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The effectiveness of Learning Objects in eLearning course design

Maximizing online learning: how Learning Objects optimize learning, flexibility, engagement and eLearning course outcomes

We have already talked in some eLearningNews articles about the fundamental building blocks of eLearning training: learning objects, We have seen **here** what they are and what they are used for, and **here** what strategies to put in place to create successful Learning Objects.

Let's take up the topic of Learning Objects again today by talking about them with **Giorgio Resi**, an **eLearning training professional and instructional design expert**.

The interview

Hi Giorgio, given your years of experience in designing and creating eLearning courses, tell us more about what learning objects are in practice? We are interested to know how they are designed, how they are created, how they fit into the delivery system, what advantages they have over other ways of designing training. Would you enlighten us, please?

In simple terms, learning objects, which in Italian we can call "Learning Objects," are self-contained content components that can be used to create online courses.

Basically, a Learning Object is a digital object with a specific learning objective. It can include text, images, videos, animations, interactive exercises, quizzes, within an interface composed of the navigation elements that enable the course to be enjoyed.

As a final point, learning objects are self-contained content components designed specifically to be self-sufficient; therefore, they can be reused in different learning contexts or in different courses.

To give you an example, a learning object might include:

- **A short video that illustrates the key concepts of a specific topic.**
- **An interactive exercise in which students have to drag and drop elements to create a logical sequence.**
- **An animation that visually shows how a complex process works.**
- **A simulator that allows students to practice practical skills in a virtual environment.**
- **A self-paced learning module with text, images, audio and quizzes covering a specific topic.**

OK, we understand what this is all about. Can you give us a better understanding now what is the process of designing, making and implementing Learning Objects within courses?

Sure, I usually follow this workflow.

1. Before I begin the design of learning objects, I always do a **requirements analysis** to identify the learning objectives, target audience, and available resources. Sometimes this is information provided to me by the principals, sometimes I have to retrieve it on my own.
2. When I am clear about the learning objectives and target audience of the training, I do the **design of each learning object** that will make up the course. At this stage I determine the specific objectives for each learning object and define its format, structure, content, and interactive elements. I must also be very careful to adapt the design to the needs of the learners and the requirements of the learning topic.

3. Once the learning objects have been designed on paper, I move on to the actual **creation of the individual digital content** of each object. This may include writing text, recording video or audio, creating graphics, or creating interactive animations. I try my best to always strive to make content that is clear, engaging and relevant to the learning objectives of the course.
4. When I have created all the necessary content, I move on to **producing the learning objects**. I need to convert them to formats compatible with the eLearning delivery platform. This may require encoding videos, adjusting image sizes, and implementing interactive elements. I also have to be very careful to ensure maximum compatibility with devices used by learners, such as computers, tablets or smartphones.
5. When finally all my Learning Objects that make up the course are ready, I move on to **integrate them into the delivery system**. Basically, I upload them into the eLearning platform and organize them into a coherent pathway, linked to the learning objectives that have been defined and made accessible to students. This organization of content can be done in modules, units or lessons, depending on the structure of the course.
6. At this point the course is mounted in the LMS platform and ready to be enjoyed. Of course I do some **testing before the final release**, to make sure that all the features of SCORM training, such as tracking of the learner's activity, time of fruition, technical limits on fruition, and many other things are working properly.

Thank you Giorgio, I completely understand. It seems to me that this is extremely innovative work and at the same time extremely crafted, A kind of digital craftsmanship for eLearning.

Yes, it's true, that's exactly what it is. Learning Objects, however, give us a number of advantages over other methods of training design that are not at all handcrafted, but rather allow us to make intensive use of the objects already created. Learning Objects, in fact, are:

- **Reusable:** I can use the learning objects I have already created in different courses or learning contexts. This saves me time and energy in creating new content for each course.
- **Customizable**: learning objects allow me to create a personalized learning path, where students in my courses can select and access the content of their interest or need. In this way I try to foster autonomous learning and flexibility.
- **Scalable:** Im general, learning objects allow efficient scalability of training. Since they are independent and reusable objects, they can be easily adapted and implemented in different learning contexts, whether for a small number of learners or for large groups.
- **Updatable:** Learning objects can be easily updated or modified as changes or new information occurs. I can then act on the training materials to keep them up-to-date and relevant over time, without having to redesign the entire course.
- **Measurable:** Because of their modular nature, as I told you earlier, learning objects allow for more specific measurement of student learning. The learning objectives I have associated with each learning object can be assessed separately, with a better understanding of student progress and areas that need further attention. Obviously, these activities are in the charge of those who then follow up with the actual teaching activity on the eLearning platform.
- **Accessible:** This is very important. Learning objects can be designed to be accessible to students with different needs. They can include subtitles for students with hearing disabilities, alternative text versions for students with visual impairments, or motion-reduction features for students with mobility impairments. In this way, I am confident that I can deliver education for all.
- **Interactive:** Learning objects can be designed to be highly interactive, offering students active involvement in learning. I can put simulations, hands-on exercises, interactive quizzes, drag-and-drop activities, learning games, and other ways of engaging learners in my learning objects to encourage active learning and retention of information.

These are definitely respectable advantages, so I believe that the eLearning course creation system based on learning objects can only grow and improve infuture.

Definitely: learning objects are an effective solution for designing high-quality eLearning courses that offer personalized learning that can be adapted to the needs of learners.

Their modular nature allows for efficient scalability, increased measurability of learning, and improved accessibility for learners with different needs.

As an eLearning instructional designer, my goal is to provide students with an engaging and high-quality learning experience. Learning objects allow me to achieve this goal by providing a flexible and customized solution for designing successful online courses.

Thank you, Giorgio, for all your explanations from which we understand that learning objects are a key component in designing successful eLearning training courses, and that they offer numerous advantages over other ways of designing training.

We hope this article has offered a clearer idea of what learning objects are and how they can be used effectively in eLearning training.