Reliable Green –

Remote work, telework and learning with innovative and accessible educational resources
for businesses and labour markets in European Green Economy

Module:
Using technology to assess learning

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The six modules of Reliable Green

The learning course consists of 6 modules

Putting tech to teach

Using technology to assess learning and teaching effectively in online environments.

Using technology to prepare and sharing content

Reliable Green Topic-related modules

Using technology to facilitate virtual training

Using technology to assess learning

Applying Universal Design for Learning principles with technology
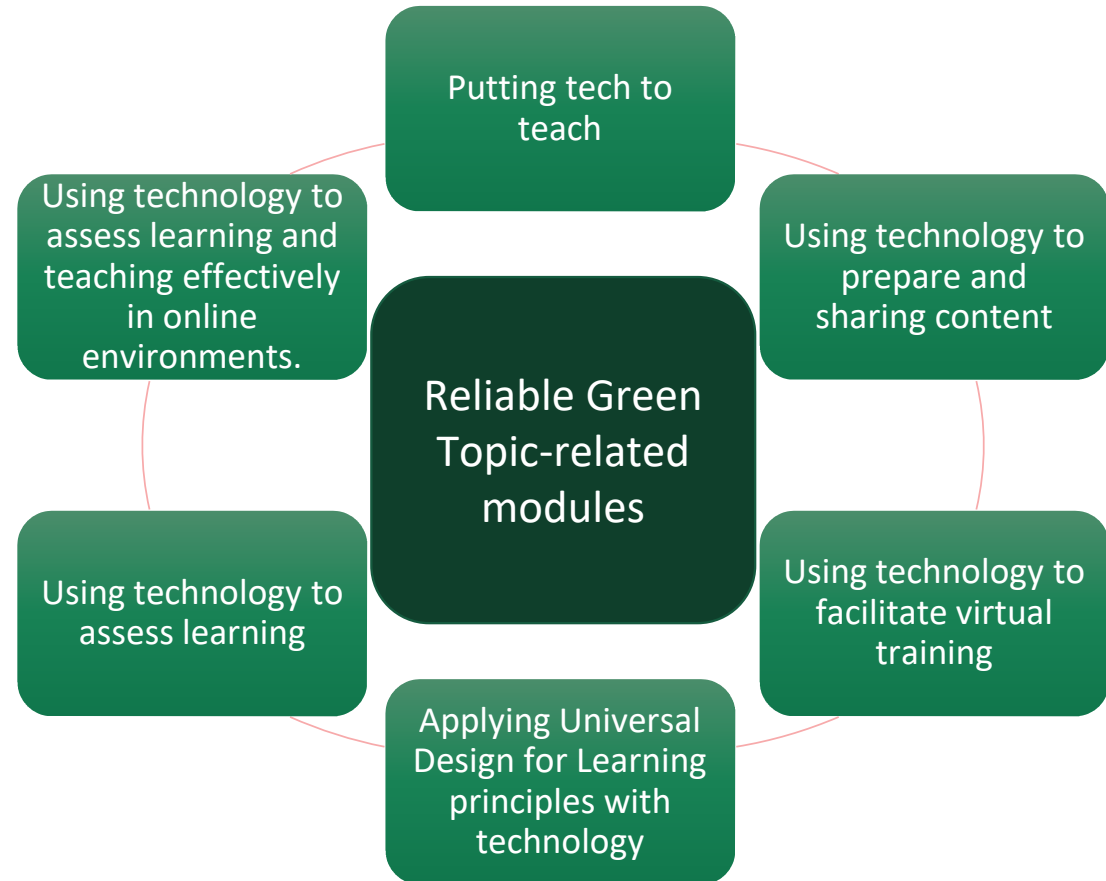
The six modules of Reliable Green

Today, we focus on "Using technology to assess learning"

Putting tech to teach

Using technology to prepare and sharing content

Using technology to assess learning and teaching effectively in online environments.

