Ecoistituto

Fundacja Instytut Badań i Innowacji w Edukacji

ESTAL
Empowering the Society Through Adult Learning

LEARNING MANUAL

KEY COMPETENCES FOR ADULT EDUCATION PROFESSIONALS SUMMARY

ESTAL: Empowering the Society through Adult Learning (inbie.pl)

Premise

PThis learning unit has been realized within the Erasmus + project "Empowering the Society through Adult Learning".

The learning unit is for educators involved in adult education and focuses on the key competencies needed in adult teaching.

The notion of Andragogy is illustrated, and the basic principles of adult learning are highlighted. Then adult learning strategies and methodologies are presented.

Finally, the key competencies of an adult educator are discussed.

Considering the increasing importance of remote teaching-learning due to the COVID-19 pandemic, a literature review on remote teaching-learning has been included.

Andragogy

Developed by Malcolm S. Knowles in 1968, andragogy is described by its creator as the art and science of helping adults to learn. The four principles of the andragogic approach are:

1. Adults learn better from experience (even if they make mistakes).
2. Adults favor a pragmatic approach and must be able to apply learning to solve a specific problem.
3. Adults are most interested in learning things that have immediate relevance and applicability.
4. Adults need to be involved in the planning and evaluation of their instruction.

Andragogy considers the adult learner as someone :

- Having an independent self-concept and can direct their learning.
- Having accumulated a reservoir of life experiences that is a rich resource for learning.
- Having learning needs that are closely related to changing social roles.
- Being problem-centered and interested in the immediate application of knowledge.
- Being motivated to learn by internal rather than external factors.

According to the above assumptions, Knowles proposed a program-planning model for designing, implementing, and evaluating educational experiences with adults. For example, with regard to the first assumption that adults are more independent and self-directing, Knowles suggested that the classroom climate should be one of "adultness," both physically and psychologically. In an "adult" classroom, adults "feel accepted, respected, and supported"; further, there exists "a spirit of mutuality between teachers and students as joint inquirers" (Knowles, 1980, p. 47).

Figure 1. Knowles five assumptions about adult learning

Knowles made five assumptions about adult learning:

1. Self-concept. As a person matures, their self-concept moves from one of being a dependent personality toward one of being a self-directed human being.
2. Adult Learner Experience. As a person matures, they accumulate a growing reservoir of experience that becomes an increasing resource for learning.
3. Readiness to Learn. As a person matures, their readiness to learn becomes oriented increasingly to the developmental tasks of their social roles.
4. Orientation to Learning. As a person matures, their time perspective changes from one of postponed application of knowledge to immediacy of application, and, accordingly, their orientation toward learning shifts from one of subject-centeredness to one of problem-centeredness.
5. Motivation to Learn. As a person matures, the motivation to learn is internal.

Figure 1 shows Knowles's five assumptions about adult learning.

Adults as learners

How do adults learn best?

Adult education began to be organized systematically during the 1920s, and teachers of adults began experiencing several problems with the pedagogical model. Indeed, compared to children and teens, adults have special needs and requirements as learners.

Malcolm S. Knowles, famous for the adoption of the theory of andragogy, identified the following main characteristics of adult learners:

- ·Adults are autonomous and self-directed. They need to be free to direct themselves. Teachers must actively involve adult learners in the learning process and motivate them. Specifically, they must get participants' perspectives about what topics to cover and let them work on projects that reflect their interests. They should allow the participants to assume responsibility for presentations and group leadership. They have to be sure to act as facilitators, guiding participants to their own knowledge rather than supplying them with facts. Finally, they must show participants how the class will help them reach their goals (e.g., via a personal goals sheet).
- ·Adults have accumulated a foundation of life experiences and knowledge that may include work-related activities, family responsibilities, and previous education. They need to connect learning to this knowledge/experience base. To help them do so, they should draw out participants' experience and knowledge which is relevant to the topic. They must relate theories and concepts to the participants and recognize the value of experience in learning.
- ·Adults are goal-oriented. Upon enrolling in a course, they usually know what goal they want to attain. They, therefore, appreciate an educational program that is organized and has clearly defined elements. Instructors must show participants how this class will help them attain their goals. This classification of goals and course objectives must be done early in the course.
- ·Adults are relevancy-oriented. They must see a reason for learning something. Learning has to be applicable to their work or other responsibilities to be of value to them. Therefore, instructors must identify objectives for adult participants before the course begins. This means, also, that theories and concepts must be related to a setting familiar to participants. This need can be fulfilled by letting participants choose projects that reflect their own interests.
- ·Adults are practical, focusing on the aspects of a lesson most useful to them in their work. They may not be interested in knowledge for its own sake. Instructors must tell participants explicitly how the lesson will be useful to them on the job.

