

Virtual Learning Environments



Learning Journey 4:
Virtual Learning Environments

Foreword



Digital technologies are impacting not only the way we work and play, but also how we teach and learn. It is creating opportunities for vocational education and training (VET) teacher/trainers, VET institutes, and the VET sector to innovate how training and education is delivered.

This Learning Journey has been developed as part of the Erasmus+ project called **Enterprises Growing Through Business Simulations (E-Growth)**. This is about VET teacher/trainers in the use of **Technology Enhanced Learning (TEL)** within in VET courses. In addition to this set of seven **Learning Journeys**, the project has also developed a business simulation called, **PROSPER**, as an example of the use of TEL – the simulation supports the development of the knowledge and skills associated with running and growing an enterprise. The project has also published an e-book called, **A Guide to Technology Enhanced Learning in VET**.

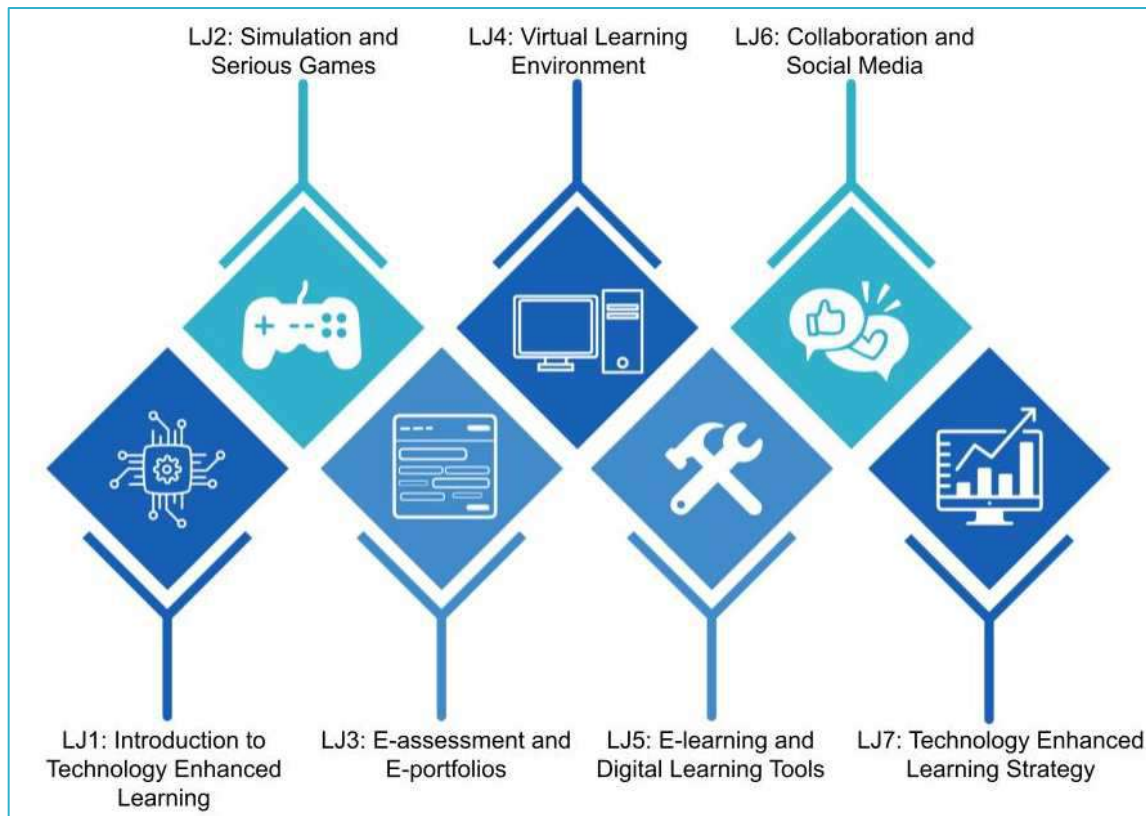
Disclaimer: This project has been funded with support from the European Commission. This document reflects the views only of the author and the Commission cannot be held responsible for any use which might be made of the information contained herein.