Reliable Green Topic-related modules

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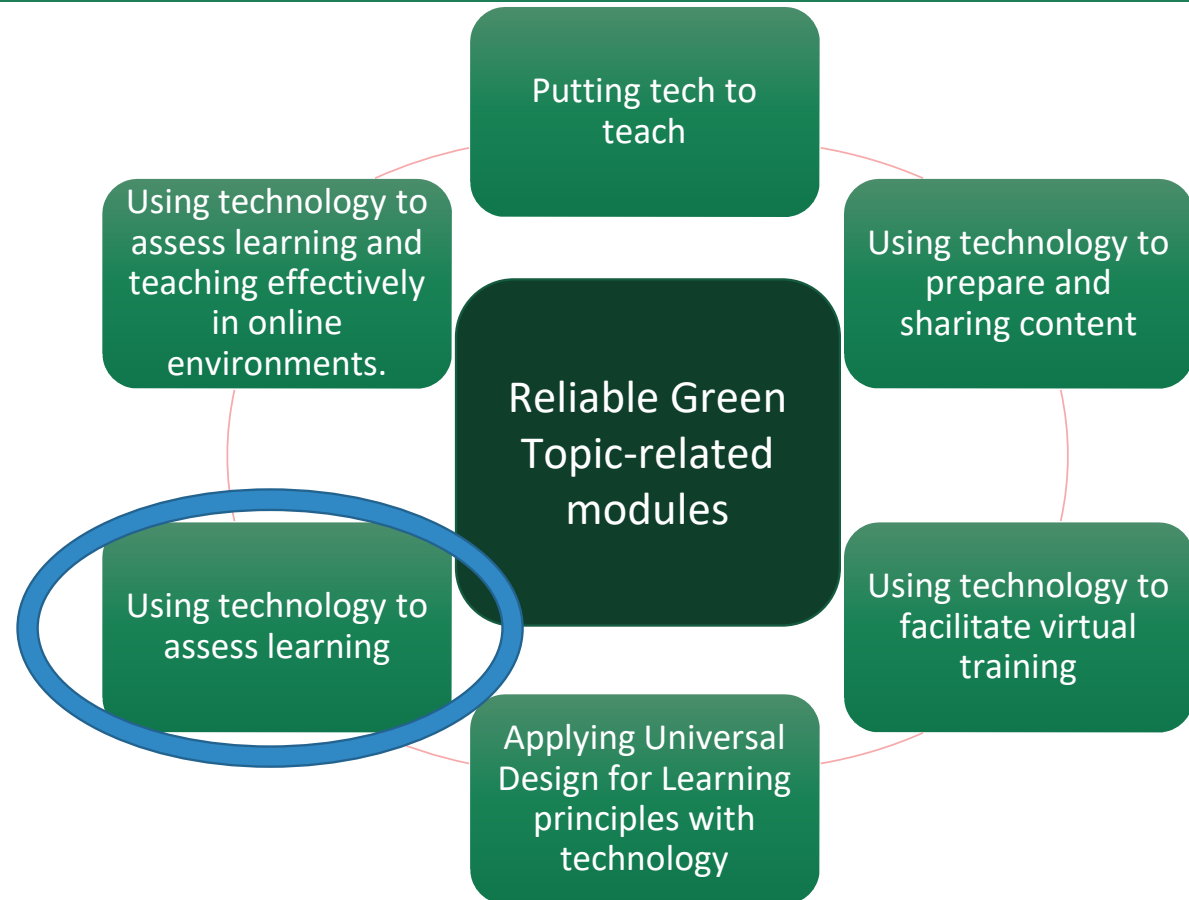
Introduction

Introduction

In this module of the Reliable Green course, we will explain how you can use technology to assess students and/or employees' learning and introduce you to a range of digital tools that can support various types of assessment. You will be able to test out these tools.

Using technology to assess learning

Digital vs. Traditional Tools

EVALUATING THE USE OF DIGITAL TOOLS FOR ASSESSMENT AND THEIR PROS AND CONS

Digital vs Traditional Assessment Methods

In recent years, the COVID '19 pandemic has accelerated the move from traditional paper assessments to digital assessment methods.

- Digital assessment tools offer a faster more fun way to deliver tests and can be far more engaging than traditional methods.

- Technology can break down and cause problems barriers of its own and cheating is far harder in an exam room environment than online.

The Advantages of Digital Assessment
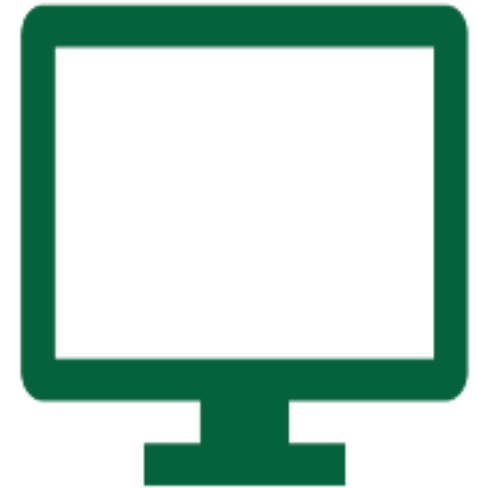
What advantages are there for the learner?

- Digital assessments are more engaging and fun.

- Feedback from tutors is typically faster.

- Remote assessment is a possibility.

- It is more inclusive of all learners.

- Learners can be more comfortable in their own setting away from the traditional exam room.

- The move towards digital assessment is more in-line with the way employers work today.