As do all learners, adults need to be shown respect. Instructors must acknowledge the wealth of experiences that adult participants bring to the classroom. These adults should be treated by teachers as equals in experience and knowledge and allowed to voice their opinions freely in class. At least six factors serve as sources of motivation for adult learning:

- ·Social relationships: to make new friends, to meet a need for associations and friendships. • External expectations: to comply with instructions from someone else; to fulfill the expectations or recommendations of someone with formal authority.
- ·Social welfare: to improve ability to serve mankind, prepare for service to the community, and improve ability to participate in community work.
- ·Personal advancement: to achieve higher status in a job, secure professional advancement, and stay abreast of competitors.
- ·Escape/Stimulation: to relieve boredom, provide a break in the routine of home or work, and provide a contrast to other exacting details of life.
- · Cognitive interest: to learn for the sake of learning, seek knowledge for its own sake, and to satisfy an inquiring mind.

Adult learning strategies

In order to design effective educational opportunities for adults, one ought to take into account that unskilled jobs don't necessarily require low-skilled people. A low-skilled person is an individual who lacks the education or training necessary in order to become employed, whilst an unskilled job may require basic skills training for the work to be completed successfully.

Good adult trainers need to know something that is important and beneficial to their learners, and know it well. They should be able to convey expertise through effective teaching and be self-confident, credible, and authentic.

Here following, the most known learning methodologies adopted with adult learners are shortly presented,

Transformative Learning

Developed by Jack Mezirow in 1978, transformative learning theory posits that all learners use different assumptions, expectations, and beliefs to make sense of the world around them. Accordingly, transformative learning attempts to help learners change — or transform — their existing frames of reference through a process of problem-solving, procedural tasks, and self-reflection. Learning transformations occur when an individual tackles a "disorienting dilemma" that challenges their existing beliefs and critically reflects upon what has occurred (Mezirow, 2018). Mezirow defines transformative learning as:

"[...] the process by which we transform problematic frames of reference (mindsets, habits of mind, meaning perspectives) – sets of assumption and expectation – to make them more inclusive, discriminating, open, reflective and emotionally able to change. Such frames are better because they are more likely to generate beliefs and opinions that will prove more true or justified to guide action." (Mezirow, 2008, p. 92)

Experiential Learning

Developed by David Kolb in the 1970s, by drawing on the work of John Dewey, Kurt Lewin, and Jean Piaget, experiential learning requires a hands-on approach that puts the learner at the center of the learning experience (Kolb, 2014). Active participation is a key factor, but it must be integrated with the individual reflecting upon what they are doing. The four elements of experiential learning are:

·active involvement;

·reflection upon practice;

·conceptualization of the experience;

·use of knowledge acquired from experience.

Self-directed learning (SDT)

SDL is rooted in Malcolm Knowles' theory of adult learning; in 1997, D.R. Garrison added elements of self-management to the model. SDL is a process where individuals take the initiative to define their learning needs, establish the learning goal, identify the learning resources, implement the learning plan, and assess their own results. Usually, SDL occurs with the help or supervision of teachers, mentors, resources, and peers. Learners must be able to access and select the appropriate learning resources.

Project Based Learning (PBL)

Developed by John Dewey in 1897, project-based learning theory holds that learners acquire a deeper knowledge through active exploration of real-world problems. Dewey called this principle "learning by doing." PBL requires learners to solicit feedback and continually review results. This iterative process is believed to increase the possibility of long-term retention of skills and knowledge. It requires the use of diverse skills, including inquiry, critical thinking, problem-solving, collaboration, and communication.

