



# Module 2: Enhance teaching, learning and assessment for digital transformation

## Unit 1: Innovative teaching and learning strategies in digital learning



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## Module 2. Enhance teaching, learning and assessment for digital transformation

### UNIT 1: Innovative teaching and learning strategies in digital learning

- Explain the importance of Curriculum Alignment in the concept of Digital Transformation
- Give examples of different digital tools that they can use for learning activities
- Outline ways to introduce the use of digital technologies in school strategy for ensuring more efficient, personalised and student-oriented learning and teaching practices;
- Identify the advantages and the limitations of implementing digital tools for teaching and learning in class settings;
- Evaluate the current situation in the school perspective in terms of digital transformation
- Structure an action plan for increasing the use of digital tools for learning and teaching activities

### UNIT 2: Assessment and evaluation in digital learning

- Address the main challenges in using technology-enhanced tools for assessment
- Select appropriate assessment tools using technology-enhanced tools
- Identify supporting measures in using digital tools for assessment purposes
- Develop an action plan to promote technologically-based assessment strategies

# UNIT 1

# Curriculum Alignment

## Definition

*“the degree to which the components of an education system - such as standards, curricula, assessments, and instruction - work together to achieve desired goals”.*

❓ In the concept of **Digital Education**, curriculum alignment can be examined in the framework of **blended learning**, where different learning tools (digital and non-digital), are blended.



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# Curriculum Alignment and Technology

- Technology can bring the power of **digital transformation** into the nature and quality of the educational experience.
- School leaders and teachers need to be able to assess **where technology makes sense in the curriculum** and add a more interactive edge to any curriculum plan.
- **Closing the gap between the curriculum and information technology** can help school leaders in their quest to leverage technology for learning.



Source: [www.freepik.com](http://www.freepik.com).

# Role in the Digital Transformation strategy of a school

**Curriculum alignment ensures that the learning content, learning objectives, study programmes, attainment targets, assessment guidelines or syllabi are aligned with the possibilities of digital education.**



The use of technologies in curriculum alignment should be addressed as an important, even separate, subject.



Curriculum alignment is the first step in using digital tools and technologies in the classroom.

- In a digitalised world, technology needs to be part of every lesson plan in any subject as it can be integrated from Humanities to Sciences. In this way, students are able to learn how to use technology while learning, even at an early age in primary schools.

# Role in the Digital Transformation strategy of a school

## **BENEFITS:**

- Aligning the curriculum with technology helps students become **engaged thinkers, active learners, knowledge constructors** and **global citizens** to participate fully in society and the economy.

School leaders can support teachers in improving their understanding of ***which tools work best*** in situations of professional activity and the ***appropriateness of digital technologies for pedagogical methods*** and strategies.

Selecting the right technology encourages collaboration, drives innovation and helps meet students' needs.



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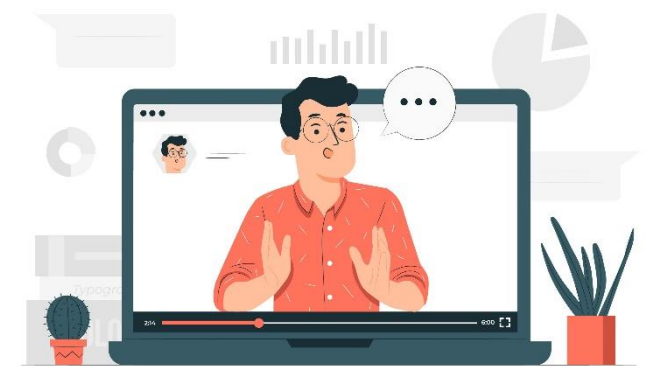
# Structure and Presentation in the final school strategy

Curriculum alignment should be an important section in the final school strategy that provides as many details as possible in regards to **available practices, needs and gaps, potential ideas and resources for improvement** when setting up the framework within which an on- and off-line curriculum alignment can be achieved.

**“An effective blended learning environment takes a learning design approach which looks at the learning goals and aligns them with teaching and learning activities and assessment, thereby ensuring the integration and appropriate use of technology”.**

The blended learning design approaches range from :

- **Predominately face-to-face teaching**, with some online learning
- **A mix of face-to-face and online learning**
- **Predominately online learning**





