This article describes the main challenges faced by teachers and trainers when guiding or “tutoring” online courses. The focus is on their emerging role as e-tutors or e-trainers. The challenges are related with the processes of orientation, guidance and monitoring e-learners within an e-course.

This paper is a result of the work developed within the Leonardo da Vinci - project Trainers Training for Virtual Learning Communities - ttVLC, which is a pilot project in the context of the European Union DGXXII - Education and Training. Other details can be found at the URL: www.ttvlc.com

1. What is e-training?

Online training or e-training is the learning process related to the orientation, guidance and monitoring of online learners within an e-course. This activity implies different tasks, from the first welcome (warm-up), to encourage and motivate, provide interaction and participation, create groups, monitor progress, facilitate discussions, control pace, give information and add knowledge, provide prompt feedback, ensuring that the course objectives are met, promote collaboration among participants, evaluate participants, define tasks, etc.

Moving from face-to-face to online or web based teaching implies different changes at social and behavioural levels.

Teachers and students are obliged to change their profiles and performances. Quick response, timely feedback and interaction as well as time management (at individual and group levels) are the main words to express those changes.

In an online educational context, teachers workloads increase and at the same time students will demand for more effective teachers, who masters the tech environment and also the content and who have overall teaching skills.

2. Learning, Teaching and Interactivity

Learning is the human capacity to acquire knowledge, new capacities and new behaviours. Some of the most important strategies used to promote active learning are:

- **Learn through action** - the users learn through sequences of actions and achievements - learning by doing. Feedback will promote understanding through the relation between the actions and their effects.

- **Learn through errors** - Errors feedback can help to learn one activity. Nevertheless errors can be frustrating especially if they are irreversible. An accurate feedback should be given in order to provide the user with an opportunity to make corrections, this way guiding him in the execution of the correct action.

- **Learn through active thinking** - The users need to understand the functions and behaviour of the system. It is essential to use obvious elements, such as icons and to use them in a consistent way.

- **Learn through objectives** - The objectives should be translated into an action plan. To accomplish the objectives the actions should be simple operations to be executed. The number of actions used to accomplish an objective should be reduced in order to make obvious the type of actions to take.

1 Also called e-moderating or e-tutoring. Salmon (2000) describes this task as e-moderating. She explains that a moderator is a person who presides a meeting and an e-moderator is a person who presides over an electronic online meeting or conference though not in quit the same ways as a moderator does.
• **Learn through analogy** - compare unknown concepts with known ones (for instance, a word processor can be compared with a typewriter). Users will use previous knowledge in the new situation.

"Teachers are said to use interactive processes in order to guarantee their accurate communication; students are supposed to need it to clarify any misunderstandings.

Interactive multimedia processes ensure then that learners are active, not passive, that they learn by doing, not simply watching. True interactivity implies that the learning process is, in some degree, modified by the actions of the learners, thus changing the roles of both the learner and the teacher. In training contexts, interactivity has been shown to increase the speed of assimilation and length and degree of retention of information. Opportunities for learners to express their own points of view explain the issues in their own words and to formulate opposing or different arguments, have always been related to deep-level learning and the development of critical thinking." (Mason, 1998).

In this sense trainers interact with learners using different strategies, namely, the use and study of the course materials (online and offline contents), the development of different tasks at individual and group levels, etc. The use of different communication tools (chat, forum, email, etc) will allow all parties to improve and update their knowledge in a constructive approach.

"Most theories of learning suggest that for learning to be effective it needs to be active; in other words the learner must respond in some way to the learning material. It is not enough merely to observe or read; learners have to do something with the learning material. Thus they may need to demonstrate (if only to themselves) that they have understood, or they may need to reprocess new material to incorporate it with existing knowledge, or to apply the knowledge they have acquired successfully to new situations." (Bates, 1991).

Mason (1998) refers that the interactivity in educational terms has three dimensions:

- interaction between the student and the content
- interaction between the teacher and the student
- interaction amongst students

Multimedia especially when delivered via the web facilitates all three kinds of interaction. Interactivity with multimedia content can take the form of simulations, self-assessment questions, quizzes with feedback, modelling, tutorial programs and micro-worlds. Interactivity with teachers and other students can be facilitated asynchronously through text based conferencing systems and synchronously through audio, video and chat software. In fact, this distinction between real time and delayed interaction is beginning to break down as technologies which allow real time interaction can be ‘canned’ for access at any time after the event.

Harasim et al (1996), places the focus on the thinking processes of the learners and on collaborative learning. The teacher plans the activities but then follows the flow of the conversation, offering guidance, as needed, rather then strictly adhering to the planned agenda or syllabus.

In this sense we can say that the online environment (which allies technical and pedagogical elements), mediates the closeness between teachers and students.

Kearsley (1999) refers that online courses provide many opportunities for participants collaboration but they also provide many possibilities for collaboration among teachers.

One possibility is to have guest teachers, audio testimonies or other added value events that can, on the one hand, enrich the online course and on the other hand, create collaborative procedures among teachers, subject-experts and researchers. Institutional partnerships and networks can also be used as well as research projects and other interesting projects related to the online course.

### 3. Students’ needs

Fritsh (1997, 1998) has commenced the delineation of the web-based student: a person who already spends over 20 hours per week sitting in front of a screen, has a company or university connection to the WWW, can write or change a page in html. In spite of already spending over 20 hours per week in front of a screen, this student wants and expects to be trained on a screen.

