



Create a Virtual Learning Environment using Edmodo®

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Virtual Learning Environments (VLEs) can enhance medical education through enabling access to a vast selection of online content. They can enable collaboration and sharing of resources for learners separated by time and/or space, to create an online learning community. They can also be more inclusive than attendance-based teaching, with easier integration of all types of media. Online environments can be used independently or as adjuncts to attendance-based learning, creating blended learning (Margulieux et al, 2016). Here, we demonstrate how a VLE can be set up and used by clinical educators using 'Edmodo®': a free online learning platform.

Why online learning?

Learners of today are increasingly computer-literate, with many already immersed in online social environments through group messaging apps and social media. As independent learners, many healthcare professionals complete eLearning modules or even distance learning courses, to fit around shift patterns and avoid long distance travel. Through learner control of content, Mayer et al (2003) argue that such multimedia content, specifically involving narrated information, has a powerful effect in facilitating deeper learning, through the segmenting principle. In addition, the conversational style widely used in such resources has been proven by Mayer et al (2004) to lead to deeper learning than the more formalised styles used in traditionally recommended reading such as journal articles. This is known as the personalisation principle. Virtual Learning Environments are information systems that facilitate eLearning (McGill and Hobbs, 2007) and as such, can enhance learners' experiences by organising and tailoring such a wide range and volume of content to suit learners' needs.

From an educator's point of view, creating a Virtual Learning Environment can enable easier communication with student/learner groups; sharing of non-standard content, such as podcasts and videos, and the ability to easily highlight and appraise other online resources for applicability and accuracy for learning for that specific group. Educators can also use the Virtual Learning Environment to update learners about course practicalities and answer questions in between sessions via private personal messaging. There is also a facility to create online formative assessments and even student portfolios, to record student work.

What is Edmodo® and how can it enhance medical education?

Edmodo® is a specifically education-orientated, free online learning environment with a similar user interface (appearance) to Facebook®, which affords users familiarity and comparable ease of use as this social media site. It allows online collaboration between different combinations of educators and students, through its virtual environment. It is a secure, closed network

where students and educators can share resources and provide updates for course materials and other practical aspects in one designated area.

Students can access teaching materials in their own time and use the personal messaging facility to privately message educators with questions or comments.

Educators can set up several closed groups in line with the teaching groups they are involved in. They can also use the online community to find other educators with similar specialty interests and use the site to communicate and develop material and to share their own resources.

A table of key Edmodo® features is listed below:

Feature	Description
Timeline	Educators and learners can post comments and resources which are visible to the whole group. It is in chronological order, but important posts can be 'pinned' (fixed) to the top to highlight their importance.
Library	This can store and organise relevant teaching in pdf, word or PowerPoint format.
Assignment & Feedback	Allows students to upload assignments for a specific deadline. Submissions can be annotated and assignments graded, which is updated in real time to the student's grade book.
Quiz	Examples include multiple choice questions; true/false; short answer questions; filling in blanks and matching. A pass mark can be assigned. Once created, quizzes can be saved for future use.
Badges	Can be used to recognize non-grade related student effort.
Progress	Allows educators to view all grades and badges for a group of students on one page. This can be downloaded and saved elsewhere.

How do I set up an Edmodo® account?

Simply visit www.Edmodo.com. Click 'I'm a teacher', then enter your name and email address and sign in. Next, fill in your course details (Figure 1). The website then generates a unique code which can be shared with students to invite them to the group. Once logged in, you can set up your profile and access features through your homepage (Figure 2), which logs comments and uploaded material in chronological order.

What other types of online environments are out there?

A wide variety exists. The most commonly used VLEs are Blackboard and Moodle. These are learning management systems which can be adapted to incorporate individualised content and facilitate assignment submission (there are often costs associated with these). Although not technically a VLE, sites such as Twitter can allow learners to share content and resources using a sharing and tagging facility.

Are there any risks?

Although the rules regarding copyright for online material are not clear, beware of the potential of breaching copyright if material is shared without giving credit to the author. Some learning materials may be free and open to use by the public. Although online educational groups are private, you have a responsibility to your students to be alert to and to flag up inappropriate or unprofessional online behaviour. The General Medical Council (2016) has published specific guidance on this.

Concluding thoughts

Virtual Learning Environments can enhance attendance-based teaching through offering a rich plethora of resources and online support for learners, in adjunct to material visited during attended sessions. Many such platforms exist which are user-friendly and offer a variety of features. In the future, there is a potential for online communities to grow using such technology, to allow collaboration with colleagues from further afield, to further enhance the educational experience for learners and educators alike.

Figure 1: Create Course/ Group

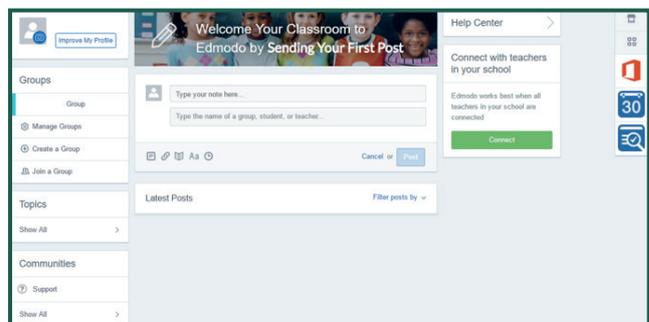


Figure 2: Home Page

References and further reading

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