

E-assessment and E-portfolios



Learning Journey 3:
E-assessment and E-portfolios

Foreword



Digital technologies are impacting not only on the way we work and play but also on 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

E-assessment and E-portfolios

This Learning Journey is called **E-assessment and E-portfolios**. It is part of a set of seven Learning Journeys exploring the use of TEL methodologies including Technology Enhanced Learning (TEL), e-assessment and e-portfolios and Virtual Learning Environments (VLEs).

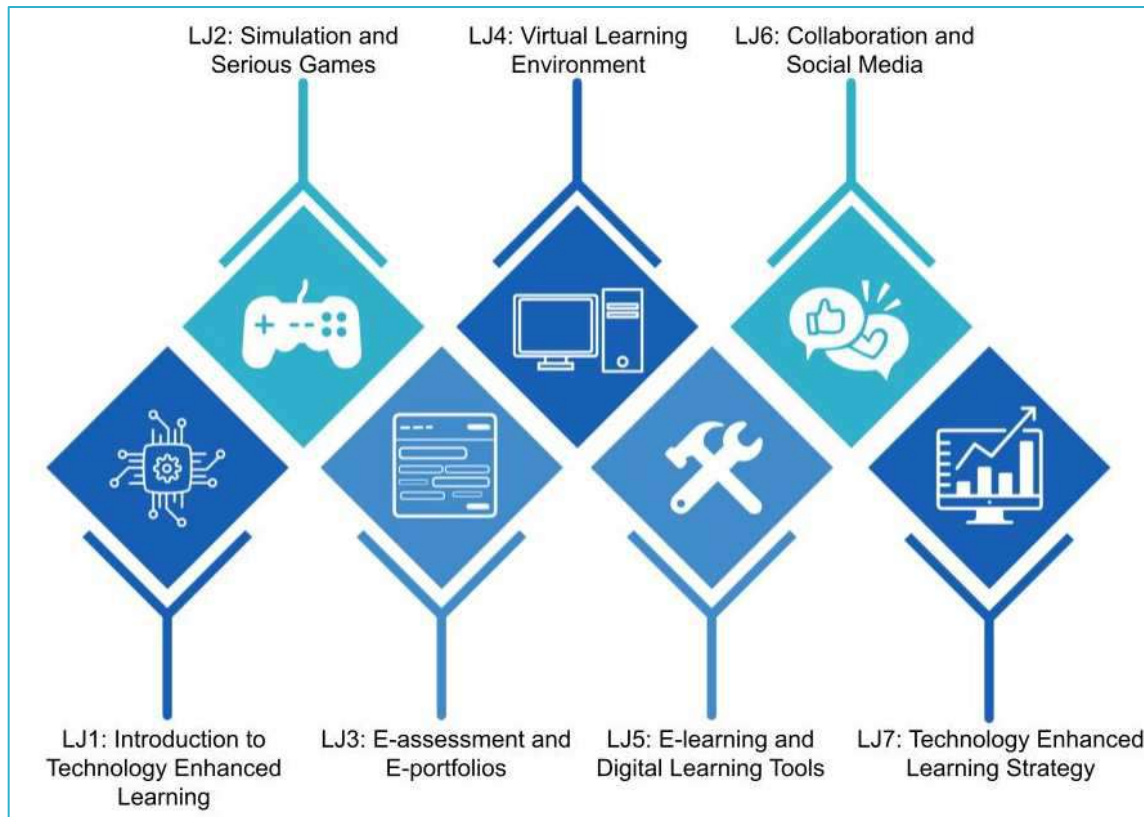


Figure 1: Learning Journeys - Technology Enhanced Learning

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 to plan and implement your own Technology Enhanced Learning Strategy.

LJ3: E-assessment and E-portfolios



Aim:

This unit is about the design and use of e-assessment and e-portfolio tools to support effective learning

Learning Outcomes:

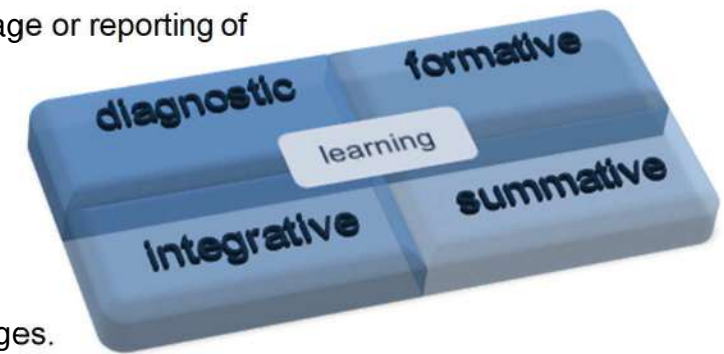
- Be able to explain what is meant by the terms 'e-assessment' and 'e-portfolios'
- Understand how to develop and use an e-assessment tool to support effective learning
- Understand how to develop and use an e-portfolio tool to support effective learning

E-assessment and E-portfolios

What is E-assessment?