The Advantages of Digital Assessment

What advantages are there for the tutor?

- Easier and faster to mark and grade learners.

- Assessments can be adapted to target learners.

- Digital allows quick and more in-depth analysis of learners' results.

- Tutors also have greater flexibility in geographical location during assessments.

- There are now a range of digital tools for creating assessments readily available to tutors online.

An enhanced learning experienced over time…

Many studies have proven that use of digital tools in education has improved students' learning over the years, particularly in maths and science subjects (Hillmayr, Delia *etal*, 2020)

An enhanced learning experience today…

"There are so many digital tools available today that offer opportunity for promoting student creativity, student voice and expanding where and how students learn". (Ganesan, Praveen Kumar & Raja, Vasimalai. (2019). Digital Tools in Learning).

Barriers to Effective Use of Digital Tools

Digital Assessment Tools Activity I – Group Work

Please discuss in small groups

I.   What are the benefits of using digital assessment tools?

I.   What types of digital assessment tools are you aware of?

I.   What qualities does a tutor need in order to successfully use digital tools for assessing trainees or learners?

Now feedback your small group discussion to the larger group.

30 minutes
Preparation
time

Brainwriting the Pitfalls of Digital Assessment Tool – Activity II

Each trainer gets a set of post-it notes and works on their own at first

I.   Come up with 3 barriers that you think could be pitfalls for trainers when using digital tools – write each one down on a post-it note.

I.   Now swap your barriers with your neighbour and read through their suggestions.

I.   Using your own and your neighbours' ideas for inspiration come up with another 3 ideas and write them out on new post-it notes.

Now put forward your top barriers and discuss how you could overcome them with the whole group.

40 minutes Preparation time

Challenges with Implementation of Digital Assessment

- For digital assessment to work effectively, both trainers and learners need to be familiar and confident with using the tools and technology needed to complete them.

- Trainers have little control over the environment of the trainee if learning remotely. Whilst it may be in the interest of the learner to have a suitable space for their learning, this may not be practical in their home environment.

- Digital assessment is at the mercy of technological complications and excuses. The traditional "my dog ate the homework" can easily become "my internet was down, or cut off during the test".

- Remote examinations are very hard to control and although cameras can serve to deter and discourage cheating, it is far easier for participants to cheat in a virtual space, especially if it is in their own homes.

- Digital equipment to access the assessment can be expensive both for the learner and the training institution.

Effective Use of Digital Assessment Tools (TIPS)

Tips to Succeed with Digital Assessment Tools for Trainers

1. Consider what you want to achieve with your digital assessment before you start? Which tool will give you what you hope to get out of it?

2. Ensure your learners have the right technology and set up to complete the assessment. Make sure both you and learners are familiar with any software.

3. You cannot control a learners remote digital space, so ask them how it is working for them and if they need anything to make it easier.

4. Make sure that any controls on digital tools are set up correctly, so that learners can only interact in the way you want them too.

5. If you are going to allow remote assessment for official examinations, ensure that you do the maximum to prevent the possibility of cheating.

6. If your organisation or any learners are struggling with the cost of technology to allow you to implement digital learning, look into any available grants.

Types of Assessments

DIAGNOSTIC, FORMATIVE AND SUMMATIVE ASSESSMENTS

Diagnostic Assessment

Diagnostic Assessment

Diagnostic Assessment is where you assess a learner's knowledge on a topic before delivering any course content to them.

This presents a useful way to identify the current level of knowledge your learners have before launching into a course.

Formative Assessment

Formative Assessment

Formative Assessment is where you assess a learner's knowledge on a topic during the course or a specific lesson/topic.

This presents a useful way to identify how well learners are doing and to identify any gaps in learning that you might fill by tweaking some of the planned course contents.

If your formative assessment shows that a particular concept is not well understood, you can immediately focus on it and clarify.
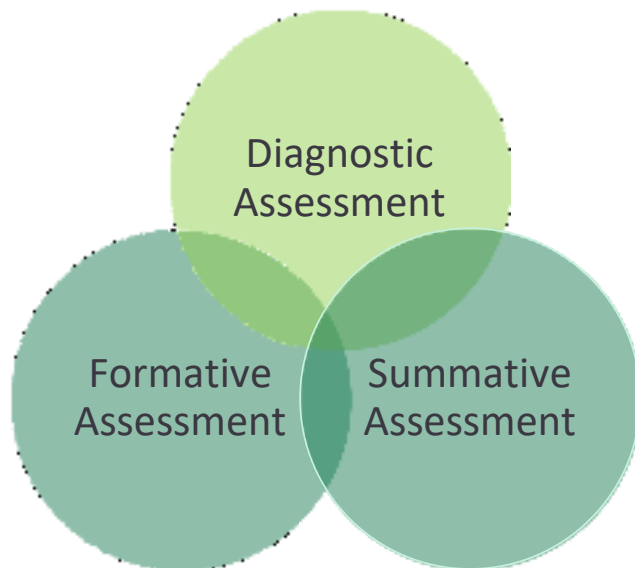
Summative Assessment

Summative
Assessment

Summative Assessment is used to evaluate learners' understanding at the end of a course or module.

