

Supporting the development of digital Pedagogy and capacity of educational institutions-complementarities between national projects/actions and Erasmus+

Introduction

This background paper provides some high-level context for the twin concepts of digital capacity and digital pedagogy. It is intended to support the DELTA WG by introducing some current thinking on these concepts in advance of the forthcoming plenary meeting in Brussels on March 1st and 2nd, 2023. The paper is organised around the two key questions the plenary event will consider:

1. What do we mean by digital capacity of an organisation and how can educational institutions be supported in developing it?
2. How do we understand Digital pedagogy and how do we support our teachers and students develop it?

1. What do we mean by digital capacity of an organisation and how can educational institutions be supported in developing it?

The term 'digital capacity' is closely related to the concept of 'digital maturity' though the later term does have a greater focus on the idea that organisations might develop through a series of stages as they mature, as distinct from the, perhaps, rather more static implications of the term 'digital capacity'.

Both concepts have their origins in the world of business, where they are typically associated with the notion of digital transformation, when technologies are used to *"innovate and orchestrate digitally enabled business transformation"*¹. The term has also been widely used in higher education and VET contexts where it has *"evolved in the direction of organisational transformation and towards embedding digital experiences in all facets of academic work and students' engagement with a wide range of administrative and learning support services (p.29)"*². Many organisations have developed frameworks to assist them review their digital capacity across a range of areas that typically include³ the following:

- Organisational digital culture
- Content and information
- Research and innovation
- Communication
- Learning, teaching and assessment.
- ICT infrastructure

In 2015 the European Commission noted that there was a range of digital capacity frameworks and self-assessment tools in use by educational organisations and they developed a pan-European

¹ For example, see this blog on digital capacity in business, <https://robllewellyn.com/what-is-the-digital-capability-framework/>

² <https://hub.teachingandlearning.ie/resource/building-digital-capacity-in-irish-higher-education-2013-18/>

³ Developing digital capability: an organisational framework, <https://digitalcapability.jisc.ac.uk/what-is-digital-capability/organisational-digital-capability/>

approach to digital capacity with the production of the DigCompOrg Framework⁴. At the time it was described as a “European reference framework that adopts a systemic approach [that] can add value by promoting transparency, comparability and peer-learning”. The framework consists of seven key elements and fifteen sub-elements, which are translated into 74 descriptors (as captured in Figure 1 below).

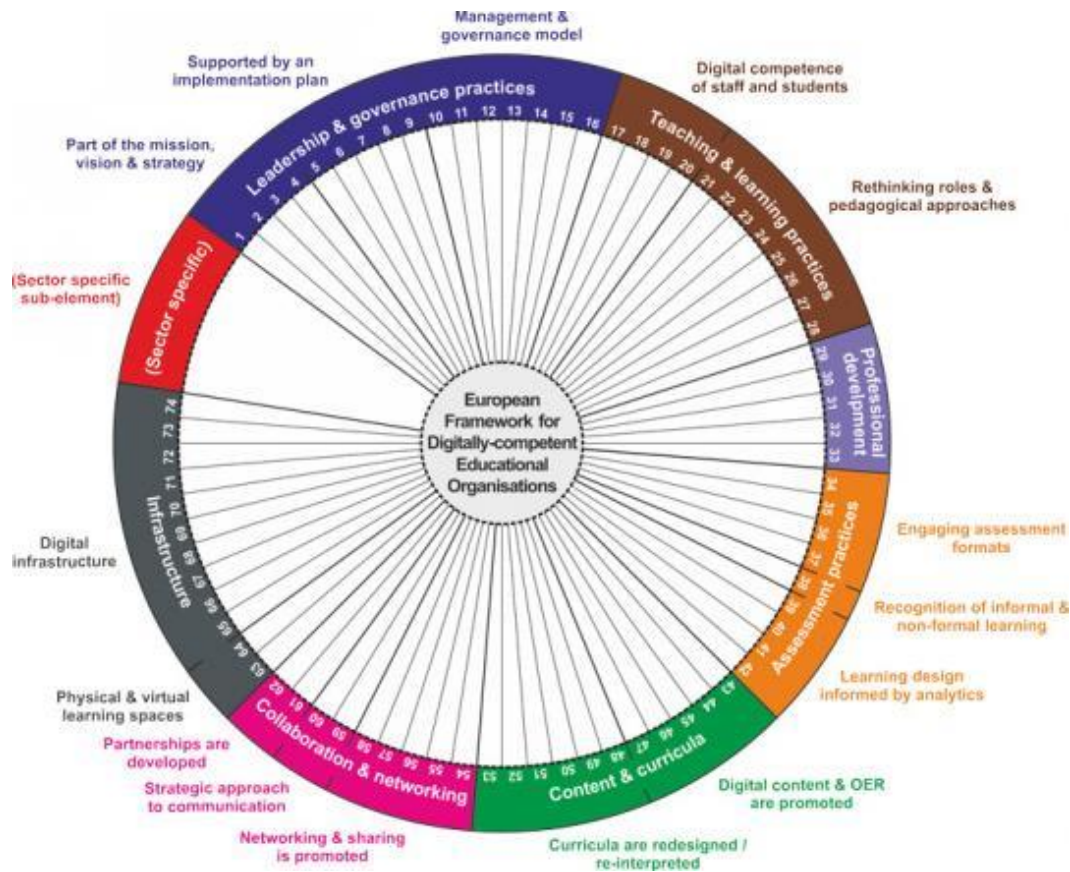


Figure 1, DigCompOrg Framework

While DigCompOrg was envisioned for use across all education and training sectors, it has been predominantly used in the schools sector. Subsequently the European Commission developed the **SELFIE**, which is based on DigCompOrg, to help schools assess where they are in relation to each of the seven key areas⁵. SELFIE is designed to help schools take a snap shot of their digital capacity and identify areas they wish to further develop in the future. The initial SELFIE tool has been adapted for other audiences, including Vocational Education and Training (VET) schools and companies, to help them assess their digital capacities and to plan their digital transformation. SELFIE was later expanded with a module on blended learning. More recently the Commission has developed the SELFIE for Teachers tool⁶, aimed to help teachers reflect on how they are using digital technologies in their professional practice. Teachers can use the tool to learn more about the digital skills they have and identify areas where they can develop further.

