

PEDAGOGICAL PRINCIPLES OF SYNCHRO- NOUS VIRTUAL EDUCATION: THE ELLU- MINATE LIVE CASE AT THE FACULTY OF EDUCATIONAL AND LANGUAGE STUDIES (THE OPEN UNIVERSITY)

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Abstract

In the current document the efficiency of the Elluminate Live tool is analyzed when it is used as a synchronous media in a virtual learning environment. In most of the research discussed, as for the integration of the tool in the university studies, it has been found that its use makes easier communication, interaction, development of online tutorials, lectures and debates. The main goal of the research shown in the current paper is to present the results obtained when using the synchronous communication tool in the process of learning and teaching of Languages Studies in the Open University. The sample consisted of one teacher and six tutors of Languages Studies of the Open University. In order to analyze the experience developed with the Elluminate Live tool, an interview with 13 questions of open answer was designed. The experience described by the tutors and the academics pointed out the advantages of the integration of synchronous communication in the teaching-learning process. Interviewees highlighted the potential of the tool for language teaching in distance education. It was considered that Elluminate Live is a facilitator of the learning process for the Open University courses, since it allows online tutorials where students can practice speaking.

Key words: distance education; intelligent tutoring systems; interactive learning environments; pedagogical issues.

Introduction

US interest in virtual education is growing and some experts believe that the beginning of a transformation of the educational system is currently taking place for the first time in more than 50 years (Metz, 2010).

In this situation, one of the challenges that must be faced is the need for teachers with specific strategies and skills for a virtual teaching network. Teachers, tutors or trainers in the network must have a set of skills that enable them to develop their educational role in the new virtual media (Barrett, 2010, p. 19).

Virtual courses may be the only available alternative to some students and it is the responsibility of the tutor, teacher and / or instructor to make the learning experience consistent and comparable to other learning situations that students may have experienced before (Pan & Sullivan, 2005).

In summary, the integration of a tool in our virtual classroom meant studying and analyzing its characteristics, applications and functions, advantages and disadvantages in depth, as well as the results obtained in other universities when it has been used.

In the following lines a theoretical framework is presented which describes the teaching

methods and teaching strategies that enable the integration of *Elluminate Live* in the learning process. The work is presented as a case study investigating the use of *Elluminate Live* in the process of learning and teaching of Languages Studies in the Open University.

The research done describes the main features of the synchronous communication tool *Elluminate Live* and introduces the pedagogical principles of synchronous virtual education. There are also shown the results which have been obtained when *Elluminate Live* has been used. Also, it presents the research carried out in the Department Language Studies (The Open University) relative to the integration of the *Elluminate Live* in their studies. The results have been analyzed in the following section and, finally, in the last section, conclusions are presented.

Synchronous Communication Process Online: Elluminate Live

Elluminate Live is a synchronous communication tool developed by Elluminate Inc. which integrates various virtual resources in order to facilitate the process of online training, such as video, chat, audio, session recording, surveys, presentations, etc.

When integrating it, Elluminate can be used as a tool in a platform as Moodle or Blackboard (Universidad Estatal a Distancia de Costa Rica, 2010)

It allows online demonstration and collaboration. Students can follow their teacher's explanation online watching every single move he/she makes on his/her computer, it allows print and broadcast media, incorporates the possibility of sharing the board and files of different formats. The main characteristics of *Elluminate Live!*® is the possibility of developing synchronous conferences and of integrating different types of virtual resources (PowerPoint, flash, video, audio) in the sessions. In short, *Elluminate Live* allows the creation of virtual classes while sharing documents and applications. (Elluminate Inc, 2009).

Among its features, Universidad Estatal a Distancia de Costa Rica, points out the following: Integration and Transfer of content. During the session, the moderator can use and display the documents produced by students through PowerPoint, Excel, Word, Flash, Dreamweaver, among others. It is provided an interactive whiteboard that can be used simultaneously by teachers and students. Many are the opportunities that this interactive whiteboard provides, among others: sharing of computer desktops, it provides the ability to record sessions, it allows the use of several rooms simultaneously by Workgroups, introduce the possibility of real time collaborative surveys and, finally, it allows the use of different operating systems, such as Windows, Mac, Linux and Solaris.

Analysis of several studios and expert opinions have showed that synchronous tools use supported socio-emotional relationships and personal interactions development (Chou, 2002; Clark, 2005; Freitas & Neumann, 2009; Hrastinski, 2008; McBrien, Jones & Rui Cheng, 2009; Rourke & Anderson, 2002; Shauna, Kromrey, Barron, & Hogarty, 2005; Schullo, 2005), increasing the frequency of interaction among the users involved in the process (Freitas & Neumann, 2009; Mabrito, 2006) and the communication process (Chou, 2002; Fox, Morris, y Rumsey, 2007; Freitas & Neumann, 2009; Hrastinski, 2008).

Pedagogical Principles of Synchronous Virtual Education

It is difficult to improve the teaching and learning in higher education by simply implementing new technology, but it can be optimized when the development of educational innovation is made on the basis of: an instructional design, the context of learning, student characteristics and previous experience with technology. Technology alone cannot ensure efficiency in the learning process (Kirkwood & Price, 2005, p. 15).