Action Learning

Developed by Reg Revans in 1982, action learning is an approach to problem-solving that involves taking action and reflecting on the results. The goal of action learning is to improve problem-solving processes and simplify the resulting solutions. This approach tackles problems by first asking questions to clarify the problem, reflecting and identifying possible solutions, and only then taking action. Usually, action learning takes place in groups. In this case, the group should be able to take action on the problem it's working on. There should be a coach or a facilitator who helps the group to learn and work smarter and more effectively.

Simulated environment

A simulation environment is defined as a programming environment of a computer that is dedicated to systems simulation and that takes care of flexible and intelligent interfacing between a user (e.g., the experimenter) and the system to be experimentally studied.

As an adult simulated learning environment, we intend a computer-based environment that will help learners how to practice self-learning.

Social learning

Social learning theory was proposed by Albert Bandura. It emphasizes the importance of observing, modeling, and imitating the behaviors, attitudes, and emotional reactions of others. Social learning theory considers how both environmental and cognitive factors interact to influence human learning and behavior (Bandura, 1969; Bandura & Walters, 1977)

Nowadays, virtual communities are often created to provide information and support workers within an organization. In the last few years, several researchers investigated the non-formal and informal learning processes that take place on the Web, and the new term, social learning, was coined to designate this modality of learning.
In the literature, social learning is considered a part of informal learning

Adult self-directed learning environment
Technology readiness is crucial in an adult self-learning online environment. It is a prerequisite to access and manage the learning resources.
Accordingly, learners who possess digital skills are more likely to adopt online learning strategies and achieve their learning goals. It implies that mastering web-based learning technologies is essential for self-directed online learning and influences learning achievements.

Inferential learning
It has been observed how, in the past decade, developmental and computational cognitive science has made significant progress in explaining how humans learn from observed evidence. Bayesian hierarchical models have formalized learning as probabilistic inferences that operate over abstract, structured representations of the world (Gweon, 2021).

The Bayesian models are grounded on the concept of conditional probability.

Conditional probability is the probability of one event occurring with some relationship to one or more other events.

Bayesian models provide a way to update our beliefs based on the arrival of new, relevant pieces of evidence. For example, if we were trying to provide the probability that a given person has cancer, we can initially assume that this probability is the percent of the population having cancer. However, given additional evidence, such as the fact that the person is a smoker, we can update our probability since the probability of having cancer is higher given that the person is a smoker. This allows us to utilize prior knowledge to improve our probability estimations.
The Bayesian view defines probability in more subjective terms — as a measure of the strength of your belief regarding the true situation.

Adult self-learning

In the 1970s, self-directed learning appeared as a model that could help define adult learners as different from children.

Self-directed learning views learning as an individual powerful tool to learn at one's own pace and on one's own time. On the cognitive side, self-directed learning allows individuals to focus effort on useful information they do not yet possess, expose information inaccessible via passive observation, and enhance the encoding and retention of materials. Therefore, self-directed learning goals are to enhance learners' ability to be proactive in their learning and foster transformative learning.

Adult self-learning aims at conjugating adult learning and self-directed learning. Adult learning theories are based on the premise that adults learn differently than children. Here are the main characteristics of adult learning:

• Adults have an existing base of knowledge and life experience. Accordingly, their ability to learn can be influenced, positively or negatively, by their previous knowledge and life experience.

• Personal interests, wants, and needs motivate adults to learn.

• It's beneficial to let adults work things out for themselves and organize themselves.

• The role of "teacher" may be effectively filled by a mentor, coach, peer, or expert.

In the 1940s, Lorge (1944, 1947) pointed out that adult test scores were related to previous education and skills, not to age per se. Since older adults had less formal education and less opportunity to develop test-taking skills, it only appeared that they were less-capable learners.