# Phases of structuring the Curriculum Alignment in the final School Strategy

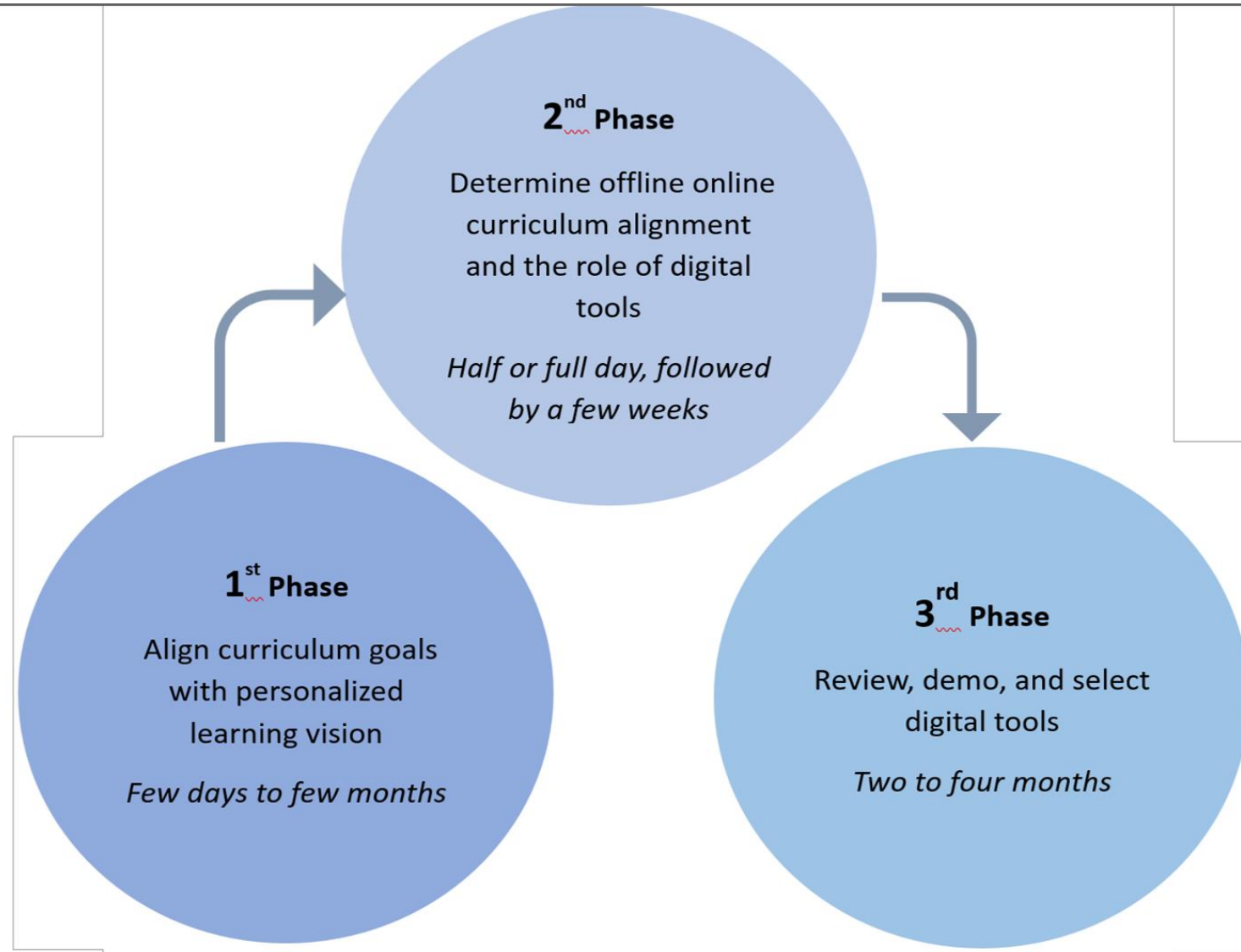


Figure 4.1. Three phases of curriculum alignment and selection Source: Education Elements, n.d.

# Phases of structuring the Curriculum Alignment in the final School Strategy

## *First Phase*

It is about creating a **clear vision** based on **personalised learning**. This vision should not only include the **voice of teachers** but also of the **students** and **school leaders**.

Taking this into account, the **identification of individuals to help** with the curriculum alignment and create an **action plan** for the completion of the process (such as teachers from a variety of grades and departments, at least one administrator, and a member of the technical support team, etc.) would be helpful.

# Phases of structuring the Curriculum Alignment in the final School Strategy

## *Second Phase*

Teachers and school leaders need to determine an **appropriate curriculum mix** . This mix can include the following three categories:

- 1. Foundational Content:** the traditional core curriculum with a defined scope and sequence aligned to grade level, as issued by top-level authorities. This can include the use of curriculum guides, syllabi, online or offline textbooks, etc.
- 1. Adaptive Content:** the digital content that adjusts the path or pace of learning according to students' mastery. This can include the use of specific portals or learning environments where students will be able to reaccess the digital content and be no longer bound by the pace of the class.
- 1. Highly Customizable Content:** Teacher-customized lessons tailored to fit individual students' needs, interests, and skills. This can include the use of creative digital tools such as [Canva](#), [Jamboard](#), [Padlet](#), etc.

# Phases of structuring the Curriculum Alignment in the final School Strategy

## *Third Phase*

It includes **reviewing, demonstrating, and selecting the ideal digital technologies**. The selection of the right tools will be based on the **specific teachers' and students' needs**.