The seven principles of good practice in undergraduate education can be removed,

Chickering and Gamson (1987), to apply the synchronous teaching-learning process. The integration of the seven principles of Chickering and Gamson, the study of synchronous communication in virtual environments is justified on the grounds that studies of synchronous communication technologies have fed on the theories and principles of classroom teaching (Graham, Cagiltay, Craner, Lim & Duffy, 2000) and even the principles and variables traditionally considered influential in student performance are still valid today (Knight, 2007). Numerous authors consider that these principles are of interest to guide the use of synchronous technology tools (Chickering & Gamson, 1987; Freitas & Neumann, 2009; Knolle, 2002).

The principles provided in educational practice: activity, expectations, cooperation, interaction, diversity and responsibility. These principles (Chickering & Gamson, 1987, p. 1-6):

Strengthen teacher-student contact: the largest motivating factor for students.

1. Enhancing reciprocity and cooperation among students: Work in a collaborative team learning and facilitates the exchange of ideas. Also respond to social interactions providing a quick thought process and a deeper understanding.
2. Promoting active learning through the practical application of learning, where students get to put into practice what they have previously learned.
3. Provide reinforcement and response to students: Students need to be constantly informed about the progress of their learning: Knowing what they have to improve, what they need to know how to evaluate the learning process. It is important to receive suggestions for improvement.
4. Give importance to the duration of tasks: Learning to use time. Students must learn to manage time and teachers to make a realistic time organization.
5. Communicate high expectations: Having high expectations of students support a positive evolution of their learning, on the theory of self-fulfilling prophecy.
6. Respect the different abilities and learning styles: First it is necessary to know the talents and learning styles of students preferred to further enhance alternative ways of learning, enhancing learning.

Khan (2001) has created an e-learning framework with eight dimensions and their sub-dimensions. Among his suggestions for the development of a learning process from the pedagogical dimension is pointed out the following: The objectives should be adapted to the course and clearly described; the course must submit an appropriate structure. It will address what the role of the instructor is and then it is studied where and how this facilitation of learning takes place. On the other hand, in order to facilitate the acquisition of goals and objectives by the students, the educational content should be presented and organized in a proper sequence in the correct order. The levels should take care of the clarity, style, readability, usability, graphics and multimedia components. In short, the course will provide a clear direction of what the student must do at each stage of the course and be also characterized by providing a logical continuation of the learning process. Besides, the use of various means of teaching can enrich the learning process.

Another interesting study by Knolle (2002) had as main objective to investigate the most effective practices for teaching in a synchronous online environment (*HorizonLive*) at the University of California State University, Chico. The sample consisted of accepting 28 teachers, selected from those teachers who had taught and had used *HorizonLive*, an asynchronous tool for a semester. Based on their responses and following the seven principles of Chickering and Gamson (1987) 68 types were set as strategies for teaching online. An analysis of data on the perceived effectiveness of the seven fulfilled the above principles. In addition, advantages and disadvantages are analyzed of using this tool (Knolle 2002). The results indicate that the group was able to identify seven principles and 68 strategies to facilitate their development.

Based on the fact that the experience with *HorizonLive* is applicable to other synchronous communication tools such as *Elluminate Live*, it's interesting to know some of these strategies and their relationship with each of the principles when using *HorizonLive* to teach in the virtual learning environment:

With regard to principle 1st "Encouraging contact among students and teachers", Knolle (2002, p. 32-39) suggests: Ensure that all questions asked are answered; maintain attention and generate new possibilities of interaction (ask questions during the session, reinforce meaningful participation, attendance at the virtual tutoring); care organization and management and manage (supervising the working groups, to organize the form and order of the response to exercise, among other aspects); promote emotional closeness of the group (using their name, read the comments made during the session to the group, and end the session by thanking their participation).

"The development of reciprocity and cooperation among students" (Second principle) can be achieved by dividing the class into small groups, using the restrooms for the debate team, introducing a topic for discussion or a task to be completed and / or using the discussion for clarification of questions and make suggestions. In addition, they can develop activities that promote interaction between the campus and online students, enabling students to answer questions made by other students on campus (Knolle 2002, p. 39-43).

With regard to the third principle "promote active learning", Knolle (2002, p. 39-43) highlights the following strategies: Asking students to analyze the information presented, ask questions of thought, ask a subject of debate, the assignments for the tasks performed exclusively during the synchronous session, development activities through Web searches, case studies, vignettes or other exercises during the class sessions to get students' answers in the chat room. Everything previously mentioned is a good approach to encourage an active learning.

The fourth principle "Strategies to boost and quick responses to the students", according to Knolle (2002, p. 48-50), may be developed if the instructor lets a specific time in the synchronous session for the approach of questions and answers, other than the necessary time to provide the lesson, showing the activities and / or comments made by other students and/or start the session by a summary of the previous session answering outstanding questions.

According to Knolle (2002, p. 50), "Give importance to the duration of the tasks" (top five) can be achieved on the one hand, through strategies that strengthen participation in synchronous session (reviewing attendance reports and contacting students who have not participated in the synchronous session, sending private messages to encourage participation), and on the other, by implementing teaching strategies that facilitate the monitoring of the session (using slides, and present an outline of content, providing students copies of content to be treated; classes begin by explaining the objectives and explaining how the session will be carried out).

In order to develop the top 6 "Communicating high expectations" Knolle (2002, p. 54-57) suggests using the modeling technique, reinforcing high expectations about the students, show a detailed description of tasks, clarifying expectations and objectives of the course and displaying the content or examples of good jobs.