⁴ [Promoting effective digital-age learning - Publications Office of the EU \(europa.eu\) - https://op.europa.eu/en/publication-detail/-/publication/f2fb1b15-a2f8-11e5-b528-01aa75ed71a1](https://op.europa.eu/en/publication-detail/-/publication/f2fb1b15-a2f8-11e5-b528-01aa75ed71a1)

⁵ <https://education.ec.europa.eu/selfie/selfie-for-work-based-learning>

⁶ <https://education.ec.europa.eu/selfie-for-teachers>

A number of member states have taken the DigCompOrg Framework and adapted it for their context. For example, Croatia has developed the e-Schools programme⁷, which includes a Framework for the Digital Maturity of Schools. The Ministry described digitally mature schools as schools that have achieved a high level of ICT integration across a number of domains, which are shown in Figure 2.

	Digitally unaware	Digital beginners	Digitally competent	Digitally advanced	Digitally mature
Leadership, planning and management					
ICT in learning and teaching					
Development of digital competences					
ICT culture					
ICT infrastructure					

Figure 2, Croatia Digital Maturity of Schools Framework

The framework has five areas, in comparison to the seven in DigCompOrg, and it identifies five levels of maturity for each one, ranging from Digitally Unaware to Digitally Mature. The documentation notes that, *“in order for a school to be certain of its level of digital maturity, a prescribed evaluation procedure in accordance with the Framework for the Digital Maturity of Schools needs to be performed”*⁸.

A recent study in the UK, entitled ‘Education technology: exploring digital maturity in schools’⁹, identified three pillars of digital maturity (p. 13):

- **Technology:** Connectivity, infrastructure (internal networking and Wi-Fi), cloud readiness, hardware (including devices), and software.
- **Capability:** Staff training, suitability of technology, staff confidence in using technology, and access to ICT expertise.
- **Strategy:** Strategic planning, investment in technology, and change management

⁷ <https://pilot.e-skole.hr/en/results/digital-maturity-of-schools/>

⁸ <https://pilot.e-skole.hr/en/results/digital-maturity-of-schools/>

⁹ https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1061797/Exploring_digital_maturity_in_schools.pdf

It found that “digitally mature schools were more likely to say they had a formal technology strategy in place with a focus on improving pupil outcomes and the meaningful use of technology in the classroom” (p. 9)¹⁰.

The report noted that UK schools showed much lower levels of digital maturity in relation to the pillar ‘strategy’ than to the other two pillars. The study attempted to find evidence of a relationship between digital maturity of schools and students’ attainment scores but found little evidence for this relationship.

Some emerging trends

There are currently a number of frameworks and tools that educational and training organisations can use to assess their digital capacity. These range from pan-European frameworks and tools, such as DigCompOrg and SELFIE, to frameworks that have been developed for local contexts, such as those in Croatia and Estonia¹¹. It should be noted that there are a growing number of such localised approaches, where member states have developed their own frameworks, which are **often informed by the DigCompOrg Framework**.

The SELFIE tool has been widely used across the EU and beyond. There have been a number of studies and projects which have considered the impact of the use of SELFIE on educational organisations and on teacher digital competences (for examples see Appendix 1). SELFIE was designed for use as a self-reflection tool by organisations where they gather data on various aspects of their digital capacity, and that is how it was used in these studies. The use of tools, such as SELFIE, allows organisations to take a holistic approach to enhancing their digital capacity by gathering data and then identifying their priorities for action, in the form of action plans^{12 13}.

Leadership is a key element in developing the digital capacity of an organisation¹⁴ and a number of Erasmus+ projects focused on how to strengthen organisational leadership so that schools are equipped to deal with the challenges of the 21st century. Leadership teams should play a key role in leading change within their organisations and in ensuring that their colleagues and key stakeholders are actively involved in the process. Attaining digital capacity has often been likened to a journey¹⁵ and it is important that leaders create an inclusive process that enables an organisation to grow and change using digital technologies.

There is evidence¹⁶ that some organisations struggle to plan effectively for digital change. Enhancing the digital capacity of an organisation requires planning and it requires organisations to engaging in cyclical planning processes (see Figure 3 below), where data is collected, actions are defined, activated and reflected upon. Such planning cycles are common in all areas of education (for example whole

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https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1061797/Exploring_digital_maturity_in_schools.pdf

¹¹ <https://www.slideshare.net/martlaa/digital-mirror-measuring-the-digital-innovation-maturity-in-estonian-schools>

¹² https://ec.europa.eu/programmes/erasmus-plus/project-result-content/34a97d8a-a6aa-4df1-93ef-fbe8625c6cb9/LearningPath_Project_Review_and_Best_Practices.pdf

¹³ [Scaling up and integrating the SELFIE tool for schools’ digital capacity in education and training systems | ETF \(europa.eu\)](https://www.erasmus-plus.eu/en/Scaling_up_and_integrating_the_SELFIE_tool_for_schools_digital_capacity_in_education_and_training_systems_|_ETF_(europa.eu))

¹⁴ <https://erasmus-plus.ec.europa.eu/projects/search/details/2020-1-DE03-KA101-076575>

¹⁵ <https://www.microsoft.com/en-gb/education/ldte>

¹⁶ [Digital Schools Awards European Programme | Build Digital Schools & Education in Europe \(awards4selfie.eu\)](https://www.erasmus-plus.eu/en/Digital_Schools_Awards_European_Programme_|_Build_Digital_Schools_&_Education_in_Europe_(awards4selfie.eu))

school evaluation approaches¹⁷). Therefore, organisations need to gather data on aspects of their digital capacity and then design action plans to enhance their current practices. Organisations typically focus on selected elements of their digital capacity at any one time, so that they take a holistic approach to enhancing the practices of their organisation over time.

