawback identified by several students was that the activities required students to prepare tasks in advance or in between scheduled tutorials. This was something some students felt they did not have the time for. A couple of students also lamented the fact that the numbers of participants dwindled over the course of the year so tutorial activities had to be modified accordingly and it got more and more difficult to organize joint work outside scheduled sessions. They thus felt that activities should be limited to a single tutorial session and require less preparation. At the same time, it was suggested that students should be strongly encouraged to make more use of Lyceum and participate

more actively by, for example, introducing an assessment element into the tutorials (which at the moment, however, does not conform to the Open University's policy of voluntary tutorials).

A couple of students commented on problems with participation in group work. One identified the danger of a more dominant person taking over when students work in small groups; another felt that in a VLE, where tutors do not receive visual clues and body language, it is easier for students unsure of what is going on to sit quietly without participating and without getting help or encouragement.

In general, tutors commented that the activities were well planned and suitable and that they supported the idea of learner-centeredness. They felt that the activities stimulated discussions amongst the students and encouraged them to work in groups preparing certain tasks. One tutor felt that she had less control over proceedings, which she thought was maybe not a bad thing. However, some tutors had to deal with students who did not prepare for sessions or did not attend regularly which resulted in tutors having to adapt the activities or develop alternatives (e.g., stand-alone sessions).

As the tutors became more familiar with Lyceum, they also became more adventurous and were better able to cater to student needs. One tutor, for example, included occasional grammar exercises; another commented that she used more pre-prepared visual/text material on whiteboards or concept maps to keep up students' concentration.

On the basis of the data analysed, the activities were shown to be contributing greatly towards fostering second language acquisition, collaboration, and sociocultural learning -- despite the problems of the interaction of learners in between scheduled sessions. The warm-up activities seemed to fulfil their purpose of helping to make the seemingly disembodied names and voices less anonymous. Over time, tutors and students also got accustomed to using the multimodal environment more effectively in order to enhance the tasks and contribute to student learning.

Student Support

According to the findings of the survey, students felt well-equipped to use Lyceum as a result of the induction, which they thought was well run and informative. Suggestions for improvement revolved mainly around the wish to have more than one induction meeting and a recommendation to future users to practise more offline.

The technical problems that students experienced related mainly to audio quality (poor sound levels, interrupted audio transmission) and to losing the connection. Because of the technical difficulties, especially at the beginning of the course, the helpdesk was inundated with technical queries and problems, and as a result it was difficult for a while to contact the helpdesk staff via telephone. Even though this meant that students had to use e-mail (resulting in a delay in resolving the problem), they felt well-served by the helpdesk whose staff they described as very helpful and resourceful. However, the questionnaire also shows that some students did not consult the helpdesk when experiencing problems.

As the system developers updated Lyceum in the course of the year, these technical problems, especially with respect to audio quality eased. Yet despite technical improvements to the system in the course of the year, two thirds of both students and tutors believed that technical issues had had a negative effect on the learning/teaching experience.

Not all students used Lyceum outside scheduled tutorials but those who did found it very useful for preparing tasks for tutorials, both individually off-line and online jointly with other users. Several students formed self-help groups which regularly met online.

E-mail proved to be extremely helpful when students wanted to contact their peers, for example in order to prepare a joint presentation for a tutorial, to send drafts for projects, or to arrange meetings in Lyceum. Another tool students had access to in order to communicate with peers was FirstClass. One student described FirstClass as a friendly place where one can try out one's written German and which is less

stressful than communicating in real time. It was seen as complementary to Lyceum, as a place to discuss course issues and to enjoy a sense of community. Students also appreciated the fact that they could communicate with their tutors via e-mail and, for example, receive advance information about tutorials.

CONCLUSION: LESSONS LEARNT AND GENERAL GUIDELINES

Looking at our findings on setting up online tuition in an audio-graphic environment in terms of task design, tutor training, and student support, it becomes clear that the main challenges that we met with cut across these different areas and relate to the technical side of online learning and teaching. As a result, the following improvements were made either in the course of the year or prior to presentation of the subsequent course. These improvements relate to the technology as well as to the help students are given so as to be able to use the technology effectively:

- improvement of audio quality;
- changes to the recommendations for computing equipment, including an indication that *minimum* requirements may not give *full* functionality;
- provision of extra advice (e.g., on sound card compatibility and ISPs);
- recruitment of dedicated trainers for the technical induction sessions;
- more clarity to students in channelling queries (e.g., all technical enquiries to be directed to helpdesk, all academic enquiries to tutor);
- publication of any updates on software issued once a week, with standard messages sent out to all students and tutors;
- direct link from each Lyceum conference to a technical support room staffed by the helpdesk during tutorial times, which should make it easier for both students and tutors seeking advice;
- introduction of an animated teach-yourself tutorial on CD-ROM, which students (and tutors) are sent two months before the start of the course; and
- streamlining of the setting-up process by extending and improving the password and authentication system and by producing a simple automated booking form for induction sessions, so that users can allocate themselves to particular slots online.

In terms of activity design, the only issue which caused major concern among tutors and students was the format of the activities, that is, the fact that each activity covered two sessions and required students to work in small groups in between the two scheduled sessions. We have reacted to this by reworking each activity into two separate tasks that stand on their own. In the next year of presentation of the course, the activity bank will include the original sessions which spread over two online meetings as well as the new stand alone sessions which cater to groups that are less willing or able to put in extra preparation time thus increasing tutor and student access to more flexible resources.

These new activities still place students at the centre of the tutorial and require them to work with their peers on a task, thus safeguarding our student-centred, interactive and collaborative approach. They also include recommendations on how students can collaborate beyond the scheduled tutorial sessions. For example, additional activities which enable students to take a given task even further are outlined.

In all other respects, the activity design seems to have been successful as borne out by the results of the evaluation of student and tutor experience through logbooks and questionnaires as well as through "classroom" observation throughout the year. However, as only one group (out of 20) was observed, and the logbooks and questionnaires reflect only a relatively small number of students' views, more work needs to be done to explore the design of tasks and especially their implementation in a VLE using audio-graphic conferencing for the delivery of tutorials.

Our experience with audio conferencing has shown that the following areas need to be priorities, within which the establishment of efficient processes and systems are crucial:

- communication with students: initial and ongoing;
- training of teaching and other staff;
- early and comprehensive developmental testing, with sufficient time built in for making changes;
- arrangements for adequate ICT support, including induction and setting up and maintaining comprehensive online help;
- design and student use of the Web site;
- adequate staffing to deal with ongoing issues; and
- ongoing evaluation of task design.

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