Within this context, the offline and online curriculum alignment could include, besides the use of Digital Educational Platforms provided by national authorities, a wide range of digital technologies that have been successfully applied within classroom settings.



Source: [www.freepik.com](http://www.freepik.com).

# Digital Tools

*The following table presents digital tools that are engaging, interactive and flexible:*

<b>Learning platforms</b>	<b>Editing &amp; authoring tools</b>	<b>Engagement, testing &amp; graphic tools</b>	<b>Chat/Video meeting tools</b>	<b>Online whiteboards &amp; forms</b>	<b>Document, presentation &amp; spreadsheet tools</b>	<b>File sharing platforms</b>
Moodle	Audacity	Kahoot	Zoom	Miro	Word	Google Drive
Canvas	Movie Maker	Prezi	Google Meet	Google Jamboard	Google Docs	Dropbox
Blackboard	Descript	Plickers	Microsoft Teams	Gynzy	PowerPoint	WeTransfer
Google Classroom	EdPuzzle	Mentimeter	Cisco Webex	Mural	Google Slides	OneDrive
Moodle	Nearpod	Quizlet	Skype	Google Forms	Excel	
Snappet		Quizizz	Viber		Google Sheets	
Thinglink		Padlet	WhatsApp		Liveworksheets	

# Examples of on- and off-line curriculum alignment

**When teachers, with the support of school leaders, can:**

- use weekly or at the end of a learning outcome an **online quiz** (either for revision or summative assessment purposes) and/or provide students with further online recourses
- upload **lecture notes, presentations, and worksheets** on their virtual learning environments (e.g., Drive), so students will be able to review them again if needed
- provide a **video** (these could be online as YouTube videos or Edpuzzle), and during viewing, ask questions and request opinions
- set up a Padlet or Mentimeter and allow students to work **online collaboratively**, discussing and sharing their ideas



# Examples of on- and off-line curriculum alignment

**Online Collaborative Projects:** Engaging students in online collaborative projects aligns the curriculum with **digital tools** and **fosters teamwork** and **critical thinking skills**. Platforms like **Padlet** or **Google Docs** **enable** students to collaborate on shared documents, **brainstorm ideas**, and **present their work** to a wider audience.

**Web-based Learning Platforms:** Aligning the curriculum with online learning platforms allows students **to access digital resources**, **engage in interactive activities**, and **submit assignments** electronically. For example, using a learning management system (LMS) like **Google Classroom** or **Moodle**, teachers can share digital materials, facilitate discussions, and provide online assessments.

**Project-based Learning:** Integrating project-based learning (PBL) approaches into the curriculum provides students with opportunities to apply digital skills in real-world scenarios. Students can **research a topic online**, **gather offline data** through surveys or interviews, and **create presentations or reports** using a combination of digital tools and traditional methods.



Source: [www.freepik.com](http://www.freepik.com).

# Methodologies and Tools

*In order to have a complete overview of the situation in the school, school leaders and teachers need to make a diagnosis regarding the on- and off-line curriculum alignment. For the needs assessment, quantitative and qualitative data can be collected through questionnaires or interviews.*

## Quantitative data

For the collection of quantitative data, school leaders can use a **checklist** adapted from the **SELFIE** and the **TET-SAT tool**. The checklist that follows is adjusted for the purposes of the DigiLEAD project to help different stakeholders reflect on areas such as:

- Teaching and learning practices,
- using digital technologies and online resources



# Methodologies and Tools

*Table 4.2. Checklist for curriculum alignment*

*Answer options: five-point Likert scale (1 min. - 5 max.) and not applicable (N/A)*

	<b>School leaders</b>	<b>Teachers</b>	<b>Students</b>
E1 Online educational resources	Our teachers search online for digital educational resources	I search online for digital educational resources	
E2 Creating digital resources	Our teachers create digital resources to support their teaching	I create digital resources to support my teaching	
E3 Using virtual learning environments	Our teachers use virtual learning environments with students	I use virtual learning environments with students	Our teachers use online platforms, to which we can also contribute, to facilitate our learning
E4 Communicating with the school community	Our teachers use digital technologies for school-related communication	I use digital technologies for school-related communication	
E5 OP Open educational resources	Our teachers use open educational resources	I use open educational resource	
Open Useful technology for teaching		Please give an example of a digital technology (equipment, software, platform, resource...) you find really useful for teaching	Please give an example of a digital technology (equipment, software, platform, resource...) you find really useful for learning

# Methodologies and Tools

*Table 4.3. Using technologies to engage students and to adapt technologies use to students' needs  
Answer options: five-point Likert scale (1 min. - 5 max.) and not applicable (N/A)*