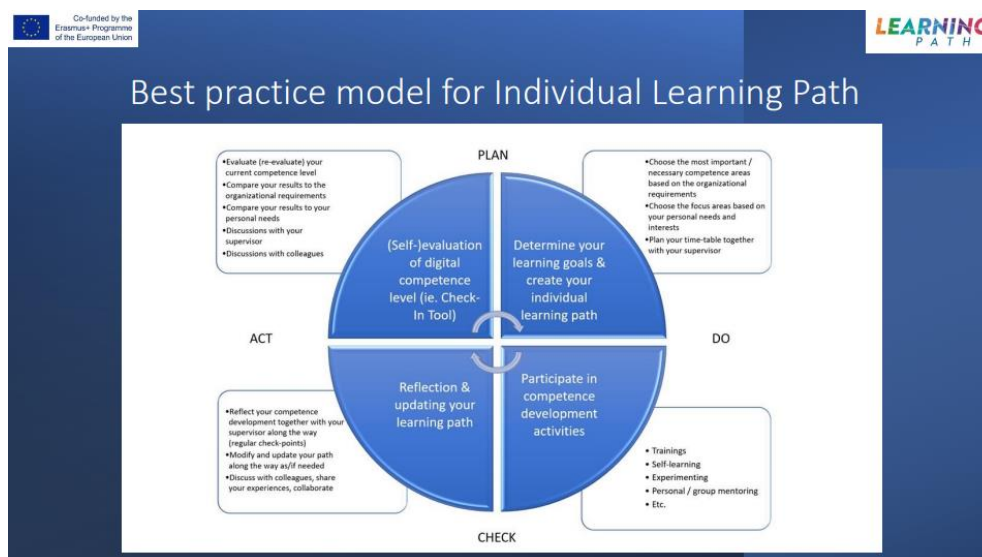


Figure 3, Planning Process from the Learning Path Project

In advance of the plenary meeting once again consider:

- What are the most important elements to keep in mind when trying to develop digital capacity of educational institutions?
- What, based on your experience/research, are the greatest challenges of this process?

When we think of the digital capacity of an organisation we also need to consider their capacity to enact pedagogical approaches that use digital technology, and we explore this concept of digital pedagogy below.

¹⁷ https://www.educatetogether.ie/wordpress/wp-content/uploads/2010/02/a_guide_to_whole_school_evaluation_in_primary_schools.pdf

2. How do we understand Digital pedagogy and how do we support our teachers and students develop it?

What is 'digital pedagogy'?

This section presents some accounts of 'digital pedagogy' and sets these in the wider context of accounts of digital education.

Digital Competence Framework for Teachers - DigCompEdu¹⁸

DigCompEdu does not use the specific term 'digital pedagogy', rather it talks in terms of using technology to support learning, teaching and assessment, identifying six areas, as shown in Figure 4.

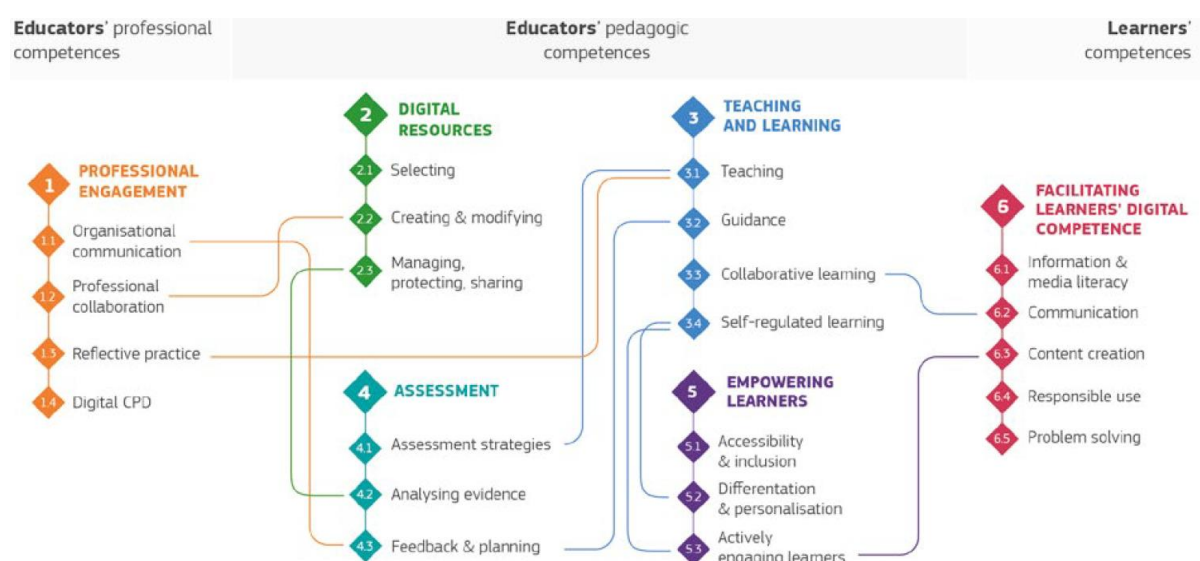


Figure 4: DigCompEdu

¹⁸ [DigCompEdu \(europa.eu\) - https://joint-research-centre.ec.europa.eu/digcompedu_en](https://joint-research-centre.ec.europa.eu/digcompedu_en)

Each of these six areas is then described in more detail, as an example the description of the four competences of ‘Teaching and Learning’ is shown in Figure 5 below.