Co-funded by the
Erasmus+ Programme
of the European Union

Virtual Learning Environments

This Learning Journey is called **Virtual Learning Environments** (VLE). It is part of a set of seven Learning Journeys exploring the use of TEL methodologies including simulations and serious games, e-assessment and e-portfolios, and virtual learning environments (VLEs).



Each Learning Journey comprises an explanation of key terms, tools and methodologies. In some Learning Journeys, there are:

- Practical 'how-to' checklists
- How to guides and
- Examples of digital tools

The last Learning Journey is designed to help you plan and implement your own Technology-Enhanced Learning Strategy.

Figure 1: Learning Journeys - Technology Enhanced Learning

LJ4: Virtual Learning Environments



Aim:

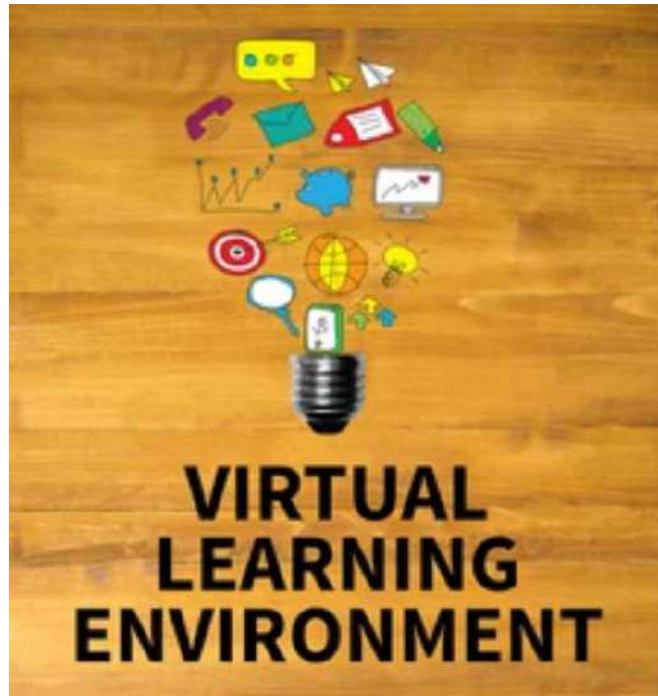
This unit is about the use and selection of Virtual Learning Environments (VLEs) and Learning Management Systems (LMS) to support effective learning

Learning Outcomes:

- Be able to explain what is meant by the terms 'Virtual Learning Environment' (VLE) and 'Learning Management Systems' (LMS)
- Understand how to select and use a 'Virtual Learning Environment' (VLE) to support effective learning
- Understand how to select and use a 'Learning Management System' (LMS) to support effective learning

LJ4: Learning Management Systems (LMS)

Virtual learning environment (VLE) in educational technology is a web-based platform for the digital aspects of courses of study



Learning Management Systems (LMS) is a software application or web-based technology used to plan, implement, and assess a specific learning process.



The most commonly used examples of an open source **VLE** is **Blackboard** and for **LMS Moodle**.



<https://www.youtube.com/watch?v=ezbJwaLmOeM>

Learner and Trainer Needs

How to identify training needs of users:

- Decide what you are trying to achieve
- Identify the knowledge, skills, and abilities needed to meet your objectives
- Figure out what employees know
- Match your training to your needs
- Use focus group to understand training and development needs