	<b>School leaders</b>	<b>Teachers</b>	<b>Students</b>
F1 Tailoring to students' needs	Our teachers use digital technologies to tailor their teaching to students' individual needs	I use digital technologies to tailor my teaching to students' individual needs	In our school, teachers give us different activities to do using technology that suit our needs
F3 Fostering creativity	Our teachers use digital learning activities that foster students' creativity	I use digital technologies to foster students' creativity	In our school, I use technology for creative activities
F4 Engaging students	Our teachers set digital learning activities that engage students	I set digital learning activities that engage students	In our school, I participate more when we use technology
F5 Student collaboration	Our teachers use digital technologies to facilitate student collaboration	I use digital technologies to facilitate student collaboration	In our school, we use technology for group work
F6 Cross-curricular projects	Our teachers engage students in using digital technologies for cross-curricular projects	I engage students in using digital technologies in cross-curricular projects	In our school, we use technology for projects that combine different subjects
F8 OP Career guidance	In our school, we use digital technologies for career guidance	In our school, we use digital technologies for career guidance	In our school, we use technology for career guidance

# Methodologies and Tools

*Table 4.4. How school leaders and teachers deal with digital divide and support students with special educational needs in blended learning forms.*

*Answer options: five-point Likert scale (1 min. - 5 max.) and not applicable (N/A)*

	<b>School leaders</b>	<b>Teachers</b>
C11 OP Digital divide: Measures to identify challenges	In our school we have measures in place to identify challenges that arise with Blended Learning, related to students learning needs and socio-economic background	In our school we have measures in place to identify challenges that arise with Blended Learning, related to students' learning needs and socio-economic background
C12 OP Digital divide: Support to address challenges	In our school, we have a plan in place to help teachers deal with challenges that arise with Blended Learning, related to students' learning needs and socio-economic background	In our school, we have a plan in place to help teachers deal <u>with challenges</u> that arise with Blended Learning, related to students' learning needs and socio-economic background

# Methodologies and Tools

## Qualitative data

To perform a gap analysis, it would be essential to conduct further research on:

- how the on- and off-line curriculum alignment is achieved in the school
- which problems regarding curriculum alignment should be overcome, and
- how the teachers and students feel about using technologies in curriculum alignment

- This qualitative information can be collected with ***short open questions***. The participants should be able to speak freely and express their thoughts. In the case of interviews or focus groups, the duration should not exceed 60-90 minutes. If face-to-face meetings cannot be conducted, you can hold an online meeting via Zoom or Google Meets.
- In order to facilitate the engagement of the students in this process, you can also create a questionnaire using Google Forms.
- The feedback received from teachers and students is important for the Digital Transformation of your school and should be taken into consideration.

# Methodologies and Tools

## *Recommendations on how to put all these elements together*

As the collection of quantitative and qualitative data requires a specific amount of time and expertise, it is recommended the individuals who are assigned to help with the curriculum alignment and the creation of an action plan for the completion of the process during phase 1 to be held responsible.



These individuals can form an **“On- and off-line Curriculum Alignment Team”** that will perform the **needs assessment and collect and analyse the received data**. A comprehensive final report that will put all the elements together will be created to present the situation in the school. During each school year, the On- and off-line Curriculum Alignment Team should provide at least one report.



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# Digital learning and teaching practices

*Quiz Time: Please evaluate/rank these digital learning and teaching practices*

- *Do you recognize these practices?*
- *Do you use these in classroom settings?*
- *Do the teachers in your school use them?*

**Competence-based learning**



**Learning experience design (LXD)**

**Active learning approaches**

**Inquiry-based learning - IBL**

**Flipped classroom**

**Game-based learning and gamification**

- *How digital technologies can help to use these learning/teaching approaches?*

# Challenges

## *Main Challenges for Integrating Digital tools in Innovative teaching and learning strategies*

Integrating digital technologies in class settings can lead to more efficient, personalised and student-oriented teaching and learning strategies.

**Using digital technologies in class for learning & teaching is not an automatic process!**

Teachers need guidance how to:

- design learning experiences with digital tools;
- design/combine digital content and educational materials.
- increase learning personalization and student-oriented teaching strategies.



# Digital technologies for teaching and learning

*Group work: Please discuss and make a list, providing evidences, examples and best practices*

1. What should be the role of digital technologies for teaching and learning in the school strategy?
2. What are the challenges, limitations and problems for using digital technologies for learning and teaching?
3. How digital technologies could be used to train key 21<sup>st</sup> century skills? Why?
4. How to facilitate and encourage teachers/students to use digital technologies for learning and teaching?



Source: [www.freepik.com](http://www.freepik.com).