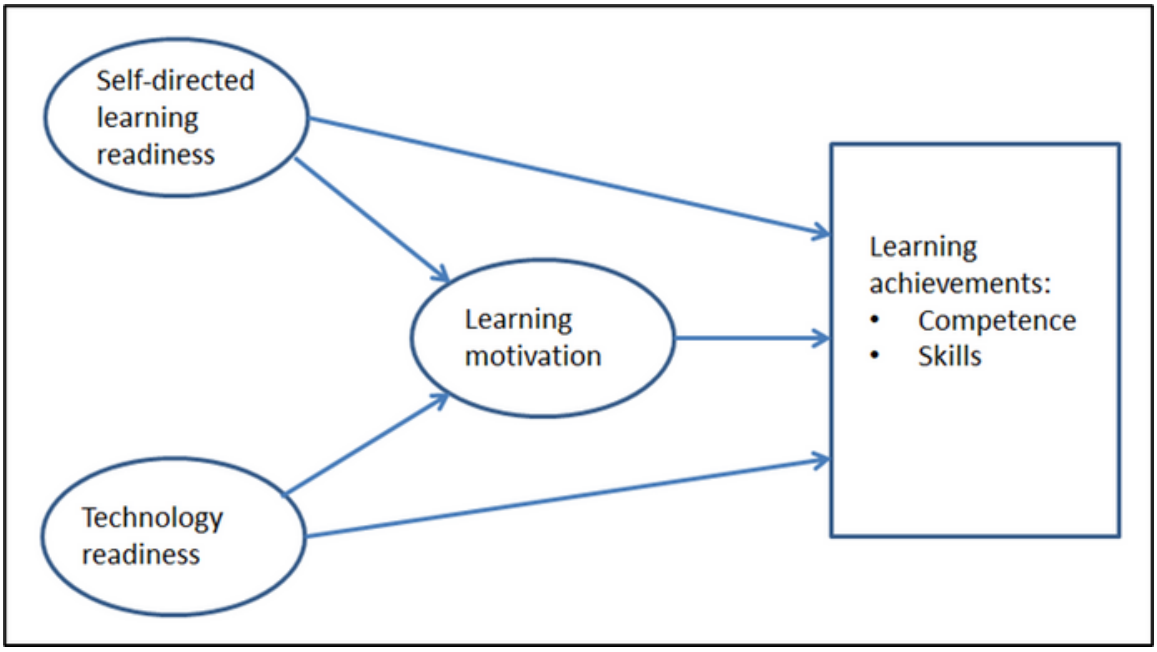


Figure 2. Conceptual model of learning motivation (own source)

Learning motivation in an adult self-directed learning environment

Learning motivation (Figure 2) is a crucial factor in an adult self-directed learning environment. Research reveals that self-efficacy and goal settings are highly related to learning motivation (Che-Ha, Mavondo, & Mohd-Said, 2014; Dos Santos, 2020; Law & Breznik, 2017).

Although various educational research emphasizes on learning motivation, the relationships between self-directed learning and technology readiness have not been sufficiently explored.

Alan Roger (2004) identified four main reasons underlying adult motivation:

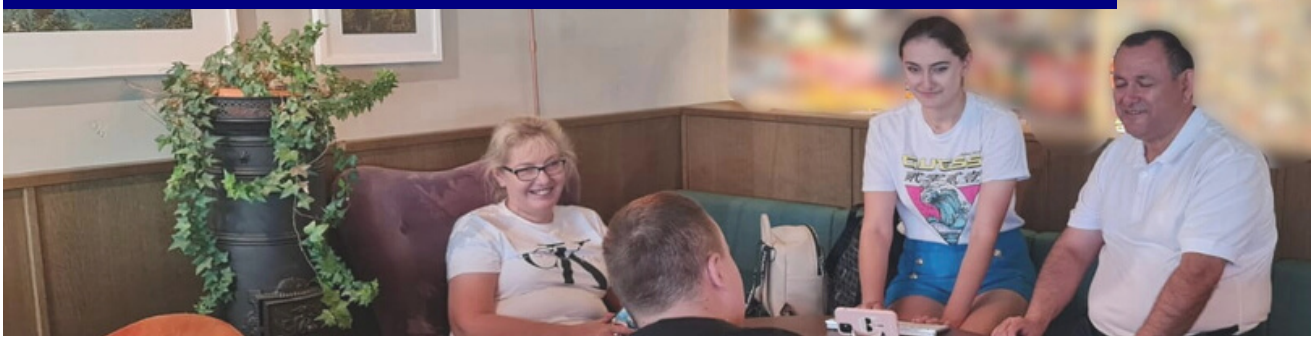
1.Symbolic reason. Some adults attend a training course, not because they want to use their new literacy skills but because they want to join 'the literacy set'. Such reason relates to social status.