E-assessment

- Involves the **use of digital devices** to assist in the construction, delivery, storage or reporting of student assessment tasks, responses, grades or feedback.
- Can be undertaken with traditional desktop computers, laptops, smart mobile phones, iPads or through the use of electronic gaming devices.
- May use a multitude of formats, including text documents or portable document formats, multimedia formats such as sound, video or images.
- Involves complex simulations or games. It can be implemented by students in groups or individually and it can occur with large numbers of students in a synchronous or asynchronous manner.
- Can be part of a Learning Management System such as *Blackboard*, *Sakai* or *Moodle* or it might be a standalone application. Electronic assessments can be accessed by students anywhere and anytime through the use of a web browser.
- E-assessment is not only setting up some multiple-choice questions. Assignments in the virtual world may take place through **the use of blogs, wikis, e-portfolios** or by using existing social media networks, scenario-based assessment and virtual role plays. Briefly e-assessment involves a variety of possibilities that allows teachers/trainers to evidence student learning in a much deeper and often more authentic way than has been possible with traditional paper-based assessments where students have been expected to use limited resources to respond to tasks.



E-assessment and E-portfolios



Use of E-portfolios in assessment

Using portfolios of evidence has long been part of the traditional assessment process for a range of qualifications since 2000. The use of e-portfolios in assessment has now also been adopted by many awarding bodies and accepted by qualifications regulators. On the other hand, the rise of digitalisation has brought to a new concept of education. Educators must focus not only on teaching concepts, but also on helping students acquire generic competences to help them grow professionally and personally in a globalized world. In this sense, the World Wide Web allows to create a new way of teaching and learning, in which there are no time or place restrictions.

In the context of this document, an e-portfolio is defined as an electronic version of a 'traditional' evidence portfolio, not a wider learning portfolio. It consists of a system and process that enables secure, computer-based verification and assessment of evidence.

'Awarding bodies are moving quickly towards acceptance of electronic scripts. Paper-based systems will simply not be sufficiently scalable, and e-portfolios will therefore be needed to support the formal qualifications system'.

(Source: British Educational Communications and Technology Agency(Becta), 'E-portfolios - Definitions and directions paper')

What is an E-portfolio?



An e-Portfolio can be defined as '*a digitised collection of artefacts including demonstrations, resources and accomplishments that represent an individual, a group or an institution*' (Lorenzo & Ittebon (2005) cited in Morales & Soler Dominguez, 2016). The main aim of an e-Portfolio is to provide the learner with a platform to document their learning and development over a period. According to Lorenzo and Ittebon (2005) e-portfolios are "*personalized, Web-based collections of work, responses to work, and reflections that are used to demonstrate key skills and accomplishment for a variety of contexts and time periods*".

Personal Learning Environment (PLE)

Learners own notes and thoughts about skills and studies

Basic portfolio

Storing material

Process portfolio

Describes
development and

Showcase

Selected proof of
competence

E-portfolios Modes of Usage



Assessment

E-Portfolios can be used for both formative and summative assessments. According to Softić, Pintek, Martinović and Bekić (2013), e-Portfolios can be extremely useful for formative assessment as an e-Portfolio can encourage learners to reflect on their progress. They also note that an e-Portfolio may also provide learner with confirmation that they are progressing well in their module or programme.

Transition

For providing evidence and records at transition points for transfer of learner information. E-Portfolios offer learners the opportunity to reflect on their progress to date in relation to their coursework and to view how their work has evolved over the course of their enrolment in a programme or a module.

Presentation

E-Portfolios can be used to enable learners to showcase their work to both educators and to employers. They may present information or achievements, often to audiences, for example, selected design drawings to show to a client or prospective employer.

Learning

For personal and group information, often related to learning, reflection and self-assessment, a record of learning goals, for example, achievements towards the learner and teacher feedback.