Figure 5: Teaching and Learning

DigCompEdu describes educators’ proficiency levels for each competence, as an example see Figure 6 below, which shows the proficiency statements for the Competence ‘Teaching’.

Progression		Proficiency statements
Newcomer	Making little use of digital technologies for instruction.	I do not or only very rarely use digital devices or digital content in my teaching.
Explorer	Making basic use of available digital technologies for instruction	I use available classroom technologies, e.g., digital whiteboards, projectors, PCs. I choose digital technologies according to the learning objective and context.
Integrator	Integrating available digital technologies meaningfully into the teaching process.	I organise and manage the integration of digital devices (e.g. classroom technologies, students’ devices) into the teaching and learning process. I manage the integration of digital content, e.g., videos, interactive activities, into the teaching and learning process.
Expert	Using digital technologies purposefully to enhance pedagogic strategies .	I consider appropriate social settings and interaction modes when integrating digital technologies. I use digital technologies in teaching to increase methodological variation. I set up learning sessions or other interactions in a digital environment.
Leader	Orchestrating, monitoring and flexibly adapting the use of digital technologies to enhance pedagogic strategies.	I structure learning sessions so that different (teacher-led and learner-led) digital activities jointly re-inforce the learning objective. I structure and manage content, contributions and interaction in a digital environment. I continuously evaluate the effectiveness of digitally enhanced teaching strategies and revise my strategies accordingly.

Pioneer	Using digital technologies to innovate teaching strategies.	I provide full courses or learning modules in a digital learning environment. I experiment with and develop new formats and pedagogical methods for instruction.
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Figure 6: Proficiency statements for 'Teaching'

Other descriptions of 'digital pedagogy'

The literature on digital education tends to use the word 'digital pedagogy' to describe a significant change in pedagogy, going beyond simply substituting existing tools with digital tools. Some examples taken from a couple of recent Erasmus+ projects are given below:

- "Digital pedagogy is not only about using a Power Point Presentation, a video or a serious game in a teaching situation but also about reflecting on how the lecture form itself should and could evolve thanks to the new digital component. This is where the teacher, being responsible of elaborating a teaching strategy, plays a key role."¹⁹
- "The challenge being to shift from a vertical education model where the teacher/trainer delivers knowledge to the students to a more horizontal one where he/she acts rather as a "facilitator" allowing every student to learn at their own pace, using a combination of different methods and scalable tools"²⁰
- "New 'Digital Pedagogies' have emerged which have shifted the focus of teaching away from face-to-face physical (analog) interaction, and towards an online, interactive, constructionist pedagogy, which can be led by the student, as much as the teacher. Digital pedagogy is not only about technology, but it is about the way we want to teach, and the way students want to learn, being facilitated by technology."²¹

Contextualizing the variety of descriptions of digital pedagogy

There are two commonly used frameworks that may help to put this range of views into perspective. Firstly, the **SAMR model**^{22 23} (shown in Figure 7) which presents some possible approaches to implementing digital technology in teaching and learning, starting with '**Substitution**' where digital tools simply replace other tools with no other change in the pedagogy, up to '**Redefinition**' where digital tools are used to support tasks that would not otherwise have been possible. It may be useful to note the correspondences between some of the descriptions of the proficiency levels of DigCompEdu with the SAMR levels. Some of the simpler levels of use described in DigCompEdu are at the 'Substitution level', whereas other descriptions in DigCompEdu point to **Augmentation, Modification and Redefinition** (where DigCompEdu uses the term 'innovate').

Secondly, the **TPACK model**²⁴ (shown in Figure 8) presents an approach to thinking about the relationship between technology use and pedagogy through identifying the areas of Content Knowledge, Pedagogical Knowledge and Technological Knowledge, and their possible relationships.

¹⁹ [Digitalpedagogycookbook | A KA2 Erasmus+ project for Adult Educators](#)

²⁰ [Digitalpedagogycookbook | A KA2 Erasmus+ project for Adult Educators](#)

²¹ <https://erasmus-plus.ec.europa.eu/projects/search/details/2021-1-BE02-KA220-HED-000032196>

²² Hamilton, E.R., Rosenberg, J.M. & Akcaoglu, M. The Substitution Augmentation Modification Redefinition (SAMR) Model: A Critical Review and Suggestions for its Use. *TechTrends* 60, 433–441 (2016). <https://doi.org/10.1007/s11528-016-0091-y>

²³ [How the SAMR learning model can help build a post-COVID digital strategy | Jisc](#)

²⁴ Mishra, P., & Koehler, M. J. (2006). Technological pedagogical content knowledge: A framework for integrating technology in teachers' knowledge. *Teachers College Record*, 108 (6), 1017–1054