2.Instrumental reason. Some adults want to learn literacy skills because they want to accomplish some literacy task.

3.Opportunity reason. Some adults join adult literacy courses, not to learn literacy skills for use but for the opportunities the course will provide subsequently.

4.Further learning reason. Some adults come to literacy courses to be able to go into a formal or non-formal educational program since it provides access to further learning.

Tips to Enhance Adult Learning



Here are some tips on applying your knowledge of adult learning theory to inspire your learners.

- Link learning to expected results. Most adult learning programs teach a mix of skills, knowledge, processes, procedures, and other specific notions aimed to improve learners' competence. The learning program should be designed to offer performance-based outcomes addressing the learners' needs.
- Formalize your informal learning. Also a self-directed learning program should be carefully designed and appropriately presented.
- Build communities for practice. Working in group can facilitate the learning process. A community of practice can help learners to achieve the learning goals.
- Chunk your content. Long, complex learning modules can overwhelm learners with their sheer volume of information. Contents should be organized into smaller learning units that focus on one idea or one aspect of a larger topic.
- Align learning to needs and capability. Learning content should be tailored to the needs and capability of learners.

Key competences of an adult educator

There is a common agreement between countries and across the different fields of education that some competences related to adult education are important (Wahlgren, 2016):

·Communicate the subject to learners in an understandable and inspiring manner using the appropriate pedagogical methods

·Relate to the learners' preconditions taken in a broad sense

·Create a constructive learning environment characterized by commitment, confidence and tolerance, and positive relationships between students and between students and teacher

·Reflect on one's own experiences to constantly improve performance.

However, an adult educator should also teach students to apply what they have learned in future practice. The adult educator must be able to train learners to apply their knowledge and help them amalgamate their different kinds of knowledge and transfer this knowledge to practice.

Nowadays, digital competence is a requirement of an adult educator, necessary in remote teaching-learning

DigiComp identified the digital competence necessary in teaching-learning.

They are related to:

- *Information processing*
- *Communication*
- *Content creation*
- *Problem-solving*

Figure 3 shows the digital competences identified in DigiComp.