Finally, Knolle (2002, p. 57-60) suggests that the top 7 "Enhancing learning styles" can be achieved if the course is enhanced using different types, sizes and materials (official documents, presentations, videos), resources offered by the tool (visual, animated movements, facial features, camera, etc.) and assessment strategies, among other strategies.

Results which Have Been Obtained when Elluminate Live Has Been Used

As noted above, many studies on the efficacy, use, evaluation and impact of the use of online courses and asynchronous communication tools in education can be studied, but few sources of research are found on the use and effectiveness of synchronous communication

tools, probably due to his recent appearance on the market (Falloon, 2011; Hampel, 2003). In addition, it can be stated that there is much research available regarding the development of optimal instructional strategies in synchronous communication environments (Schullo, 2005). It stands out, above all, the lack of studies relating to the synchronous tools with the objectives of learning and integration of this tool in teaching (Schullo, 2005).

Among the authors who make recommendations to ensure proper integration of *Elluminate Live*, several can be pointed out, such as to Frank, Kurtz and Levin (2002) who examined two pre-university courses where they used LearnLinc iNet. The authors conclude that it is important to respond to students immediately and to facilitate care throughout the process, establish a methodology that provides opportunities for students to speak; teachers need to have some experience in using the tool and in coordination of virtual groups.

In order to achieve success in the synchronous learning process it is suggested: properly design of a reference guide for the program including synchronous teaching exercises and instructions, use of asynchronous tools as essential to provide greater autonomy to the student, allowing access to content to an individualized pace, prepare students before the start of the session; use the blackboard to respond to the chat notes, solve technical problems; track students, monitor if you are late to the session and disruptive students (Hofmann, 2001)

Moreover, it is interesting to note that among the most effective teaching strategies used in the study of Schuller (2005) at the University of Florida, mini lectures with interactive exercises were included, group work and collaborative structured exercises, and finally, debates. The main objective of the instructors using *Elluminate Live* is to reduce the lack of immediacy present in asynchronous tools, as well as the need to direct the acquisition of information.

Suggested recommendations for a successful use of synchronous tools, such as chat, conducted by Branon and Essex (2001) have been related to the ability to form small groups of students, organizing several sessions at different times to increase participation opportunities for all students and, finally, it is recommended to design a specific protocol for the chat.

The results indicate that for teachers and educators to find useful distance education using synchronous tools, the following items should be achieved: the development of meetings or sessions, decision making, brainstorming, community building or equipment and for addressing technical problems. Moreover, they noted that asynchronous tools were considered particularly useful in strengthening the depth of learning, reflection, discussion and development of communication. (Branon & Essex, 2001, p. 36-37).

Laurillard (2002) indicates the risk of delivering new material during the synchronous sessions instead of allowing a preliminary discussion. On the other hand, he believes that integration of different resources synchronous (text, audio, video, etc.) can enrich the learning process.

Kirkwood and Price (2005) consider that the immediacy of the response requested in synchronous communication means not having enough time for reflection, highlighting the advantage of asynchronous communication tools on the time that allows students to reflect on some issue or question raised, prominent element in the educational process. Synchronous communication, therefore, should be more structured and systematic, requiring more technical training in the use of these tools by tutors and students.

Clark (2005) based on a review of researches made regarding the use of synchronous tools, including *Elluminate Live*, draws some recommendations for its integration in virtual classroom. First, the author recommends being brief. The online sessions should be 60 to 90 minutes. You can make several weekly sessions or one session per week distributing and using asynchronous tools between sessions. Secondly, in order to maintain student's attention in synchronous sessions, he recommends: pace yourself active in the presentation of content while using synchronous tool (in one hour to present to 40-45 slides, distributing the content across multiple slides) to dominate visual content rather than content-text, incorporating the responses

of students, and conduct small group meetings, assigning groups to the rooms.

The eLearning Guild (Brandon, 2005) is the result of analysis of data from 644 surveys answered by professionals on the synchronous instruction. Based on the experience gained with the use of this tool, a set of tips for the delivery of teaching through online synchronous tools are listed. Among others, it is highlighted the need for the instructor, to meet and practice with the tool (software) and technology, preparing to teach through an online tool to know what is going to be taught and how they will teach it and prepare for the unexpected, that is, to prepare for the session in advance.

Furthermore, in order to ensure an effective result, it is recommended as follows: preparing the session in advance, keep in mind the students, help to prepare the student in using the tool, establishing clear expectations from the beginning of the course, providing the possibility the student to introduce him/herself, taking care of the motivation, involvement and commitment of students, giving the student immediate reinforcement, care of contents and keeping a clear and precise communication with students. It also noted that it is interesting to study the optimal size of the class group based on the objective of the course (if the target is the interaction group size must be less than if the goal is the presentation of content through slides) and indicates that the duration should not exceed 2 hours.

The review of the literature by Freitas and Neumann (2009) indicated that the design of tasks, taking into account the technological means which will be used, the role of tutor and design activities on the basis context, the environment and the characteristics of the students are teaching basic aspects to consider when integrating a synchronous tool in distance education. The authors note that their application should be mainly in small groups.