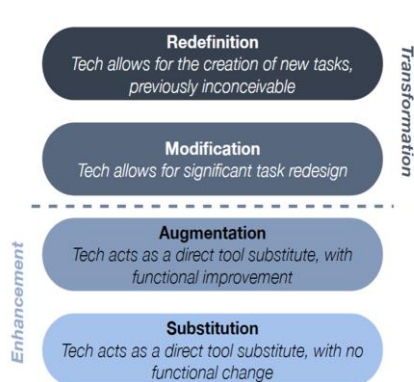


Figure 7: SAMR model

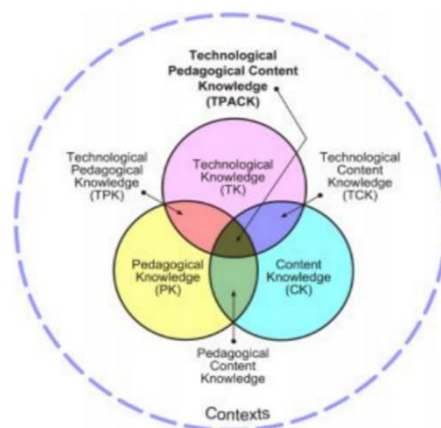


Figure 8: TPACK framework (image ©2012 by tpck.org)

Whilst both frameworks have been widely used in discussions of digital pedagogy, neither throw much light on the details of bringing about **pedagogic change**. Possibly more useful approaches to this issue are found in work discussing ‘teaching as design’, one particular example of which is the **Activity Centred Analysis and Design (ACAD)**^{25 26} approach shown in Figure 9. This puts a consideration of ‘student learning activity’ at the centre and examines the elements which make up the pedagogic design of these activities, thus providing a basis for a more flexible view of the potential role of technology, and for reflection on the value (or not) of specific pedagogic changes. The four elements in the ACAD approach are:

1. Intended learning outcomes (subject content, and might include digital competences, critical understanding, social skills etc.)
2. Social design (individual and group work, both in class, and via online networking)
3. Set design (physical locations, but also online, blended and hybrid spaces)
4. Epistemic design (tasks – inherited or newly designed - incorporating new forms of knowledge generated by digital technology and new kinds of tasks enabled by use of technology).

²⁵ [ACAD: Activity-Centred Analysis and Design – Peter Goodyear - https://petergoodyear.net/2021/08/13/acad-activity-centred-analysis-and-design/](https://petergoodyear.net/2021/08/13/acad-activity-centred-analysis-and-design/)

²⁶ Another widely used design approach is one based on Diana Laurillard’s Conversational Framework, which formed the basis for this Erasmus+ project: [ABC Learning Design – Sprint design your courses and programs in just 90 minutes \(abc-ld.org\) - https://abc-ld.org/](https://abc-ld.org/)

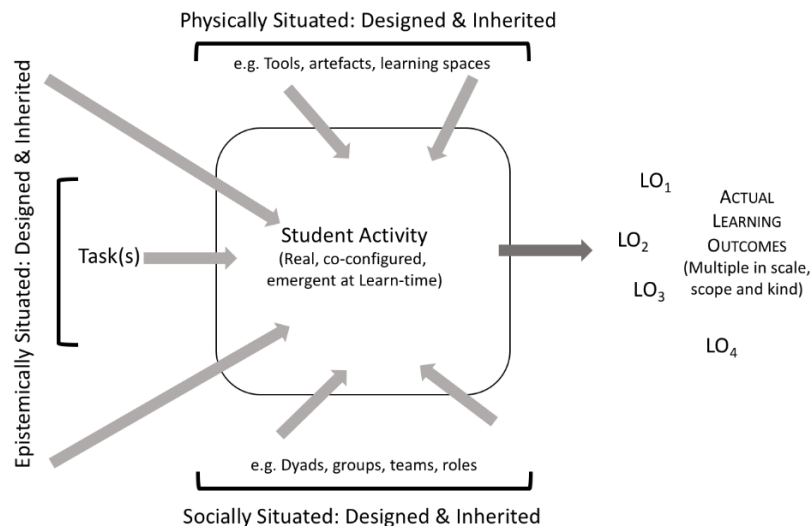


Figure 9: Activity Centred Analysis and Design

In such a view of digital pedagogy, the use of digital technology is not seen as a requirement, rather the **digital is seen as extending the range of choices which need to be considered.**

In defining their own approach to digital pedagogy, a teacher or an organisation needs to examine the goals that they wish to achieve, and how far they wish to go in modifying their pedagogical approaches. The ACAD approach can provide a structure for clarifying those choices.

How can teachers be supported in developing digital pedagogy?

In this section we discuss some of the existing approaches to supporting teachers in developing digital pedagogy, starting with the account of Professional Communication set out in DigCompEdu and then by looking at some examples from Erasmus+ projects.

DigCompEdu

DigCompEdu describes three elements of teacher development under the competence ‘Professional communication’:

- Professional engagement - To use digital technologies to engage in collaboration with other educators, sharing and exchanging knowledge and experience, and collaboratively innovating pedagogic practices.
- Reflective practice - To individually and collectively reflect on, critically assess and actively develop one’s own digital pedagogical practice and that of one’s educational community.
- Digital Continuous Professional Development (CPD) - To use digital sources and resources for continuous professional development.

Erasmus+ initiatives

Below are just a few of the range of approaches to supporting teachers in developing digital pedagogy explored by recent Erasmus+ projects:

- Digital Pedagogy Cookbook²⁷ - a toolkit for educators, designed around a recipe metaphor: “The use of a cooking and recipe metaphor is designed to ensure better understanding of the project,

²⁷ [Digitalpedagogycookbook | A KA2 Erasmus+ project for Adult Educators](#)

by giving a practical step by step guide to follow to create the result required. This will be a comprehensive and, above all, a practice-driven guide. In addition, it is intended to empower and support educators to strengthen their performance through the development of an online community where educators can effectively access, share and create knowledge, as well as strengthen their commitment to the profession”.