# Evaluate current status

*How to identify school readiness to adopt digital tools for teaching and learning?*


***In order to have a complete overview of the situation in the school, school leaders and teachers need to make a diagnosis regarding the on- and off-line curriculum alignment. For the needs assessment, quantitative and qualitative data can be collected through questionnaires or interviews.***


Explore strategies for collecting information about current situation:

- Quantitative methods;
- Qualitative methods;

# Role in the Digital Transformation strategy of a school

**The innovative learning and teaching strategies have to be specifically addressed in the Final School strategy vision, goals and action plan.**

 In **Strategy vision**, goals and action plan: integrate innovative teaching and learning practices, conformed to the national and regional policy and school priorities.

 In **Action plan**: provide specific list of activities, goals and objectives, KPIs for adopting digital tools for innovative learning and teaching, improving teacher and student motivation, performance and impact.

**The main top-down decisions for building school capacity for digital transformation such as:**

- Improve use and accessibility to school **physical spaces** (labs, STEAM centres) and **digital infrastructure**
- Develop **plans for teacher-training** and professional development, raising skills and attitudes
- Promote activities to facilitate knowledge sharing of innovative learning and teaching practices.

# Methodologies and Tools

*In order to have a complete overview of the situation in the school, school leaders and teachers need to make a diagnosis regarding the on- and off-line curriculum alignment. For the needs assessment, quantitative and qualitative data can be collected through questionnaires or interviews.*

## Quantitative data

For the collection of quantitative data, school leaders can use a **checklist** adapted from the **SELFIE** and the **TET-SAT tool**. The checklist that follows is adjusted for the purposes of the DigiLEAD project to help different stakeholders reflect on areas such as:

- Teaching and learning practices,
- using digital technologies and online resources

# Methodologies and Tools

*Table 6.1. Collecting quantitative data, based on SELFIE questionnaire*

*Answer options: five-point Likert scale (1 min. - 5 max.) and not applicable (N/A)*

Questions	School leaders	Teachers	Students
E1 Online educational resources	Our teachers search online for digital educational resources	I search online for digital educational resources	
E2 Creating digital resources	Our teachers create digital resources to support their teaching	I create digital resources to support my teaching	
E3 Using virtual learning environments	Our teachers use virtual learning environments with students	I use virtual learning environments with students	Our teachers use online platforms, to which we can also contribute, to facilitate our learning
E4 Communicating with the school community	Our teachers use digital technologies for school-related communication	I use digital technologies for school-related communication	
E5 OP Open educational resources	Our teachers use open educational resources	I use open educational resource	
Open question: Useful technology for teaching		Please give an example of a digital technology (equipment, software, platform, resource...) you find really useful for teaching	Please give an example of a digital technology (equipment, software, platform, resource...) you find really useful for learning
F1 Tailoring to students' needs	Our teachers use digital technologies to tailor their teaching to students' individual needs	I use digital technologies to tailor my teaching to students' individual needs	In our school, teachers give us different activities to do using technology that suit our needs
F3 Fostering creativity	Our teachers use digital learning activities that foster students' creativity	I use digital technologies to foster students' creativity	In our school, I use technology for creative activities

# Methodologies and Tools

*Table 6.1. Collecting quantitative data, based on SELFIE questionnaire*

*Answer options: five-point Likert scale (1 min. - 5 max.) and not applicable (N/A)*

Questions	School leaders	Teachers	Students
F3 Fostering creativity	Our teachers use digital learning activities that foster students' creativity	I use digital technologies to foster students' creativity	In our school, I use technology for creative activities
F4 Engaging students	Our teachers set digital learning activities that engage students	I set digital learning activities that engage students	In our school, I participate more when we use technology
F5 Student collaboration	Our teachers use digital technologies to facilitate student collaboration	I use digital technologies to facilitate student collaboration	In our school, we use technology for group work
F6 Cross-curricular projects	Our teachers engage students in using digital technologies for cross-curricular projects	I engage students in using digital technologies in cross-curricular projects	In our school, we use technology for projects that combine different subjects
F8 OP Career guidance	In our school, we use digital technologies for career guidance	In our school, we use digital technologies for career guidance	In our school, we use technology for career guidance
C11 OP Digital divide: Measures to identify challenges	In our school we have measures in place to identify challenges that arise with Blended Learning, related to students learning needs	In our school we have measures in place to identify challenges that arise with Blended Learning, related to students' learning	
	and socio-economic background	needs and socio-economic background	
C12 OP Digital divide: Support to address challenges	In our school we have a plan in place to help teachers deal with challenges that arise with Blended Learning, related to students' learning needs and socio-economic background	In our school we have a plan in place to help teachers deal with challenges that arise with Blended Learning, related to students' learning needs and socio-economic background	

# Methodologies and Tools

## Qualitative data

To perform a gap analysis, it would be essential to conduct further research on:

- current teaching and learning strategies and how these can be improved;
- Identify key criteria for evaluating good practices, expectations and feedback
- how teachers and students feel about using technologies in teaching and learning

- This qualitative information can be collected in focus group or with round table discussion with ***short open questions***. The participants should be able to speak freely and express their thoughts.
- The duration should not exceed 60-90 minutes. If face-to-face meetings cannot be conducted, you can hold an online meeting via Zoom or Google Meets.
- The feedback received from teachers and students is important for the Digital Transformation of your school and should be taken into consideration.
- The self-evaluation forms and qualitative feedback assessment is vital, especially when it comes from the teaching staff, as they are the ones directly involved in the teaching, learning and assessment processes;

# Methodologies and Tools

## The report of the results

A general summary of the current state of the digital skills, the attitudes and the experiences of the teachers in the school.

