

Blended Learning Essentials: Getting Started

Crib Sheet: Learning Objects



What is a Learning Object?

A learning object can be thought of as a small package of learning content with elements of interactivity. This might mean that visual materials are presented as a series of pages, and the learner clicks through them. A quiz may be included, or audio and video may be embedded within the pages, which the learner can choose to play. Ideally, Learning Objects can be reusable in different contexts enabling teachers and trainers to share Learning Objects they have created. Free software tools to create Learning Objects include Xerte and Glomaker. [Xerte Online Toolkits \(XOT\)](#) can be installed on an institutional server (for example, by an organisation's learning technology team) to allow tutors to create learning objects in Flash and HTML5. In addition, the [Moodle Lesson activity](#) can also be used to create interactive Learning Objects by combining content with Quiz pages. Future developments in this area include the [Adapt authoring tool](#) which will support mobile learning by creating content that will run on multiple devices such as desktops, smartphones and tablets.

Where can I find out how to use Learning Objects?

Downloads and guides to creating Xerte Learning Objects can be found at <http://www.xerte.org.uk>. Xerte was developed at the University of Nottingham, and their [Xerte project site](#) contains information about the project along with Xerte resources. You can browse [examples of Xerte Learning Objects here](#). Consultant [Ron Mitchell](#), who has a background in FE, has also created series of [video tutorials](#), including how to use Xerte Learning Objects within Moodle. Glomaker software downloads, samples and tutorials can be found at <http://www.glomaker.org/index.html> and there is a community site at <http://glomaker.wikifoundry.com/> with a [gallery](#) of reusable learning objects. However, this site does not appear to be being updated.

How can Learning Objects be used in learning and teaching?

Learning Objects may operate as stand alone tutorials or lessons, or act as 'just in time' resources that learners can consult as they need them. The capacity to incorporate multimedia and interactivity can be motivational for the learner. Learning Objects can give teachers or trainers the opportunity to design a path through resources for the learner, along with opportunities to practice what they have learnt. Learning Objects focused on generic skills such as information searching or referencing can be easily reused in different contexts. Learning Objects can be used to create self-study units that enable learners to test their understanding. This makes Learning Objects an effective way of training learners in the practices and procedures of a workplace, or delivering material that requires recall such as anatomy or languages.

be adapted to your own educational context are:

- Motivating learners to engage with content online by combining text, images, audio and video and interactive quizzes;
- Producing electronic assessments to test learners' understanding of key principles and procedures using content combined with interactive quizzes;
- Presenting different perspectives on a topic by incorporating audio or video from contrasting sources within one learning object;
- Producing self-study materials with dynamic content and opportunities for learner interaction and feedback (for example, for distance or work based learners).

Using Learning Objects in the Vocational Education and Training Sector

Level 3 Performing Arts

Learners are taking part in a project to stage a live music event where they are required to take on different roles in groups (e.g. some students are responsible for performing the music, others for setting up the PA, microphones, performing sound checks and monitoring the performance):

- The teacher or trainer has created a Glomaker learning object in order to help the learners understand how collaboration works in the performing arts and how their collaboration will be assessed;
- The teacher or trainer has interviewed a musical performer and a sound engineer and made two digital audio recordings;
- The teacher or trainer embeds these within the learning object;
- Learners interact with the learning object by playing the interviews embedded beneath images of the performer and the sound engineer;
- Learners take an interactive quiz within the learning object on the criteria used to assess collaboration.

Level 2 Construction

The teacher or trainer has created an interactive learning object in Xerte (like [this Xerte created at Lewisham Southwark College](#)) to teach learners about fire-related safety at work, and to assess their learning:

- The teacher or trainer uses Xerte Online Toolkits to add pages on a) the different types of fire, b) the types of fire fighting equipment and their uses, and c) emergency procedures.
- The teacher or trainer adds images of fire and fire fighting equipment to the pages.
- The teacher or trainer adds a video of a fire marshall supervising an emergency evacuation (filmed during a college or work place fire drill).
- The teacher or trainer adds quiz pages after each section to test the learner's understanding.
- The teacher or trainer adds an audio commentary to introduce the topic.
- Learners work through the learning object and take the quizzes to test their understanding.