These type of “students” require skilled "teachers”\(^3\), who masters the tech environment but who also have overall teaching skills.

The students are no longer passive they are knowledge producers. When the students send messages, emails, or when they participate in a course chat or other CMC events they are contributing to the production of the new knowledge base of the course.

---

\(^2\) Students, learners, trainees or participants. In this paper we will use the terms students, learners, trainees and participants indifferently.

\(^3\) Teachers, trainers, tutors or moderators. In this paper we will use the terms teacher, trainer and tutor indifferently.
Hedberg et al (1996), describes this process - when the individual learner is permitted to occupy the role of interactive multimedia producer with a focus on the knowledge construction process, he or she is publishing for personal viewing. All the information searching, discussion with peers, mistakes, re-makes, media production, screen construction, and linking are vital elements of the process the learner experiences. Immediately, he or she must take an active approach to the appraisal, accumulation, and generation of relevant resources.

However students should be carefully selected, their tech level, besides their content level, should be measured in order to maintain the group learning rhythm.

4. E-trainers tasks

Exactly as in face-to-face courses, trainers in an online course should manage all pedagogical strategies able to provide the students with an enriching learning experience.

In order to satisfy the students with good learning experiences it is important to prepare skilled online trainers.

Face to face trainers need to change attitudes and behaviour in order to migrate to online learning processes and thinking. Trainers should be provided with "hands on" materials and with tech experiences, which will allow them to learn and to master the tech environment in a situated learning approach.

Trainers will be then prepared to provide the students with appropriate technical and pedagogical approaches.

Harasim et al (1996) describes very well all the changes to occur in the teacher's approaches to "teaching" when performing their role in online course contexts. As they describe teachers should set the stage, monitor and encouraging participation, form groups, assign role responsibilities, moderate and facilitate group processes, co-ordinate interaction, pace interaction, organise interaction, perform meta-communication, weaving, end conferences, take care of socio-emotional issues and establish norms and grad performances.

Salmon (2000) describes a five-step model that relates the learning process and level of interactivity with the technical support and the e-moderating to be provided to participants. At stage one - access and motivation, in which individual access and the ability of participants to use CMC are essential prerequisites for conference participation. Stage two, online socialisation involves individual participants establishing their online identities and then finding others with whom to interact. At stage three, information exchange, participants give information relevant to the course to each other. Up to and including stage three, a form of co-operation occurs, i.e. support for each person goals. At stage four, knowledge construction, course-related group discussions occur and the interaction becomes more collaborative. The communication depends on the establishment of common understandings. At stage five, development, participants look for more benefits from the system to help them achieve personal goals, explore how to integrate CMC into other forms of learning and reflect on the learning processes. Each stage requires participants to master certain technical skills and call for different e-moderating skills.

---

4 Computer Mediated Conference
In this context the e-trainer is someone able to manage all those stages, aware of the learning process and promoting reactions, productions and knowledge construction among the participants.

Below we provide a checklist of the main e-trainers tasks:

• Welcome (warm-up),
• Encourage and motivate,
• Promote interaction, participation and guidance
• Provide prompt feedback,
• Create and animate groups,
• Promote collaboration among participants,
• Facilitate discussions,
• Monitor progress,
• Control pace,
• Give information and add knowledge,
• Provide assignments and tasks,
• Ensure that the course objectives are met,
• Evaluate participants,
• Evaluate course,
• Improve and add knowledge to the next course

5. Institutional support

The Institution that hosts and administers the online courses also has a very important role in the whole process. It must master and monitor the learning provision, that is:

• administration and management of the learning provision, namely the processes of enrolment, fees, contracts with all parties, information, statistics, economics, etc;
• contact with the potential participants, trainers and content providers,
• select participants

\[5\] Salmon (2000), E-Moderating, page 26
• contract the trainers and content providers,
• provide support and feedback to all parties,
• make sure that participants, trainers and content providers are active,
• prepare the overall evaluation of the course

Online Course Provider Institutions are expanding all over the world. In Portugal we can find a few of them. The problem at the moment is the lack of a legal framework to courses delivered via the web. Local training/education Institution that provide courses can provide the online course certification, but without a legal binding at the level of the National Bodies which certify education and training.

6. Conclusions

Trainers in online courses need to acquire a common set of skills in the management of the tech environment and they need to transfer their pedagogical knowledge to online contexts.

In an online course provision setting the focus of the teaching process is no longer centred on the teacher and on his/her power as owner of the knowledge to be transferred to the students. The focus is instead centred on the learning process. Distance learning in general changes the target of teaching, from teacher centred to student centred. The student is not only a knowledge consumer but also and must of all a knowledge producer.

The interactivity and collaboration between all parties involved in the learning process, namely trainers, institution, students, technicians, is based on the promotion of new learning experiences. Those learning experiences will be later transformed into knowledge acquired at the level of the computer systems involved and at the level of the contents.

Satisfying the students needs, the institutions facilitate the availability and access to education and training by providing different chances and a profound change of mentalities and attitudes in the traditional institutions.

In this context, trainers will be obliged to learn new approaches to training in online contexts (tech and pedagogic), namely by sharing their knowledge, exchanging procedures, promoting the construction of knowledge with the students. They will act more like advisors or facilitators challenging the students to act and to produce knowledge, taking their attention to a particular topic, focusing in individual and group objectives. In summary trainers will monitor and guide the students towards the construction of the course knowledge base (course materials plus all elements resulting from the interactions and communications between all parties involved).

7. References