In the research conducted by Schuller, Siekman and Szydło (2003) which studied the use of *Elluminate Live!* in different synchronous tools by teachers from different disciplines (Education, Nursing and Engineering) conclude that similar teaching strategies are used in all subjects, such as the use of conference and / or discussion, as well as in all courses, students positively evaluated the performance of teachers and the learning experience, which stimulated effective learning environments and increased the sense of community.

One of the teachers conducted interactive classes that included dictation, surveys, question and answer sessions and discussion. Furthermore, he used the rest rooms for project work in small groups of students. Another teacher worked with small groups of students (groups of 3 students) introducing short lectures to be subsequently discussed by the group of students. She used slides and the Internet for the presentation of information. A third teacher used a small group work and introduced no materials or did online classes. Students work in groups to achieve a specific objective following the competitive methodology. Communication tools were used for the communication among group members (Schullo, Siekman & Szydło, 2003)

Finally, here are some examples of activities that can be implemented by using *Elluminate Live*. In the presentation “Five interesting Ways to teach by using Elluminate” conducted by the Faculty of Education and Language Studies, 28th June 2011, at the Open University, they were presented five examples of Activities to use in a group with Elluminate. The main purpose of the presentation was to explain what the possibilities of this online teaching tool were. Among the suggestions the following may be included:

You can start the course with an introductory task that aims to encourage students to speak and participate through the tool. The first activity was the presentation of a text (of a 2 minutes duration) over which it is developed group discussion for about 8 minutes. From the pedagogical point of view, this work facilitates the participation of students through answers to the questions presented, but also reinforces the students to take the lead in the discussion.

The second activity is the presentation of an ethical and reflective issue (analysis of potential harm from the standpoint of an ethical approach to research) to which the students respond verbally.

The third activity's main objective is the collaborative work group through the use of quiz answers. Following the presentation of a case study or conceptual text, some questions are introduced to be answered. Each student will individually present their response in writing, allowing a direct and immediate response. The tool lets you know, immediately and directly, which student has answered, and what is issued.

The fourth activity is called "Open-ended discussion". Following the presentation of the book "Alice in Wonderland" raises a question of reflection to the students, who must respond verbally and individually.

The fifth activity is based on a collaborative process of building where, from the presentation of the task by the teacher, students progressively include written responses to the shared whiteboard. Later, the teacher introduces a question and students give their answers verbally. Therefore, at the end of the session there is an available answer set by the group of students, both verbally and in writing, reinforcing the process of learning and knowledge acquisition.

Here the above mentioned examples are displayed in a chart (see Table 1).

Table 1. Examples of Activities to use in a group with *Elluminate Live*.

Activity developed with <i>Elluminate Live</i>	Time of the academic year	Pedagogy target	Activity description
Introductory task	Beginning of course	Encourage students to speak and participate through the tool	Presentation of a text (of a 2 minutes duration) over which it is developed group discussion for about 8 minutes
Academic task	It may be one of the first activities presented to the student, once he she has been introduced in the course	Introduction to discussion and reflection techniques	Presentation of an ethical and reflective issue: analysis of potential harm from the standpoint of an ethical approach to research
Collaborative activities	All throughout the academic year.	Collaborative work group through the use of quiz answers	Following the presentation of a case study or conceptual text, some questions are introduced to be answered. Each student will individually present his=her response in writing, allowing a direct and immediate response
Open-ended discussion	Within the academic year.	Group Discussion and development of knowledge	Following the presentation of the book "Alice in Wonderland" a question of reflection raises to the students who must respond verbally and individually
Collaborative process of building	Within the academic year.	Reinforcing the process of learning and knowledge acquisition.	From the presentation of the task by the teacher, students progressively include written responses to the shared whiteboard. Later, the teacher introduces a question and students give their answers verbally

In this section a number of theories and guidelines are introduced of how to start a process of synchronous communication in virtual learning environments. Among the pedagogical principles identified by the experts, it is considered that the proposal by Chickering and Gamson (1987) is the most complete, since it brings together the fundamental guidelines regarding the process of synchronous teaching which are shared by Knolle (2002). In short, when using *Elluminate Live* there should be taken into account issues such as: the need to strengthen the student (this is shared by most authors studied), enhance interactivity and active learning to be effective in the answers, care of the duration of tasks, communicate high expectations and respect learning styles. Khan (2001) identifies as relevant aspects some such as organizing and structuring the course, adapting to the course objectives, the importance of methodology and instructional media.

It has been identified several strategies for working with a synchronous tool. Among the points raised, several are highlighted: the importance of providing students respond to their interventions (Chickering & Gamson, 1987; Frank, Kurtz & Levin, 2002; Hofmann, 2001; Knolle 2002), the need to provide students the chance to talk and interact during the sessions (Brandon, 2005; Chickering & Gamson, 1987; Frank, Kurtz & Levin, 2002), the need to organize the session, the teacher, before starting and to prepare the students themselves (Brandon, 2005; Hofmann, 2001). Furthermore, it is stated that it is imperative that the teacher has prior training in technology and organization of virtual groups (Frank, Kurtz & Levin, 2002; Brandon, 2005). Some authors emphasize the importance of studying the duration of the session (Chickering & Gamson, 1987; Clark, 2005; Knolle 2002), give predominance to the visual content (Clark, 2005) and conduct small group meetings (Clark, 2005; Schullo, 2005), and finally, the presentation of interactive exercises (Schullo, 2005).