- Upskilling Digital Pedagogy for Teachers and Future Teachers²⁸ - is producing a “Scenario-based Digital Pedagogy Teacher Guide for Learning/Teaching Practices”.
- RemixED - a team-based learning design approach to continuing professional development for teachers, in which the teachers practice documenting learning activities, improving them with peers, and sharing them with the educational community.
- Digital Schools Awards European Programme²⁹ - this uses teacher self-reflection using SELFIE coupled with interactions with external ‘critical friends’ to help teachers develop digital education practices. The evaluation report for this project highlights several aspects which were seen as needing further development:
 - Further research is needed to better understand the needs of participating teachers and schools based on their current level of digital education practices.
 - Greater opportunities are needed for schools to collaborate with other schools and organisations to share evidence of best practices.
 - Whilst there was significant improvement in digital competences, there continued to be a clear requirement for increased support for teachers’ professional development in this area.
 - Training should be developed for those in the role of ‘critical friends’ to schools, to equip them with effective strategies for support.

Another initiative relevant to the use of SELFIE is the SELFIE for TEACHERS expert network³⁰– which is exploring the use of SELFIE for TEACHERS as a support for teacher development in digital pedagogy, through implementing a number of use cases, which will take into consideration factors such as user experience, school infrastructure, institutional support, school leadership, user characteristics, teacher motivation, data management, digital credentials and collaborative learning.

Common themes

Whilst the previous list of projects illustrates a wide range of approaches, there are a number of themes which are common across a range of initiatives - **development of teacher communities, collaboration and exchange of approaches, learning design (teaching as design), reflective practice, and open sharing of designs, approaches, and use cases.** The role of SELFIE and SELFIE for TEACHERS in supporting teacher development is being widely explored.

Many of these approaches promote self-reflection and encourage teachers using the collected data to engage in professional conversations around their practice. Teachers **will need to have opportunities to develop their digital pedagogy**, so they can engage in using digital technologies to innovate teaching strategies and there is still much to learn around how best to achieve this.

²⁸ <https://erasmus-plus.ec.europa.eu/projects/search/details/2021-1-BE02-KA220-HED-000032196>

²⁹ [Digital Schools Awards European Programme | Build Digital Schools & Education in Europe \(awards4selfie.eu\)](#)

³⁰ [Launch of the SELFIE for TEACHERS expert network | European Education Area \(europa.eu\)](#)

In advance of the plenary meeting once again consider:

- How do we understand Digital pedagogy and how do we support our teachers and students develop it?

Appendix 1: Examples of related Erasmus+ projects

Digital Capacity		
	Name, link, Key Action/Action Type	Objectives
1	<p>Digital Capacity Building in a post COVID-19 Era. - https://erasmus-plus.ec.europa.eu/projects/search/details/2021-1-DK01-KA220-VET-000028080</p> <p>Key Action: Partnerships for cooperation and exchanges of practices</p> <p>Action Type: Cooperation partnerships in vocational education and training</p>	<p>“The main objective of the project is to collect the experiences from digital distance learning and thereby build capacity for digital readiness among teachers and students in the VET sector in Europe. Furthermore, the project wants to address key issues which all VET schools has to consider when moving forward with digital distance learning. These issues could lead the way for more innovative practices and a digital transformation for the VET sector.”</p>
2	<p>Digitalized Learning Path for Educational Organizations - https://erasmus-plus.ec.europa.eu/projects/search/details/2018-1-FI01-KA202-047312</p> <p>Key Action: Cooperation for innovation and the exchange of good practices</p> <p>Action Type: Strategic Partnerships for vocational education and training</p>	<p>“The Organizational Learning Path focused on organizational strategies, “road maps”, and each project partner developed their own organizational road map. The road maps focused on enhancing the organization’s digital capacity and defining focus areas and competence levels for teachers’ digital competence development and CPD activities. Partners tested various CPD activities and based on the experiments created/updated their strategies.”</p>
3	<p>Embedding and Empowering SELFIE WBL Culture -https://erasmus-plus.ec.europa.eu/projects/search/details/2021-1-FR01-KA220-VET-000037798</p> <p>Key Action: Partnerships for cooperation and exchanges of practices</p> <p>Action Type: Cooperation partnerships in vocational education and training</p>	<p>“The objectives of the SELFIE WBL Follow Up project are:</p> <ul style="list-style-type: none"> - For the VET schools to understand fully the results received through the SELFIE WBL institutional report. - Use these results to effectively address the actions for digital transformation. - Build the capacity for digital transformation of their VET school. - To use SELFIE WBL to strengthen the ecosystem and cooperation with companies and other stakeholders which will contribute to better professional and digital skills and competencies of all stakeholders (especially students). - For VET schools to use the SELFIE WBL tool on regular basis and follow their achievements towards their digital transformation. - Prepare guidelines with recommendations and good practices for all other users of the SELFIE WBL tool to make the use of their report easier. - Propose the project result SELFIE WBL supporting toolkit as supporting materials to JRC.”
4	<p>Digital leadership - Strengthening school governance in the face of digital challenges in the 21st century - https://erasmus-plus.ec.europa.eu/projects/search/details/2020-1-DE03-KA101-076575</p> <p>Key Action: Learning Mobility of Individuals</p> <p>Action Type: School education staff mobility</p>	<p>“The goals of this collaboration are laid out on several levels. The school management should be strengthened in its leadership skills and in its media skills in order to prepare for important decisions in school development processes and equipment decisions. First of all, there is the control of school development processes in the context of digital change. The school management should be strengthened, in cooperation with their respective colleges, with a view to the specific requirements of their pupils and in accordance with the general conditions of their school location, to initiate, accompany and lead to suitable school development processes in the field of digital learning. Equipment decisions should be competent and according to the current status of developments.”</p>
5	<p>Supporting School leaders to build a digital transformation strategy - https://erasmus-plus.ec.europa.eu/projects/search/details/2021-1-BG01-KA220-SCH-000032711</p>	<p>“- Support School leaders and staff to develop a digital strategy</p> <ul style="list-style-type: none"> - Develop school leadership teams competencies for leveraging free digital tools and resources for school improvement. - Develop a practical toolkit aligned with the DigCompEdu, with practical, step-by-step guides on how to design and deploy a strategy. - Adapt and use the SELFIE and TET-SAT tools to support the digital strategy development. - Develop the digital skills of school leadership teams and teachers.”