Table 6.2. Exploring teachers' digital skills and attitudes for adopting active learning strategies, based on the [TET-SAT tool](#) (2017) prepared within the Erasmus+ project MENTEP

<b>Teacher</b>	<b>Beginner</b>	<b>Capable</b>	<b>Proficient</b>	<b>Expert</b>
<b>ICT use</b>	<b>Basic</b>	<b>Autonomous</b>	<b>Proficient</b>	<b>Creative and transformative</b>
Activities	Use ICT in their main teaching practice	Use ICT for performing common tasks	ICT to modify and improve teaching practices.	Use ICT to design innovative teaching and learning activities and students experiences.
Active learning approaches	Familiar, but not experienced	Have specific experience in the field;	Use active methods in class	Use and teach other teachers and students how to design them.
Engagement techniques and gamification	Familiar, but not experienced	Have specific experience in the field;	Use engagement and GBL approaches in class	Use and teach other teachers and students how to use and engage with GBL.

# Action plan

*Group work: Design action plan for development of innovative learning and teaching strategies*

Each group **to reflect, discuss and share practical steps for addressing :**

- How to improve accessibility and use of school equipment and digital tools for innovative learning and teaching?
- How to increase capacity and skills of the teachers to adopt innovative learning and teaching strategies?
- How to improve knowledge sharing for best practices of innovative teaching and learning?
- How to address current challenges and limitations?
- How to identify relevant partnerships, key driving forces, key performance indicators and others?



# Action plan

## *Discuss Possible Challenges*

The main challenges and limitations for adopting innovative teaching and learning strategies can be summarised as follows:

- **Rigid national learning programs** and educational standards, stuck to traditional way of training and learning, specific programs supporting traditional methods of trainings, strict end-of-school examinations.
- **Lack of access**, offering and funding for attending appropriate teacher training programs and learning opportunities;
- **Lack of access to technology infrastructure**
- **Lack of digital learning culture** and leadership support.

# Driving forces

## *Discuss driving forces and suggestions for partnership/ networks*

Example of driving forces, to adopt more innovative teaching and learning strategies :

- 1. Increase teachers' technology-related teaching skills.**
- 2. School digital champions** – can raise expertise, improve visibility of innovative experiences, promote best practices and share voluntary knowledge, skills and resources.
- 3. Set an internal resource centre (data base)** for collecting and sharing knowledge and educational resources and lessons plans, provided from teachers, educational experts and others.
- 4. Establish a calendar** to schedule and plan various activities and events to promote innovative teaching and learning practices among students and teachers.
- 5. Community building**—collaborate with external experts and stakeholders, including other schools' teachers, researchers, parents, establish partnerships and take part in school networks that can facilitate school leaders to gain better vision, understanding and positioning.

# Group Presentations

*Present the outcomes of the group work:*

- What is the role of digital technologies for teaching and learning in the school strategy?
- What is the best action plan for development of innovative learning and teaching strategies?
- How to address problems, challenges and limitations?

# Action plan – Wrap up

## *Phases of structuring Action plan*

The action plan could address specific activities to support, encourage and promote innovative teaching and learning strategies with digital tools.

Goal/ Objective	Action	Responsible staff	Timeframe	Resources	KPIs/ Validation
<b>1. Improve accessibility and use of school equipment and digital tools for innovative learning and teaching</b>	Explore current situation and challenges	Digital Strategy Coordination Team	1 week	Online survey	% of teachers involved
	Investigate and propose relevant solutions and activities	Digital Strategy Coordination Team	1 month	Report	% of proposed solutions
	Approve action plan and assign responsibilities	Leadership board	1 month	Action plan	% of tasks
	Regular monitoring	Leadership board	Semi-annually	Report	% of adopted practices