Problems of the Research

Traditional systems of education have been substituted by new ways of instruction which have been characterized mainly by its development with the help of ICT (Information Communication Technology). The research showed in this research arises from the need to know what results have been obtained when *Elluminate Live* –a synchronous communication tool- has been used in higher education. On the other hand, it has been analyzed the experience developed with *Elluminate Live* in the Department Language Studies of The Open University as a reference study.

Following Clark (2005) approach, two main issues will be considered, those which try to be answered throughout this article: What are the best practices for the use of these new tools to deliver training? What can be learnt from the experiences carried out in an educational field and the research on the instructional methodology implementation?

Methodology of Research

Elluminate Live is used in the Department of Languages of the Faculty of Education and Language Studies of the Open University. *Elluminate Live* has been integrated within the platform Moodle as a complement tool in courses in order to teach several languages.

Aims and Sample

In order to analyze the experience developed with *Elluminate Live* tool, in the Faculty of Educational and Language Studies (The Open University), an interview with 13 questions of open answers was designed. The mentioned interview can be consulted in the appendix.

Summing up, the sample consists of:

- 1 academic is a course team member and also chair of Spanish courses in the Department of Languages at the Open University
- 6 tutors of Spanish courses in the Department of Languages at the Open University were interviewed, with an average of 17 years of teaching experience and 9.6 years of experience with the use of ICT.

Instruments and Data Collection

The interview has been built on the basis of the objectives for which it was intended, which as noted above, is to collect more information on the possibilities and applications of the tool in courses of Language Studies of The Open University.

Planning of the interview was conducted following the steps listed below:

Selection of interviewees: The choice was deliberate and intentional. That is, all participants are teachers or tutors in virtual courses of Language Studies of The Open University. It has been aimed to cover the whole range of users and professionals involved in online courses. The selection has resulted into 7 tutors and 1 teacher.

Choosing time and place: As they are individual interviews in order to reach the greatest number of tutors and teachers, the interview was conducted via email.

Sending request: During the month of June 2011 interviews were sent by email to all the selected subjects.

For the analysis of the interviews the technique of *Content Analysis* was used. The *Content Analysis* technique has been defined as “a set of communication analysis techniques designed to obtain indicators (quantitative or not) for systematic and objective procedures to describe the contents of messages, allowing the inference of knowledge regarding the conditions production / reception (inferred variables) of these messages” (Bardin, 1986; citado en García, González y Ballesteros, 2001).

In order to systematize the study of information, some of the steps recommended by *García et al. (2001)* have been followed but with a more qualitative approach:

1. Defining the universe of contents and sample selection
2. Decision taking on the unit of analysis.
3. Establishment of families and Codes: Based on the preliminary analysis conducted by the researchers, a content analysis using the Software Atlas TI is then applied. It confirms the previously established codes.

Families and codes found were as the following:

- F.C. Possibilities: Enrichment programme, Complement, Behaviour and Cognitive.
- F.C. Pedagogy: Tutorials, Interaction, Learning and Communication.
- F.C. Advantages: Student participation and Workgroups.
- F.C. Disadvantages: Technical problems.
- F.C. Impact: Quality of teaching and Studies and/or universities.

Treatment of Results

The treatment of the results was performed according to the previous objectives of this research.

Firstly, all the interviews received by email were read and arranged. This approach facilitated the first detailed analysis of the contents. Then it is carried out an objective and systematic reading of each of the interviews without losing sight of the objectives of the investigation.

Secondly, interviews were organized as primary documents for analysis with *ATLAS.ti*.

It was treated as a new *hermeneutic unit*, primary documents were assigned, we found the total amount of words through *Word Crunder* and later, depending on the results, create codes and associated dates. The coding approach is followed by a textual approach at first, and later by a more descriptive coding in order to comprise the most comprehensive and rich contents of the interviews. They were created code families in order to group the codes depending on the objectives of the investigation. Finally, the reports of codes are developed by appointment and the networks with which the most relevant codes were built up.

Moreover, in a subsequent analysis the particular was discriminated, individual and atypical of what the interviewee shared with other interviewees and the matches found between the different interviews were studied, repeated attitudes and opinions are the aspects on which analysis was, finally, presented.

Results of Research

Quantitative Analysis

The qualitative analysis has shown that the use of the tool on online courses in the department is preferably carried out in small groups. In general, mentoring is ready for 20 students, but approximately 12 students usually attend. In addition, they used *Elluminate Live* within small groups (2 or 3 students per group).

Among the interviewed, It may be mentioned a professor at the Open University, Head of Award for Certificate courses and course team member and also chair of Spanish courses in the Department of Languages at the Open University, with 22 years of experience as a teacher and 15 years of experience in the use of ICT in education. In addition, 6 tutors of Spanish courses in the Department of Languages at the Open University were interviewed, with an average of 17 years of teaching experience and 9.6 years of experience with the use of ICT.

Qualitative Analysis

It is then shown a conceptual map which reflects all the families and established codes to categorize interviews with the teacher and the tutors (see Figure 1).