<p>Key Action: Partnerships for cooperation and exchanges of practices</p> <p>Action Type: Cooperation partnerships in school education</p>	
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Digital Pedagogy		
	Name, link, Key Action/Action Type	Objectives
6	<p>RemixED - Innovating Teacher Professional Development with Team-based Learning Design - https://erasmus-plus.ec.europa.eu/projects/search/details/2021-1-ES01-KA220-SCH-000032801</p> <p>Key Action: Partnerships for cooperation and exchanges of practices</p> <p>Action Type: Cooperation partnerships in school education</p>	<p>“the project aims to support their professional development and introduce an approach and technology that can:</p> <ul style="list-style-type: none"> • Increase sense of initiative by empowering teachers to collaboratively identify and address problems; • Increase sense of motivation, and satisfaction in daily work by increasing collaborative opportunities and peer-support available; • Increase opportunities for professional development with ongoing teamwork. • Increase levels of digital competence with practice of redesigning digital lesson materials; • Improve understanding and responsiveness to diversity with guidance on designing inclusive materials”
7	<p>Teachers go digital. Digital skills, technologies and pedagogies for teaching and learning in schools - https://erasmus-plus.ec.europa.eu/projects/search/details/2021-1-BG01-KA220-SCH-000029974</p> <p>Key Action: Partnerships for cooperation and exchanges of practices</p> <p>Action Type: Cooperation partnerships in school education</p>	<p>“ the main objective of DIGITEACH project that is to deploy digital tools and methods to deliver quality and inclusive education and support school teachers / educators in delivering online classes by promoting the use of open, technological and innovative educational resources.</p> <p>DIGITEACH is not focused just on exploring “new technological tools”, but in developing Knowledge Building environments (KBE) in general that enhance collaborative efforts to create and continually improve ideas. Inspiring on the Engaging Learning Environment (ELE) model of designing new learning environments, DIGITEACH thinks of learning as an iterative and cyclical process made up by different phases including diagnosing of contexts and current knowledge, going through and facilitating various inquiries in which new knowledge and understanding is produced, and assessing learning gains and knowledge as an integral part of learning.”</p>
8	<p>Upskilling Digital Pedagogy for Teachers and Future Teachers - https://erasmus-plus.ec.europa.eu/projects/search/details/2021-1-BE02-KA220-HED-000032196</p> <p>Key Action: Partnerships for cooperation and exchanges of practices</p> <p>Action Type: Cooperation partnerships in higher education</p>	<p>“... the objectives of this project are as follows.</p> <ol style="list-style-type: none"> 1- Enhancing capacity building of prospective students in the departments of education and enabling them to excel in learning and teaching competencies. 2- Promoting digital pedagogy for better cognitive and implementation skills of students in departments of education. 3- Investing in innovative approaches as teaching methodologies and techniques and contributing to the development of learning outcomes.”
9	<p>Digital Skills and Methods for Distance and Hybrid Learning - https://erasmus-plus.ec.europa.eu/projects/search/details/2021-1-FI01-KA210-VET-000034566</p> <p>Key Action: Partnerships for cooperation and exchanges of practices</p> <p>Action Type: Small-scale partnerships in vocational education and training</p>	<p>“The level of online and distance teaching in participating organisations will be increased by giving the teachers knowledge and tools to design collaborative and creative digital learning solutions. Students' online and distance learning will be more versatile and collaborating, they will have more active role in their online and distance studies, they will interact, learn and work together in ways they haven't been able to do in the past.”</p>
10	<p>Making Technology Meaningful Through Digital Pedagogy - https://erasmus-plus.ec.europa.eu/projects/search/details/2018-1-EE01-KA203-047126</p> <p>Key Action: Cooperation for innovation and the exchange of good practices</p> <p>Action Type: Strategic Partnerships for higher education</p>	<p>“The aim of the project "Making Technology Meaningful" was to develop lesson plans and guidelines for supporting the meaningful use of digital technologies in schools. By the end of the project, we were able to deliver a complete set of innovative digital practices combining digital competences with subject-related competences to form a meaningful and lasting digital pedagogy.”</p>