It can also be part of a formal curriculum assessment, such as exams or assignments.

Diagnostic, Formative and Summative Assessment types

Diagnostic Assessment

Formative Assessment

Summative Assessment

Together, the 3 assessment types can give trainers a strong understanding of how learners are performing.

The results should act as feedback as to which elements of the course could be improved going forwards and which elements are too easy/hard for the level of the learners.

Where assessment leads to grades or qualifications, deeper analysis of results may also uncover areas that learners particularly excelled in or struggled with.

Types of Digital Assessment Tools

EVALUATING THE TYPES DIGITAL TOOLS FOR ASSESSMENT AND THEIR APPLICATIONS

Types of Digital Assessment Tool

Continuous Assessment

Peer interaction Assessment

Digital Flashcards

Digital Quizzes

Reflective Videos

Simulations

"There are so many digital tools available today that offer opportunity for promoting student creativity, student voice and expanding where and how students learn", Ganesan, Praveen Kumar & Raja, Vasimalai. (2019). Digital Tools in Learning.

Types of Digital Assessment Tool

Continuous Assessment (Through Platform based training/learning)

Tools that allow for trainers and learners to interact and share files, giving trainers the ability to make quick real-time assessment of learners' work.

Google Classroom

File sharing/editing, video conferencing, access to Google's sweet of products, e.g. Forms for interactive elements.

Microsoft Teams

Targeted more towards professionals, allowing to share and edit files, video conference

Pear Deck

Allows the use of formative assessments and interactive questions to Google Slides presentations.

Peer Interaction Assessment Tools

Tools that allow learners to work in a collaborative manner online to share knowledge and work together collectively to improve their learning experience

Padlet

Platform tool allowing groups to collaborate on group work and discuss.

Linoit

Brainstorm-style digital sticky note platform that allows users to share ideas within a group.

Stormboard

Professional platform allowing to share files and post-it thoughts for brainstorming activities on digital whiteboard.

Digital Flashcards

Fill in the blank type activities allow learners to test their newly found knowledge by filling in missing key words relevant to the topic.

Plickers

A group card activity game that allows trainers to get instant feedback to formative assessments.

Quizlet

Science-based digital flashcards

Types of Digital Assessment Tool

Digital Quizzes

Quizzes are a popular type of assessment tool as they can be engaging and they give the trainers a clear of idea of what learners know and where they might need further support.

Kahoot

Online quiz programme that allows trainer to create quiz to be completed by multiple learners from in different locations simultaneously.

Google Forms

Allows the creation of quizzes with multiple choice, open ended and True/false type questions.

Wizer

Allows trainers to create interactive worksheet-style quizzes and feedback on learners answers.

Reflective Videos

Video is perhaps the most popular form of digital content nowadays. It provides a good assessment tool when combined with reflective exercises to test the learners' understanding.

Edpuzzle

Interactive videos with reflective assessment questions built in.

Stornaway

Creation of story-telling type interactive/reflective videos

Simulations

Simulation tools allow learners to have an experience that they would not otherwise have without greater knowledge and experience.

Software needs to programmed/built in and equipment required, but great potential for learning, especially where mistakes have huge consequences (e.g. surgery, flying aircraft etc.)

- Virtual Reality experiences

- Augmented Reality experiences

GROUP ACTIVITIES: Evaluating Digital Tools

Choose Your Digital Assessment Tools – Activity III

**30 minutes
Preparation time**

Google Classroom

Microsoft Teams

Pear Deck

Plickers

Quizlet

Kahoot

Google Forms

Wizer

Edpuzzle

Stornaway

<u>**Working in pairs**</u>

I. Take a look at the list of assessment tools to the right.

I. Choose 1 that you would like to use for formative tests and 1 that you would like to use in summative tests and think about why?

I. Discuss with your neighbour about the tools both of you have chosen.

Now feedback what your neighbour has chosen and why to the whole group.

Create your own digital assessment – Activity IV

Your trainer will assign half the learners with creating a formative assessment and half with creating a summative assessment.

I.   Working in small groups, create a short digital assessment, using one of the tools featured in the previous exercise.

I.   Present your assessment back to the whole group

I.   Each group will pilot/review the digital assessment created by another group.

Now feedback your view and suggested improvements to the group who created the assessment.

45 minutes Preparation time

Thank you for participating!

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