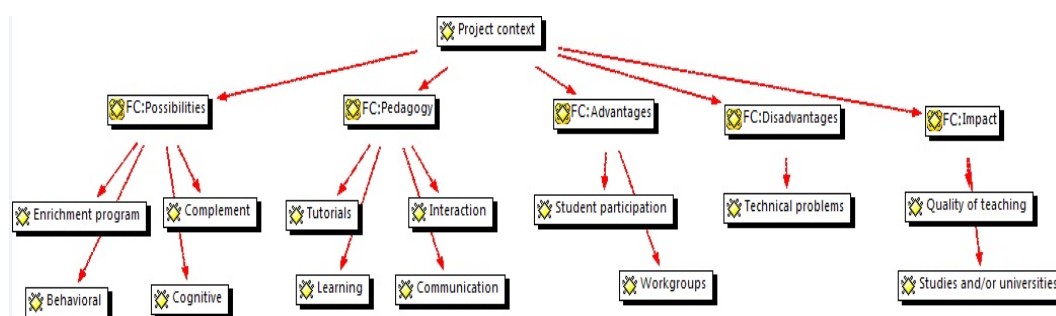


Figure 1: Conceptual map: families and codes found in the research.

By performing a content analysis, it is pointed out that throughout the interviews, the tutors and the teacher have highlighted the potential of the tool and its advantages for the teaching-learning process, not to be forgotten the disadvantages of its use. They have also been reflected on the potential impact of the integration of *Elluminate Live* within studies of the Open University and also at other universities.

Regarding the family code (FC) “Possibilities” offered by *Elluminate Live* (see Figure 2) the interviewees highlighted the potential of the tool for language teaching in distance education. It is presented a conceptual map of family code “Possibilities” conceptual analysis results performed:

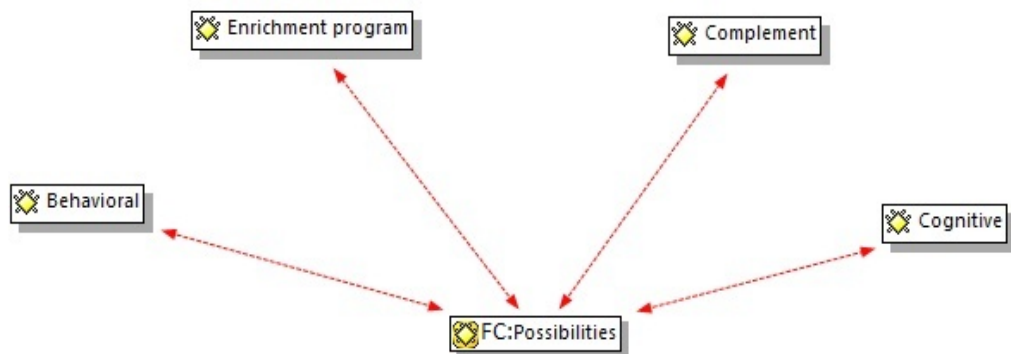


Figure 2: Family code: “Possibilities” offered by *Elluminate Live*.

The academic believes that *Elluminate Live* is a facilitator of the learning process for the Open University courses, since it allows online tutorials where students can practice speaking. The tutors that were interviewed shared the same ideas. They believe that the tool enriches the academic program, as it facilitates learning, allowing interactive process of teaching in the area of language.

All interviewees have agreed that the tool enriches the academic program, considering it a technological advantage that facilitates the development of cognitive and behaviour processes.

Among the cognitive and behavioural processes that are reinforced by the tool is the possibility to practice listening and verbal skills. Overall, the tutors considered that the tool enhances learning and social interaction, “(...) capabilities such as perception, participation, attention or memory” oral skills, i.e. mainly *Elluminate Live* “makes a communicative approach of language easier”.

Some of the comments made by interviewees were as follows:

Academic 1. “Yes, I think it enriches the academic program as it facilitates learning and language teaching in an interactive way”.

Tutor 4. “Absolutely. *Elluminate* or any other programs that serve these functions is a very important addition. It gives the opportunity to do some practice that otherwise would not be possible in a distance situation (practice real conversation in real time)”.

Moreover, it highlights aspects related to the teaching developed in virtual classrooms followed through *Elluminate Live*. It is drawn a conceptual map of family code “Pedagogy” (see Figure 3) conceptual analysis results performed:

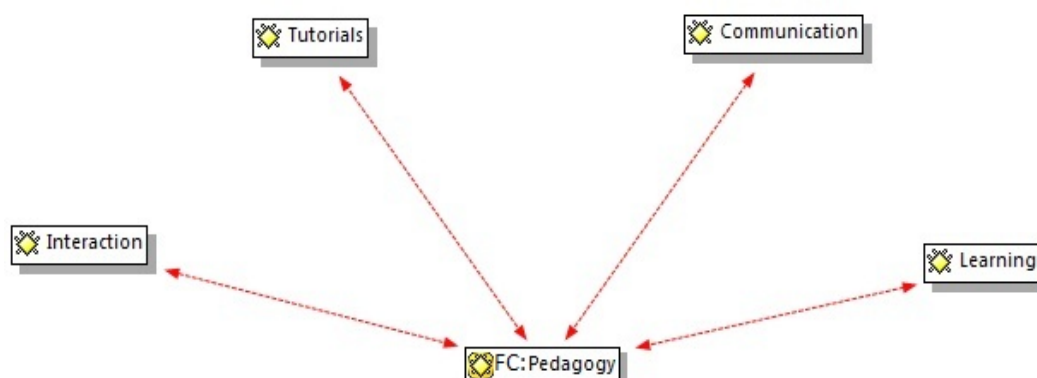


Figure 3: Family code: "Pedagogy" (Teaching process developed in virtual courses).