11	Awards4Selfie - Digital Schools Awards European Programme Build Digital Schools & Education in Europe https://erasmus-plus.ec.europa.eu/projects/search/details/612888-EPP-1-2019-1-IE-EPPKA3-PI-FORWARD Key Action: Support for policy reform Action Type: Forward looking cooperation projects	“The Digital Schools Awards European programme is focused on strengthening the professional profile of teachers by developing resources and learning experiences that are relevant and focused on enhancing digital education practices. Schools and teachers who participate in the programme will have their practices acknowledged and will join a growing community of digital schools in Europe.”
12	Digital Pedagogy Cookbook - https://erasmus-plus.ec.europa.eu/projects/search/details/2018-1-EL01-KA204-047775 Key Action: Cooperation for innovation and the exchange of good practices Action Type: Strategic Partnerships for adult education	“ To provide all the theoretical and practical information needed by educators in order to understand digital pedagogy, improve their digital competences, create, evaluate and share their own digital recipes according to the European Digital Competence Frameworks for Citizens and for Educators. - To promote the use of cooking/recipe metaphor for digital pedagogy by providing comprehensive and - above all - a practice driven guide. - To empower and support educators to strengthen their performance through the development of an online community of practice where educators can effectively access, share, and create knowledge, as well as strengthen their commitment to the profession. -To support informal learning and professional development for educators.”
13	PLayful Environment for Inclusive leArning Design in Europe - https://erasmus-plus.ec.europa.eu/projects/search/details/2020-1-IT02-KA201-080089 Key Action: Cooperation for innovation and the exchange of good practices Action Type: Strategic Partnerships for school education	“PLEIADE supports the efforts of European teachers to systematically integrate inclusive practices in their teaching. It does this by helping them to work together on the design, implementation and sharing of inclusion-oriented learning activity plans. These plans centre on carefully orchestrated learner collaboration, a widely recognized approach not just for strengthening acquisition of curriculum contents but also for supporting inclusive classroom dynamics and attitudes.”

Digital Pedagogy		
	Name and link	Objectives
6	RemixED - Innovating Teacher Professional Development with Team-based Learning Design - https://erasmus-plus.ec.europa.eu/projects/search/details/2021-1-ES01-KA220-SCH-000032801	<p>"The project aims to support their professional development and introduce an approach and technology that can:</p> <ul style="list-style-type: none"> • Increase sense of initiative by empowering teachers to collaboratively identify and address problems; • Increase sense of motivation, and satisfaction in daily work by increasing collaborative opportunities and peer-support available; • Increase opportunities for professional development with ongoing teamwork. • Increase levels of digital competence with practice of redesigning digital lesson materials. • Improve understanding and responsiveness to diversity with guidance on designing inclusive materials"
7	Teachers go digital. Digital skills, technologies and pedagogies for teaching and learning in schools - https://erasmus-plus.ec.europa.eu/projects/search/details/2021-1-BG01-KA220-SCH-000029974	<p>" the main objective of DIGITEACH project that is to deploy digital tools and methods to deliver quality and inclusive education and support school teachers / educators in delivering online classes by promoting the use of open, technological and innovative educational resources.</p> <p>DIGITEACH is not focused just on exploring "new technological tools", but in developing Knowledge Building environments (KBE) in general that enhance collaborative efforts to create and continually improve ideas. Inspiring on the Engaging Learning Environment (ELE) model of designing new learning environments, DIGITEACH thinks of learning as an iterative and cyclical process made up by different phases including diagnosing of contexts and current knowledge, going through and facilitating various inquiries in which new knowledge and understanding is produced, and assessing learning gains and knowledge as an integral part of learning."</p>
8	Upskilling Digital Pedagogy for Teachers and Future Teachers - https://erasmus-plus.ec.europa.eu/projects/search/details/2021-1-BE02-KA220-HED-000032196	<p>" ... the objectives of this project are as follows.</p> <ol style="list-style-type: none"> 1- Enhancing capacity building of prospective students in the departments of education and enabling them to excel in learning and teaching competencies. 2- Promoting digital pedagogy for better cognitive and implementation skills of students in departments of education. 3- Investing in innovative approaches as teaching methodologies and techniques and contributing to the development of learning outcomes."
9	Digital Skills and Methods for Distance and Hybrid Learning - https://erasmus-plus.ec.europa.eu/projects/search/details/2021-1-FI01-KA210-VET-000034566	<p>"The level of online and distance teaching in participating organisations will be increased by giving the teachers knowledge and tools to design collaborative and creative digital learning solutions. Students' online and distance learning will be more versatile and collaborating, they will have more active role in their online and distance studies, they will interact, learn and work together in ways they haven't been able to do in the past."</p>
10	Making Technology Meaningful Through Digital Pedagogy - https://erasmus-plus.ec.europa.eu/projects/search/details/2018-1-EE01-KA203-047126	<p>"The aim of the project "Making Technology Meaningful" was to develop lesson plans and guidelines for supporting the meaningful use of digital technologies in schools. By the end of the project, we were able to deliver a complete set of innovative digital practices combining digital competences with subject-related competences to form a meaningful and lasting digital pedagogy."</p>
11	Awards4Selfie - Digital Schools Awards European Programme Build Digital Schools & Education in Europe https://awards4selfie.eu/	<p>"The Digital Schools Awards European programme is focused on strengthening the professional profile of teachers by developing resources and learning experiences that are relevant and focused on enhancing digital education practices. Schools and teachers who participate in the programme will have their practices acknowledged and will join a growing community of digital schools in Europe."</p>
12	Digital Pedagogy Cookbook - https://erasmus-plus.ec.europa.eu/projects/search/details/2018-1-EL01-KA204-047775	<p>" To provide all the theoretical and practical information needed by educators in order to understand digital pedagogy, improve their digital competences, create, evaluate and share their own digital recipes according to the European Digital Competence Frameworks for Citizens and for Educators.</p> <ul style="list-style-type: none"> - To promote the use of cooking/recipe metaphor for digital pedagogy by providing comprehensive and - above all - a practice driven guide. - To empower and support educators to strengthen their performance through the development of an online community of practice where educators can effectively access, share, and create knowledge, as well as strengthen their commitment to the profession. -To support informal learning and professional development for educators."
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