Digital competences - Self-assessment grid

	Basic User	Independent user	Proficient user
Information processing	I can look for information online using a search engine. I know not all online information is reliable. I can save or store files or content (e.g. text, pictures, music, videos, web pages) and retrieve them once saved or stored.	I can use different search engines to find information. I use some filters when searching (e.g. searching only images, videos, maps). I compare different sources to assess the reliability of the information I find. I classify the information in a methodical way using files and folders to locate these easier. I do backups of information or files I have stored.	I can use advanced search strategies (e.g. using search operators) to find reliable information on the internet. I can use web feeds (like RSS) to be updated with content I am interested in. I can assess the validity and credibility of information using a range of criteria. I am aware of new advances in information search, storage and retrieval. I can save information found on the internet in different formats. I can use cloud information storage services.
Communication	I can communicate with others using mobile phone, Voice-over IP (e.g. Skype) e-mail or chat - using basic features (e.g. voice messaging, SMS, send and receive e-mails, text exchange). I can share files and content using simple tools. I know I can use digital technologies to interact with services (as governments, banks, hospitals). I am aware of social networking sites and online collaboration tools. I am aware that when using digital tools, certain communication rules apply (e.g. when commenting, sharing personal information).	I can use advanced features of several communication tools (e.g. using Voice over IP and sharing files). I can use collaboration tools and contribute to e.g. shared documents/files someone else has created. I can use some features of online services (e.g. public services, e-banking, online shopping). I pass on or share knowledge with others online (e.g. through social networking tools or in online communities). I am aware of and use the rules of online communication ("netiquette").	I actively use a wide range of communication tools (e-mail, chat, SMS, instant messaging, blogs, micro-blogs, social networks) for online communication. I can create and manage content with collaboration tools (e.g. electronic calendars, project management systems, online proofing, online spreadsheets). I actively participate in online spaces and use several online services (e.g. public services, e-banking, online shopping). I can use advanced features of communication tools (e.g. video-conferencing, data sharing, application sharing).
Content creation	I can produce simple digital content (e.g. text, tables, images, audio files) in at least one format using digital tools. I can make basic editing to content produced by others. I know that content can be covered by copyright. I can apply and modify simple functions and settings of software and applications that I use (e.g. change default settings).	I can produce complex digital content in different formats (e.g. text, tables, images, audio files). I can use tools/editors for creating web page or blog using templates (e.g. WordPress). I can apply basic formatting (e.g. insert footnotes, charts, tables) to the content I or others have produced. I know how to reference and reuse content covered by copyright. I know the basics of one programming language.	I can produce or modify complex, multimedia content in different formats, using a variety of digital platforms, tools and environments. I can create a website using a programming language. I can use advanced formatting functions of different tools (e.g. mail merge, merging documents of different formats, using advanced formulas, macros). I know how to apply licences and copyrights. I can use several programming languages. I know how to design, create and modify databases with a computer tool.
Safety	I can take basic steps to protect my devices (e.g. using anti-viruses and passwords). I know that not all online information is reliable. I am aware that my credentials (username and password) can be stolen. I know I should not reveal private information online. I know that using digital technology too extensively can affect my health. I take basic measures to save energy.	I have installed security programmes on the device(s) that I use to access the Internet (e.g. antivirus, firewall). I run these programmes on a regular basis and I update them regularly. I use different passwords to access equipment, devices and digital services and I modify them on a periodic basis. I can identify the websites or e-mail messages which might be used to scam. I can identify a phishing e-mail. I can shape my online digital identity and keep track of my digital footprint. I understand the health risks associated with the use of digital technology (e.g. ergonomy, risk of addiction). I understand the positive and negative impact of technology on the environment.	I frequently check the security configuration and systems of my devices and/or of the applications I use. I know how to react if my computer is infected by a virus. I can configure or modify the firewall and security settings of my digital devices. I know how to encrypte-mails or files. I can apply filters to spam e-mails. To avoid health problems (physical and psychological), I make reasonable use of information and communication technology. I have an informed stance on the impact of digital technologies on everyday life, online consumption, and the environment.
Problem solving	I can find support and assistance when a technical problem occurs or when using a new device, program or application. I know how to solve some routine problems (e.g. close program, re-start computer, re-install/update program, check internet connection). I know that digital tools can help me in solving problems. I am also aware that they have their limitations. When confronted with a technological or non-technological problem, I can use the digital tools I know to solve it. I am aware that I need to update my digital skills regularly.	I can solve most of the more frequent problems that arise when using digital technologies. I can use digital technologies to solve (non-technical) problems. I can select a digital tool that suits my needs and assess its effectiveness. I can solve technological problems by exploring the settings and options of programmes or tools. I regularly update my digital skills. I am aware of my limits and try to fill my gaps.	I can solve almost all problems that arise when using digital technology. I can choose the right tool, device, application, software or service to solve (non-technical) problems. I am aware of new technological developments. I understand how new tools work. I frequently update my digital skills.

Figure 3. DigiComp digital competences.

In particular, the European Framework for the Digital Competence of Educators (DigCompEdu) has been developed to identify a set of digital competences specific to an educator in order to seize the potential of digital technologies for enhancing and innovating education (Figure 4).