Interviewees pointed out that the tool is to support the development of virtual tutorials, mainly due to the ability of *Elluminate Live* to facilitate communication and interaction among participants in the tutorials. Therefore, it is considered that it facilitates, in turns, learning.

The use of the tool enhances the "sense of group belonging and" facilitates the contact between "(...) tutor / student to and from the students themselves in an interactive way." It also allows the undergoing of business meetings.

On the other hand, it is added that through virtual tutorials developed real-time *Elluminate Live* is possible to reinforce grammar and practical aspects of language learning.

In summary, *Elluminate Live* has been used to "(...) to reinforce grammatical structures and carry out communicative activities related to the course syllabus".

Tutor 4 summarizes in a clear and concise manner some of the most frequently applications performed with the tool:

We used Elluminate to put students in situations (discussions, role playing or group discussions) that mimic real situations that have specifically been chosen to facilitate the practice of vocabulary and certain structures.

In this line, it is interesting to note one of the experiences described by one tutor:

Using Elluminate as a virtual classroom in which I meet about once a month (the course has a tutorial hour) with my students for a class / tutorial. In whiteboard it was presented a power point with the objectives and as support for activities that I will cover in class. Students participate and complete activities in an active and interactive using their voice and applications / functions on the whiteboard.

Within the Department of Languages, the tool has been integrated into all foreign language courses, courses for beginners A2 (French, Spanish, German, Italian, Chinese and Welsh), intermediate B1 (French, Spanish, German, Italian) and advanced C2 (French, Spanish and German) with a frequency of tutoring per month in addition to the tutorials available in all regions where the courses are taught. In general, *Elluminate Live* is used by tutors with a frequency of 1 or 2 tutorials per month.

Teachers and tutors valued the tool as an alternative to the classroom: "It is not always possible to arrange classes, and this is a good alternative. It is also a useful alternative for students with mobility problems, or those living in a remote or dispersed area, and would have

to travel long distances to attend a tutoring office”. Noted the possibility offered by the tool “(...) reading, writing, listening and speaking in a previously prepared position”. *Elluminate Live*, allows the tutor to solve doubts, to practice verbal skills and unrelated participants in the course.

Among the resources developed by the Department of Languages at the Open University, it is necessary to highlight the project “Open Resources Languages Online (LORO)” (see: <http://www.open.ac.uk/education-and-languages/parrot/>).

Among its highlights the potential advantages of the tool as a means of strengthening teamwork, social interaction and participation, as well as student motivation. They note that the tool can reinforce the development of auditory and verbal skills through group work. In addition, the ability to record sessions provides students unable to attend, to consult offline.

Some of the comments made regarding the advantages of *Elluminate Live* were as follows:

Academic 1. “It allows to work oral and aural skills in real-time group. I think it’s motivating to have that contact with other students when studying at a distance”

Tutor 1. “It’s a tool that offers convenience; you can use it from home, and definitely reinforces teamwork”

Tutor 4. “(...) mainly reinforces the sense of belonging to a group”

Tutor 5. “It is interactive and encourages participation”

The technical problems of connection and sound quality are the main drawbacks mentioned. The sound quality is considered a “(...) problem when you have to take into account the quality of the language, pronunciation and intonation”.

On the other hand, it has been indicated that the use of the tool may have an exclusionary and discouraging effect to those who are not accustomed to using it. They underlined the importance of teachers trained in the use of the tool as a means of mentoring, because there are important differences between the process of classroom teaching and learning via videoconferencing. Moreover, the tutors have stressed that the tool has not been particularly helpful to increase student participation on online tutorials, compared to the tutorials. However, the use of this tool has partly replaced the telephone tutoring, facilitating the tutorial.

Among the comments on the disadvantages of the tool is interesting to note the following:

Academic 1: “Technical problems: connection, sound quality ... You also need a good teacher training program, it is not the same teaching in a classroom than teaching through audiographic lectures”.

Tutor 6. “Technical problems and the connection to the Internet are sometimes slow or fails”.

The department’s online courses have been enriched by the increased flexibility provided by the use of *Elluminte Live* in distance education, since it eliminates spatial barriers in the learning process. In short, the integration of this tool can be valuable for educational organizations, always taking into account the limitations set out and the need for teachers with resources to make good use of the tool.

Academic 1. “I think we can be more flexible and offer a service to students living in remote or dispersed and those with mobility problems”.

Tutor 2. “Tutorials can be recorded and it is easy for students to access them”.

Finally, the teacher highlights two important aspects. On the one hand, the difficulty involved in implementing a new tool not only by teacher training, but also by “(...) processes

to be set or documents (eg protocols and instructions for final exams of course performed in Elluminate)” and, second, emphasizes the use of the tool for business meetings.

Discussion

Seven interviews have been carried out with experts on the use of *Elluminate Live*, with the main objective of analyzing the possibilities of this tool for distance education. In addition, it is sought to understand the pedagogical applications of the tool in the field of philology, studying the advantages and limitations of using the tool in education and reflecting on the impact that may have resulted from integrating it into studies of the Department of Languages, the Faculty of Education and Language Studies, Open University.

The academic and tutors believe that *Elluminate Live* is a facilitator of the learning process for the Open University courses, since it allows online tutorials where students can practice speaking.