Components of an E-portfolio



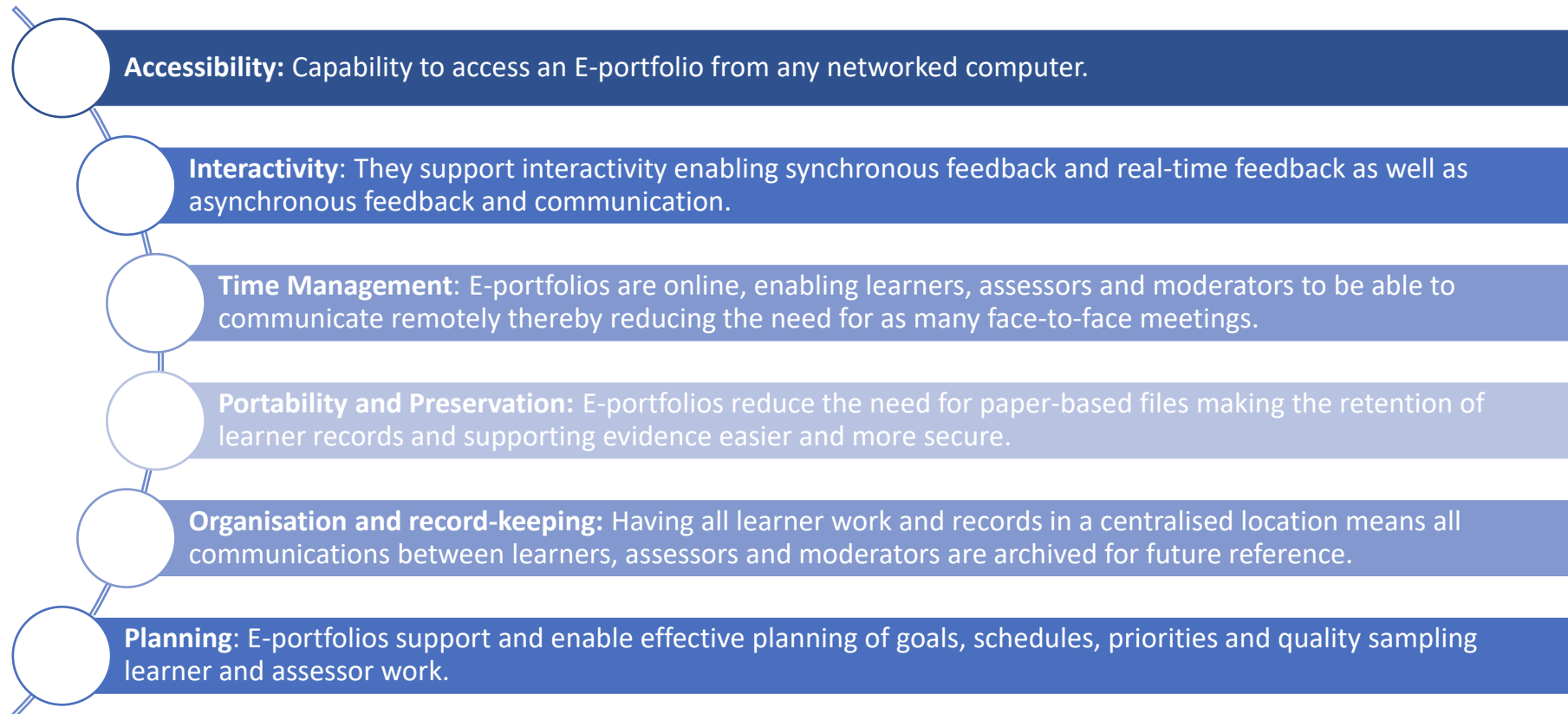
There is no standard design, format or 'look' for e-portfolios. Whatever the design, an e-portfolio should capture and record a plethora of data associated with the learner, assessors and moderators, the course or qualification and learner assignments, work and progress.

E-portfolios are essentially databases and should capture data such as:

- An online personal workspace where an individual can easily write and publish text-based information, links, digital images and audio or video clips (e.g. blogs)
- Learner details (e.g. name, position, contact details)
- Course or qualification and unit titles and reference numbers
- Course and qualification and unit learning outcomes and assessment criteria
- Start and planned completion dates
- Planned schedule of assignments and assessments
- Learner progress (e.g. percentage completion by unit and qualification)
- Feedback from assessors to learners
- Feedback from moderators to assessors
- Time and date records of uploaded files and reports
- Contacts and discussions between users
- Task scheduler and reminders on overdue actions
- Automatic notifications and reminders for users
- Multiple report generator to monitor individual and group progress by qualification
- Features to categorise, tag and classify the content created, collected and published
- Search and filtering tools allowing easy extraction of relevant and related information on any specific topic captured by the learner
- Management and rights access facilities to allow personalised access to specific content sections to different stakeholders.