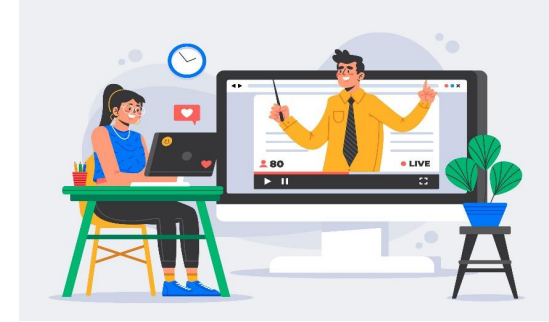
# Action plan

## *Phases of structuring Action plan*

<b>2. Increase capacity of the teachers to adopt innovative learning and teaching strategies</b>	<b>Assess current situation and training needs</b>	<b>Digital Strategy Coordination Team</b>	<b>1 month</b>	<b>Online survey, Interviews, Round table</b>	<b>% of teachers involved</b>
	<b>Explore training opportunities for digital skills and innovative training and learning</b>	<b>Digital Strategy Coordination Team, Teachers</b>	<b>1 month</b>	<b>Desktop research, Interviews</b>	<b>Number of trainings, Quality of training providers</b>
	<b>Design and approve action plan for teacher trainings</b>	<b>Digital Strategy Coordination Team, Leadership board, Teachers</b>	<b>1 month</b>	<b>Report</b>	<b>Number of trainings</b>
	<b>Internal evaluation of the teacher trainings</b>	<b>Teachers</b>	<b>10 days after training</b>	<b>Survey</b>	<b>Quality and satisfaction rate</b>

# Action plan

## *Phases of structuring Action plan*



<b>3. Improve knowledge sharing for best practices of innovative teaching and learning</b>	<b>Explore current situation and assess teachers' attitudes</b>	<b>Digital Strategy Coordination Team, Teachers</b>	<b>1 month</b>	<b>Online survey, Interviews, Round table</b>	<b>% of the teachers involved</b>
	<b>Explore best practices, KS activities in other schools</b>	<b>Digital Strategy Coordination Team, Teachers</b>	<b>1 month</b>	<b>Desktop research, interviews</b>	<b>Number of identified best practices</b>
	<b>Design and approve action plan and calendar for regular KS activities</b>	<b>Digital Strategy Coordination Team, Leadership board, Teachers</b>		<b>Report, annual calendar</b>	<b>Number of internal and external KS activities</b>
	<b>Monitoring and evaluation</b>	<b>Management</b>	<b>annually</b>	<b>Survey, report</b>	<b>Satisfaction rate</b>

# UNIT 2

# Role in the Digital transformation strategy of the school

**Assessment plays a crucial role in teaching and learning procedures. Specifically, it:**

- **Provides** information on students' performance,
- **Checks** progress and success
- **Assists in** the identification of areas for development and improvement.
- **Sets** the requirements and admission criteria for the next level of studies
- **Supports** reflection on the pedagogical strategies used in class





# Digital and online assessment practices– Brainstorming

*Let's reflect...*



Duration: 7 minutes

To what extent digital tools are used in your school to:

- (a) assess students' knowledge and skills,
- (b) encourage students to reflect on their own learning,
- (c) promote peer-to-peer learning



1. In your group, reflect on these questions.
2. Note your thoughts on the padlet:
3. Discuss in plenary.

# Needs analysis - Activity in groups

*Let's reflect on needs & gaps...*



Duration: 20 minutes

Why is needs analysis important in this case?

Which tools can you use to collect qualitative and quantitative data with respect to digital and online assessment practices in your school?

1. In your group, reflect on these questions.
2. Note your thoughts down on a notebook.
3. Discuss in plenary.
4. You will then be given *the Needs Analysis Sheet M2.U2.1* to go through.

# Technology enhanced assessment tools

**Written assignments:** students submit **written work** they have prepared **individually or collaboratively**, through **technology-enhanced means**.

**Useful digital tools:** shared document creation (e.g., Google docs), online canvas (e.g., Padlet, Miro), submission area in the LMS (e.g., Edmodo, Google Classroom).

**Presentations and interviews:** assess your students **orally** through presentations, **1-1 sessions** either presenting their individual/group work or online interviews. Depending on why you are assessing students, the oral work can be an **assignment** (formative assessment) **or final exam** (summative assessment).

**Useful digital tools:** presentation creation (e.g., Google Sites, Prezi), digital content creation (e.g., Canva), web conferencing (e.g., Teams, ZOOM).



# Technology enhanced assessment tools

**Discussions:** students engage with **synchronous or asynchronous** discussion activities. You can hold asynchronous discussions on a discussion board, blog, forum, or wiki whereas synchronous discussions via web conferencing.

**Useful digital tools:** web conferencing (e.g., Teams, ZOOM), video creation/sharing (e.g., Flipgrid), online canvas (e.g., Padlet, Miro), forums/thread discussions area in the LMS, debate creation (e.g., Kialo), blog creation with a comments' section (e.g., WordPress)

**Written exams:** the typical **traditional** assessments composed of quizzes (e.g., multiple-choice, short answer questions) or open-ended questions (e.g., essays).

**Useful digital tools:** forms creation (e.g., Google Forms), document creation (e.g., Google docs).



# Technology enhanced assessment tools

**Online polls/quizzes:** students complete a poll/survey before, during, or after an instruction. These activities are short and used mainly to track students' understanding while actively engaging them.