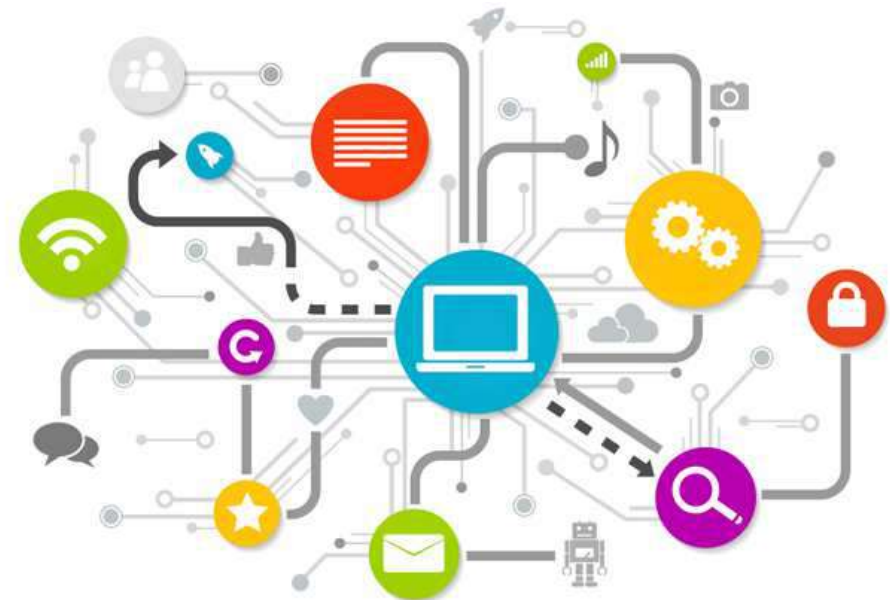
Benefits & Challenges for LMS

Benefits

- Reduces learning and development time
- Quickly and conveniently expands e-Learning courses
- Integrates social learning experiences
- Easily tracks learner progress and performance
- Provides unlimited access to e-Learning materials

Challenges

- User Onboarding: It is crucial to account for the differing needs of each end-user
- Time Management: Course creation alone can take up significant amount of time
- Customisation: All cannot be addressed with a one-size-fits-all approach



Benefits & Challenges for VLE



Benefits

- Immediate feedback on learning - Most online learning classrooms provide the opportunity for immediate feedback on learning
- Improved technical skills - Can learn new technical skills and become more proficient
- Expanded world view - Insights into how other cultures and people approach problem solving
- Cost savings - Many virtual lessons and classrooms will often be far cheaper than a traditional establishment such as a college
- Community and relationship building - Collaborate on projects and talk through ideas, which can also help with teamwork skills

Challenges

- Difficulty learning to use new technology – Problem of unfamiliarity; the remote classroom can be struggling to adapt
- Lack of access to technology - Access to a reliable internet connection, computer, or laptop
- Difficulty with concentrating - Facing countless distractions
- Difficulty managing time - In a virtual classroom, procrastination becomes much easier



Key Elements and Functionality of a VLE

Key Elements & Functionality

- User-friendly course administration
- Communication between instructor and learner.
- Easy course registration
- Centralised learning materials
- Evaluation capabilities + test-out options
- Easy upgrades and rearrangements



How to Select a VLE

Identify which features do you need:

- Learner Engagement and Administration - Managed access to learner information and resources and tracking of progress and achievement
- Paid/Free/Freemium
- Customer support
- Managing VLE by yourself / by an expert
- Curriculum mapping and planning – lesson planning, assessment and personalisation of the learning experience
- Content management – creation, storage, access to, and use of learning resources



Steps in Setting up VLEs

1. Create a VLE implementation project plan – understand your organisation’s goals, and objectives should follow the SMART format
2. Choose your provider – compare how each provider meets your requirements and choose the best fit



<https://www.blackboard.com//>



<https://moodle.org/>



<https://teachable.com/>

3. Build your project team, for example, team leader, project manager, eLearning specialist, IT administrator, and human resources personnel
4. Train the administrators – administrators should be the ones who are knowledgeable about the system and know its ins and outs
5. Do a pilot launch – VLE starts as essentially an “empty box”, so start by having a single training class to test it
6. Get feedback, evaluate, and refine the process

How to test effectiveness of VLEs

1. Is your VLE meeting your needs?
2. Create respondent group bias
3. Ask the right questions to your users
4. Give them tasks to do
5. Let them fill in a form for potential improvement

