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Interactivity, how to use it in e-learning courses

Interactivity is crucial for online courses because it allows students to become an active part. Here, a few tips for using it into e-learning training

In the past, traditional learning consisted of face-to-face lectures given by a lecturer to a group of students, who had no **active role** in the course. Pupils were only required to listen to the notions that the teacher gave them, without real participation. Later, with the passage of time and inevitable social changes, the **student** became an integral part of the learning process, taking an increasingly central role and becoming an actor.

Further changing education has been the intervention of **technologies and social media**, which, since the Covid-19 pandemic, have taken center stage and become learning tools to be used during lectures and training courses. Alongside social, serious games, instructive role-playing games, and urban computing, i.e., the set of technologies that use wireless networks such as tablets and smartphones, have also won their place as training tools. Thus, traditional learning has been joined by **interactive learning**, which incorporates new technologies into course design.

Interactive learning

Interactive learning is an instructional strategy in which both teacher and student play an active role. The student is not only placed at the center of the learning process, but also becomes part of the course planning, taking on the role of an actor, participating in the lessons themselves. This is a dynamic learning mode, full of stimulating activities, which push the learner to maintain a high level of attention. In this training strategy, the relationship between teacher and student has a character of reciprocity, with both actors and receivers of the learning process.

Three elements are needed to build this type of learning activity:

1. **The lecturer**, whose role is to hold the strings of the course and motivate learning. His or her task is to plan the course program and make sure that students perform the proposed activities correctly.
2. **The students**, who are addressed by the lecturer's lectures, but who can intervene and interact during the lectures, actively participating in the learning process.
3. **A place**, which can be a physical classroom or a virtual space, in which teachers and students have the opportunity to confront and interact with each other, establishing a constant dialogue that allows each learning actor to best develop his or her role.

New technologies, the Internet, role-playing games and social networks represent important allies for the construction of interactive learning, which sees **students as protagonists** of their own education, prompting them to actively participate in lessons, thus becoming an integral part of the learning process.

Interactivity in e-learning

In e-learning, interactivity plays an important role because it allows users to **be involved** in online courses, improving the effectiveness of training. Therefore, in the design phase of an e-learning course, the possibility of interaction must be taken into serious consideration, providing for the inclusion of engaging activities at the right time, to make the learning process that takes place through e-learning even more fruitful.

In an online course, **four levels of interactivity** can be identified:

1. **No interaction**, when students remain passive. In fact, in this first level, no interaction is required and the student simply reads or views content provided by the instructor, such as text, images or explanatory videos. In this case, the

course has a linear structure and there are no hands-on exercises involving the student.
2. **Limited interaction**, when it is possible for the student to control some aspects of the online learning process, acting on the content at certain times or in certain parts. Learning is active, because the student is asked to perform certain actions, through flexible navigation in a virtual environment partly controlled by the student, via a menu.
3. **Medium interaction**, involves a personalized learning experience and higher pupil participation. In this case, the student can access customized lessons, hands-on activities and exercises.
4. **Full interaction**, when course learners are given the opportunity to fully interact with the lecture content, immersively, through role-plays or virtual simulations. The course, in this case, is characterized by multiple paths, in which you can move freely, choosing the proposal that best suits your needs.

Good e-learning design also involves the use of interactivity, which allows students to actively participate in training, so that they become more involved in the learning process and more motivated to learn.

The benefits

By now it is clear that learners are able to learn **more effectively** if they are involved in the lessons of online courses. And interactivity applied to e-learning has precisely the task of stimulating students' involvement in the learning process. In addition to this, interactive e-learning can have some **advantages**:

1. **It improves memory** and helps retain the knowledge learned during the learning process. The goal of a training process is the acquisition and retention of new knowledge, which is embedded in the students' memory. The presence of a long-term memory of learned notions allows pupils to modify their behaviors based on what they have learned and to react in a certain way to situations for which they have been trained. Role-plays, virtual simulations and interactive multimedia content make memorization easier, because involvement makes recall more immediate: a lived experience, in fact, will stick in the student's mind more effectively than a series of sentences written to explain a given topic.
2. It allows risk-free **simulations**, bringing the student to experience potentially real situations, with the ability to freely choose the action to be taken, without fear of making mistakes. Thus, interactive content such as virtual simulations allow participants in an e-learning course to be prepared for the real problems they will encounter once the online lessons are over.
3. **It motivates** the student to study. In interactive e-learning, the student can monitor his or her own learning progress and carry out exercises on newly learned notions. These techniques stimulate the student to study. In addition, the inclusion of elements such as games, simulations, and multimedia in the online course makes learning more enjoyable and fun, which prompts students to access training more willingly.
4. Develops **reflective and thinking skills** through the presence of questions, exercises, testing moments or other activities that force the student to stop and reflect in order to choose the correct action to implement.

An interactive e-learning is an engaging e-learning, which entices the learner to participate in the training process, making him or her an active participant, so as to improve his or her learning abilities and memorization of course content.

How to use interactivity in online courses

In an online course, **interactivity** is therefore a winning strategy that can immerse the student in the learning process. But how to use it in e-learning? There are various techniques and tools that enable the student not to remain on the sidelines or passive in front of the lectures, but making him or her an active participant.

Here are **5 tips** for incorporating interactivity into an e-learning course:

1. Insert **test papers or quizzes**, making these assessment moments stimulating and engaging as well. Questions posed within the lessons, could also be useful in awakening the learner's attention, requiring them to perform the action of answering. Once the user's response is obtained, it is also important to provide feedback, to show the correctness of the answer or the error made. It might also be stimulating to show the results of other course participants.
2. Use **games** to make the course fun. By incorporating a role-playing game, the teacher can recreate a real situation, in which the student can immerse himself completely, to act according to the stimuli that are set by the teacher. In this way, the student can learn while having fun, becoming an actor in the learning process and immersing himself in e-learning in an interactive way. The use of play in learning also makes it possible to better capture users' attention,

which is often challenged by many **digital distractions**. The interactivity developed through play combines excitement and fun, fully involving the learner in the learning process.

3. Use **interactive infographics**, which allow the user to learn information schematically and manage the screen as needed. By moving the mouse cursor, each pupil can decide which part of the infographic to visit, what data to highlight, and what information to interact with.
4. Enter **simulations**, which can help students immerse themselves in real situations, but with the ability to make decisions completely safely. In this way, pupils in an online course will be able to act for themselves, freely choosing what action to take, without the risk of incurring real consequences. In this area, interactivity is aided by tools such as virtual reality and augmented reality, which allow the user to step completely into the e-learning course.

In general, to make sure that interactivity makes the course effective, one piece of advice is to build short modules without too much information and to vary in the use of different techniques, depending on the needs and responses of your learners. Putting interactivity first, using it consciously could be the winning key to making an e-learning course effective.