**Useful digital tools:** presentation tools with polls/quizzes (e.g., Mentimeter, Slido), quiz creation (e.g., Kahoot, Quizizz, Quizlet).

**Projects:** projects can take any form and format, from recording videos to delivering presentations. Thus, projects often include **one or more of the methods** discussed earlier.



# Authentic assessment

## Authentic assessment:

is **realistic** and **resembles** the contexts in which the students **will use** the new knowledge, and skills learned

requires **higher-order thinking skills** (e.g., judgement, critical thinking, innovation/creativity);

includes **“complex” tasks** which students cannot solve on the spot or with minimum effort;

gives students time and space for **reflection and improvement** through feedback;

allows for **collaboration** and group work;

is open-ended, accepting **more than one solution** as correct.

## Types of authentic assessment:

**E-portfolios:** each student prepares an electronic/ digital space that acts as a **repertoire and exhibition of their creations** (e.g., an essay, a story, a project, a presentation)

**Self-assessment:** such tasks focus on letting students **monitor and reflect on their progress** (e.g., a quiz, a game-based activity, a checklist, a survey, or a mind map-concept mapping (students draw connections between concepts they have learned)).

# Challenges in using digital technologies for assessment



Duration: 15 minutes

## Constraints and risks in the process of renewing the assessment methods

1. In your group, reflect on constraints and risks in the process of renewing the assessment methods in your school
2. Note your thoughts on the padlet:
3. Discuss in plenary.



# Challenges in using digital technologies for assessment

- Do school leadership teams have the autonomy and flexibility to promote changes in the assessment methodology?
- Does the school have computer-equipped classrooms, computing equipment, power supply and network connection facilities to support digital assessment methods?
- Are the teachers well-trained to implement new technologically- based assessment strategies?
- Do all students possess the requisite skills and experience to take full advantage of digital technologies, while being assessed?
- Is there any risk for social divisions between students or participation gap, when using shared online spaces, which might make the different levels of achievement more visible?
- Is there any risk for social exclusion, when using social networking tools, which might raise complex social identity issues?
- What about the ethical concerns, i.e. consent, data collection, usage and storing, data control and protection?



## **Technologically-based assessment strategies in schools:**

### ➤ Establishment of a Digital Strategy Coordination Teams

School leadership team, teachers, support teaching staff, administrative staff, parents, ICT expert.

Perform needs assessment;

Analyse the data, i.e. interpret the evidence collected and reflect on the results;

Report the results



# Supporting measures in using digital tools for assessment purposes

- Inclusion of technology-enhanced tools in the curricula
- Flexibility and adequate time to implement them in class
- Official recognition and inclusion in the curricula and the provision of guidelines
- Teacher training on new technologically - based assessment approaches
- Evaluation frameworks to be established to measure the progress and effectiveness of using technology in class and assess teachers' skills
- Collaboration with external stakeholders such as policymakers, universities, research centres /teams, technology developers, businesses, parents', and teachers' unions



# Development of an action plan

## Components:

- a detailed description of the SMARTer objectives
- the actions or tasks to be carried out to reach the objective
- the people who will be in charge of carrying out each task
- by when this task needs to be completed
- the resources needed to complete the task
- the measures to evaluate the process



# Action plan to promote technologically-based assessment strategies

Goal/ Objective	Action(s)	Responsible staff	Time frame	Resources	KPIs/ Validation

# Action plan to promote technologically-based assessment strategies

## Example

Goal/ Objective	Action(s)	Responsible staff	Time frame	Resources	KPIs/ Validation
Familiarise teachers on digital tools available for assessment to be able to implement them in class.	<p>a) One or two teachers per subject-matter to become members of the pool of trainers.</p> <p>b) Members should propose to the team a tool/technology or share a piece of new knowledge every 6 months (can research, attend seminars etc).</p> <p>c) A list will be made and will be constantly updated and shared with other colleagues.</p> <p>d) The pool will be responsible to train the staff on the list of tools/ technologies every beginning of the school year.</p>			Recruite staff based on abilities and interest	The pool of trainers will monitor the progress via visits in the classes or students' surveys.

# Good Practices

- <https://www.socrative.com/> (quizzes, multiple choices, short questions)
- <https://www.mentimeter.com/solutions/education> (polls, surveys, word clouds, open-ended questions, quizzes and tests for engaging students)
- <https://kahoot.com/> (game-based assessment tool. Teachers can choose from more than 40 million ready-to-go learning games or create their own in minutes).
- <https://get.plickers.com/>
- <http://photodentro.edu.gr/aggregator/>
- Education Hub proposes some tools, which may be useful for self-assessment, such as rubrics, journals, e-portfolios (The Education Hub, n.d.).

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