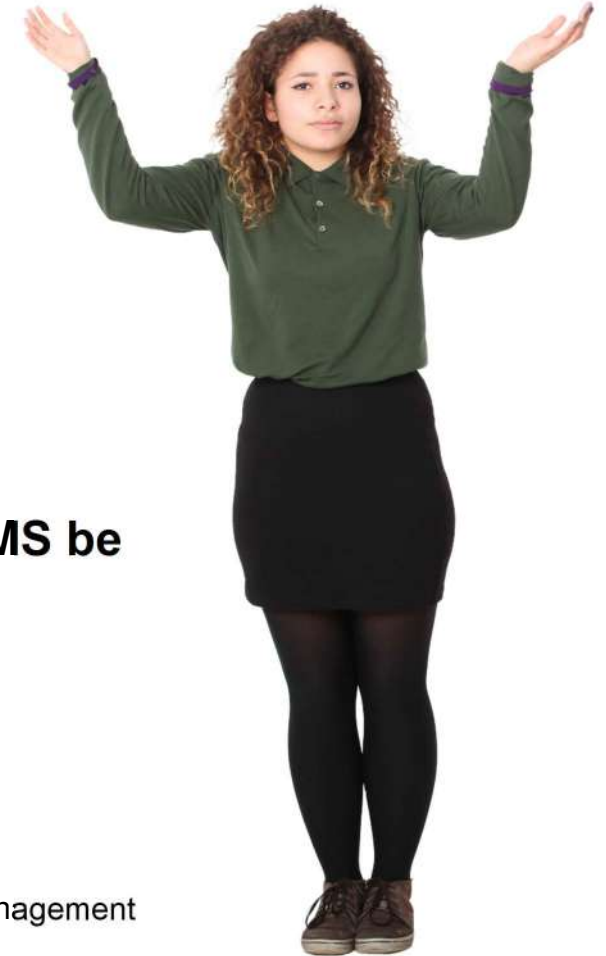


Key questions to answer before establishing an LMS

- Understand learning needs
- Ease of integration/ ease of use
- Integrations needs
- Customisation needs
- Define key features you need
- Open-source vs. proprietary software
- Get to know your audience

What can an LMS be useful for?

- Onboarding
- Compliance training
- Sales training
- Knowledge base management
- E-learning



Setting-up and Implementation of LMS

1. Create an LMS implementation project plan – understand your organisation’s goals; objectives should follow the SMART format
2. Choose your provider – compare how each provider meets your requirements and choose the best fit



<https://moodle.org/>



<https://abaralms.com/>



<https://teachable.com/>

3. Build your project team, for example, team leader, project manager, eLearning specialist, IT administrator, and human resources personnel
4. Train the administrators – administrators should be the ones who are knowledgeable about the system and know its ins and outs
5. Do a pilot launch, for example, by having a single training class to test it
6. Get feedback, evaluate, and refine the process

Testing and Evaluating of LMS

Still not sure what your LMS should look like?

Try the Moodle editable page <https://school.moodledemo.net/>

For testing of LMS try those tasks:



- Manage users, courses, roles
- Create a personal reminder or draft message
- Make a course calendar
- Hide yourself from the online user's block
- Tag your courses so that students can see them
- Make choices for students who missed a deadline
- Load course materials easily and without errors



Extra Tips and Video Recommendation



Ted Talk: The Era of Online Learning

<https://www.youtube.com/watch?v=5JKgUoY9pTg>

The Brave New World of Online Learning: Amy Collier at TEDxStanford

<https://www.youtube.com/watch?v=TRl9kmpNc6A>

Keeping Students Engaged in Digital Learning

<https://www.youtube.com/watch?v=-LybF2YIWn4>

Virtual Learning Environments



Disclaimer: This project has been funded with support from the European Commission. This document reflects the views only of the author and the Commission cannot be held responsible for any use which might be made of the information contained herein.



Co-funded by the
Erasmus+ Programme
of the European Union