Benefits of using E-portfolios

Although it is possible to achieve the assessment objectives for most qualifications without the use of an E-portfolio, there are benefits in using electronic means to collect and monitor a range of different types of information. This enables the information to be held in one place, and to be accessed, edited (where appropriate) and assessed more easily than disparate items that are not held electronically.



Artifacts to be Considered for Inclusion in an E-portfolio



E-Portfolio systems range from a secure file storage function within a stand-alone system, to more sophisticated web-based products, or they may be part of a Virtual Learning Environment. Educational institutions may also choose to develop their own system. Whichever approach is selected, institutions looking at introducing E-portfolios into their learning process should consider how well the system supports the assessment process.

A typical e-portfolio may include assessment evidence in the following types of format:

- text
- documents (for example, Word, PowerPoint, PDF)
- sound
- images/pictures
- multimedia, such as video.



Selecting an E-portfolio



Prior to selecting an e-Portfolio, VET centres need to consider a wide range of criteria which were viewed as essential to the development and success of a new e-Portfolio platform. A useful list of the issues and decisions which need to be made about why to construct a portfolio, how to go about it, what to include, and what happens after it is completed is the following (Source: Zeichner, K., and Wray, S., (2001)

What is the purpose of e-Portfolio?

Who are the users and what are their needs?

How do users communicate and collaborate?

How does it engage learners and other users?

What access do users get (e.g. 24 hours)?

Does it support multiple forms of assessment?

How can achievements be shared?

How easy-to-use is the e-Portfolio?

What reporting functions does it contain?

How portable and accessible is the e-Portfolio?

Can it integrate with other on-line platforms?

What is the storage size limits and file types?

Security and Privacy Considerations

E-Portfolios contain private and often sensitive personal and organisational data. For this reason, it is essential that the e-Portfolio system can prevent unauthorised access and is trusted by users that their privacy rights are protected. E-Portfolio systems need to be safe, secure, and robust. Below are some factors to consider when selecting an e-Portfolio:



Restrict Content Access: Only users permitted to access the e-Portfolio should be given access rights and even then, some user roles should have restricted rights (e.g. deleting, editing, and approving content).



Disaster Recovery: Files and data stored in e-Portfolios must be routinely backed up by the software provider, supported by plans for data recovery in the event of a disaster scenario.



Hacking: Robust protection is in place to block any unwanted access. Regular penetration tests are performed to see how the system reacts when under attack.



Storage: Multimedia and graphics files can be large, therefore there might be limitations on file size. Centres need to determine how long records will be stored and accessible.



System Maintenance and Up-dates: System maintenance and up-dates must be considered when selecting an e-Portfolio. As new cyber threats and advances in technology are on-going the e-Portfolio must be up-dated and developed.



Cyber Security and Privacy: E-Portfolios must be encrypted, and password protected to ensure the user's information is safe, private, and secure and that will never be shared with third parties.



Data Protection: All information stored in an e-Portfolio is extremely secure as data are fully encrypted and stored on one and/or multiple secure servers. This means data cannot be lost, stolen, hacked or damaged – unlike paper-based portfolios.

Examples of E-assessment and E-portfolio tools



There has been a continuous move toward the use of Technology Enhanced Learning (TEL) within VET for many years. The emergence of COVID-19 has accelerated the need for and use of on-line pedagogical models and in particular the delivery of distant learning and e- assessment.



<https://e-leap.eu/>

Learn, Engage, Apply and Perform (LEAP) E-portfolio platform aims to meet the needs of learners, VET teacher/trainers, VET centres and Awarding Bodies for a modern one-stop learning and assessment tool to support learners through short informal learning programmes and qualification-based programmes. The LEAP platform combines learner assessment, feedback and moderation and connects the learner directly to their teacher/trainers.



<https://teammate360.eu>

Teammate360 is a web-based 360-degree assessment tool designed to help managers who lead virtual teams and team members to improve their effectiveness and job performance. It provides a short, practical report including a set of development actions which if actioned will impact positively on future performance.



<https://mahara.org>

Mahara is designed for students to create content and control who sees it. This content is created in a personal portfolio of pages (or collection of pages).



<https://onefile.co.uk>

OneFile is a browser based e-Portfolio system, procured to manage and evidence the delivery of Degree Apprenticeship programmes.



<https://myportfolio.school.nz>

MyPortfolio provides a personal learning environment to record and showcase evidence of achievement, manage development plans, set goals, and create online learning communities.

More to explore here: <https://eportfolioreview.wordpress.com/eportfolio-list/>