Among the cognitive and behavioural processes that are reinforced by the tool is the possibility to practice listening and verbal skills.

The potential of a synchronous communication tool opens new possibilities for distance education. The experience described by the tutors and the teacher pointed out the advantages for the teaching-learning process of the integration of synchronous communication. Motivational aspects and practical elements have been highlighted by respondents.

Elluminate Live is valued as a facilitator, as it adds the ability to practice the language in real time, especially for those students who for various reasons can not attend classes. Tutors report that *Elluminate Live* enables them to interact, using different types of formats (text, audio and video) and integrating different files.

The main purpose of tutorials is the practice of oral skills and enhancing of teamwork. Tutors use the tool to practice oral skills in situations that simulate real life (debates, role plays and group discussions).

On the other hand, the project “Open Resources Languages Online (LORO)” of the Department of Languages had provided a repository of activities to be used by teachers in the OU in order to facilitate the tutorial task with *Elluminate Live*. Some of the tutors note that they both used the activities suggested by teachers and also design their own resources.

It would be interesting to conduct a comparative study between the tool *Elluminate Live* and the synchronous communication tool developed by the *National Distance Education University* (UNED). This comparative study would highlight the advantages and disadvantages of both tools and their possibilities in distance education.

Conclusion

Experiences from teachers at The Open University show that the use of *Elluminate Live* means paying special attention to the interactive aspects of the teacher-student relationship. That is, it is necessary to strengthen the participation of students in real-time sessions, to support collaborative learning styles, together with discussion and group reflection. In short, teachers need to provide students opportunities for interaction and communication through this tool.

Three basic aspects have been highlighted to be taken into account in the development of the teaching-learning process through *Elluminate Live*:

Firstly, the creation of small workgroups that facilitate the development of collaborative work, in fact, this has been pointed out as the key element in the effectiveness of using this tool. At the beginning of the online session is recommended to distribute subgroups into separate rooms where they can work independently from the rest of the class. Later on, the subgroups will show their work and findings to all the participants of the course.

Secondly, it must be pointed out the need to promote teacher training in using the tool, from a technical and pedagogical point of view.

Thirdly, the need to prepare online tutorials in advance was brought up by teachers.

In connection with the best conditions under which to use the tool, it is pointed out the confirmation of the data obtained in the investigations discussed: reduced number of students by session (between 8 and 10) which are later divided into smaller groups (2/3 students per group) and selection of a small number of subjects to study, not more than 3 or 4. Some tutors have recommended to deal with between 1 or 2 activities per session, although this can vary depending on the objectives of each session and the length of the activity. It might be concluded that the length of each session should be approximately of 1 hour (maximum one hour), with a frequency of one or two sessions per month. Nevertheless, it is emphasized the difficulty of setting a specific number of sessions, as it depends on the needs of each discipline and users group.

On the other hand, it is interesting to comment the project “Open Resources Languages Online (LORO)” of the Department of Languages that has provided a repository of activities to be used by teachers in the OU in order to facilitate the tutorial task with *Elluminate Live*.

In short, *Elluminate Live* is an effective complement to other tools offered in online courses, especially in relation to auditory and visual communication in real time. Teachers and tutors value the tool as an alternative to traditional class.

It is a useful tool for students with mobility problems and / or for those who live far from school. It is also highlighted the possibility offered by the tool for the development of skills of reading, writing, listening and speaking. This allows the teachers to answer questions, students to practice reading, writing and oral skills and the interaction among participants in a course.

It is possible to conclude that a synchronous communication tool opens new possibilities for distance education. The experience described by the tutors and teachers stresses the advantages of the integration of synchronous communication for the teaching-learning process.

It would be interesting to conduct a comparative research between the tool *Elluminate Live* and other synchronous communication tools such as the one developed by the *National Distance Education University (UNED)*. This comparative study could display not only the advantages and disadvantages of both tools but also their possibilities in distance education.

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Appendix.

Interview protocol: *Elluminate Live*

First name and surname:

Years of experience as a professor:

Years of experience with the use of ICT in education:

a. Possibilities of the tool and its pedagogical applications

1. Do you think the use of *Elluminate Live* is an enrichment of the academic program? (Is a facilitator of learning, provides an educational initiative).
2. What aspects of the *Elluminate Live* you considered to be enriching the program?
3. What cognitive and behavioral processes are reinforced and/or powered by using this tool?
4. Could you describe the methodology (pedagogy) followed in your online course? How are you using the tool on the OU?
5. As for the Department of Languages:
 - What courses are you using this tool in?
 - Which subjects are you using this tool in?
 - How often?
6. Could you tell me, in your experience, what are the optimum uses of the tool?
 - Number of students (student group size: in small groups or within the class group)
 - Number of topics to be discussed
 - Number of sessions (per week, month ...) or length of sessions
7. Can it be asserted that the *Elluminate Live* is effectively complements to other tools offered in online courses? Why?

b. Advantages and disadvantages of the tool

8. What are the main advantages of the tools (for example, enhances teamwork and study/learning motivation)?
9. What are the main disadvantages or problems that you face when using the tool?

c. Impact

10. What is the impact of the use of the tool on the quality of teaching in courses where it has been used?
11. What result do you think it might become from integrating this tool in other studies and / or universities.
12. If you have not previously responded/answered: what would improve the tool?
13. Would you like to make any further comments?

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