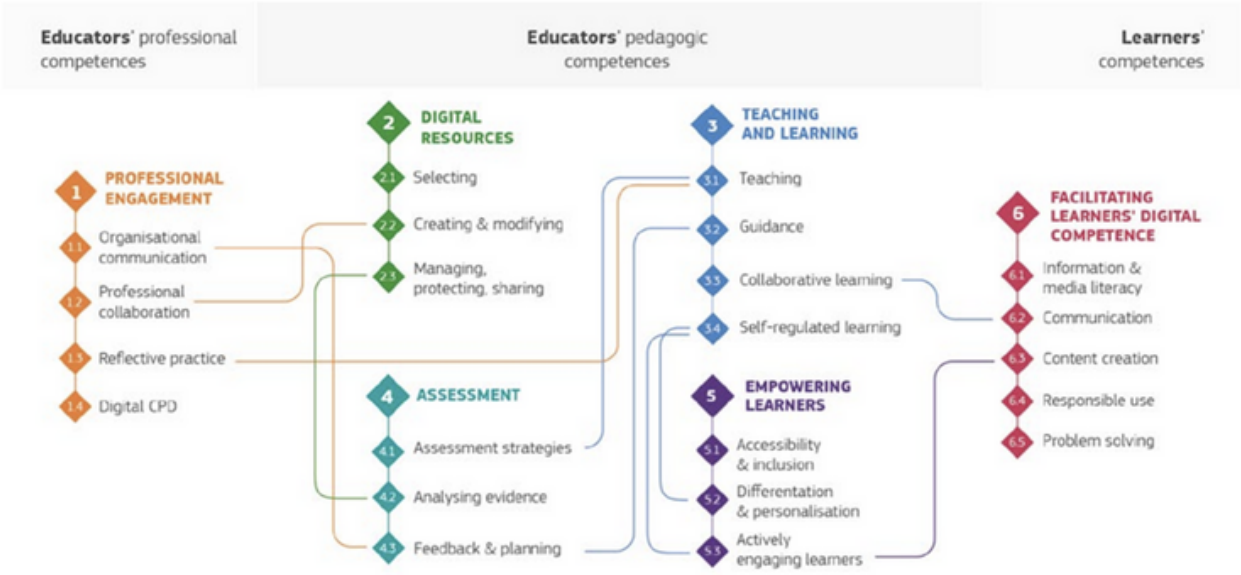


Figure 4. DigiCompEdu framework.

DigCompEdu included six areas focusing on different aspects of educators' professional activities:

1. Area 1: Professional Engagement Using digital technologies for communication, collaboration and professional development.
2. Area 2: Digital Resources Sourcing, creating and sharing digital resources.
3. Area 3: Teaching and Learning Managing and orchestrating the use of digital technologies in teaching and learning.
4. Area 4: Assessment Using digital technologies and strategies to enhance assessment.
5. Area 5: Empowering Learners Using digital technologies to enhance inclusion, personalisation and learners' active engagement.
6. Area 6: Facilitating Learners' Digital Competence Enabling learners to creatively and responsibly use digital technologies for information, communication, content creation, wellbeing and problem-solving.

There are four key digital competences of an educator:

1.To plan for and implement digital devices and resources in the teaching process, so as to enhance the effectiveness of teaching interventions. To appropriately manage and orchestrate digital teaching strategies. To experiment with and develop new formats and pedagogical methods for instruction.
2.To use digital technologies and services to enhance the interaction with learners, individually and collectively, within and outside the learning session. To use digital technologies to offer timely and targeted guidance and assistance. To experiment with and develop new forms and formats for offering guidance and support.
3.To use digital technologies to foster and enhance learner collaboration. To enable learners to use digital technologies as part of collaborative assignments as a means of enhancing communication, collaboration and collaborative knowledge creation.
4.To use digital technologies to support learners' self-regulated learning, i.e. to enable learners to plan, monitor and reflect on their own learning, provide evidence of progress, share insights and come up with creative solutions.

Note that an educator is unable to develop their learners' digital competence if they do not possess these competences and the capability to transfer them to learners.

·An educator should be able:
·To locate and retrieve relevant information on the internet and know how to store, organize and analyze such information for its possible applications in teaching.
·To share community-created resources and experiences through online tools, allowing feedback between teachers. Belong to teaching communities in social networks. This will enable the dissemination of good practices and the creation of a validated resources bank.
·To create and edit own teaching materials and audio-visual productions, while understanding how copyright and licenses are to be applied. In order to provide personalized learning to students, teachers must be able to create their own resources.
·To protect personal data, digital content and use technology in a responsible and safe manner. Problems such as identity theft or cyberbullying may occur if new technologies are not used properly.
·To identify needs and know how to choose digital resources for resolving problems. Decide which are the most appropriate tools and use them properly, particularly with regard to active methodologies.

Literature analysis on remote teaching-learning

In the last few years, remote teaching-learning has become popular due to the COVID-19 pandemic. We included a literature review on remote teaching-learning to complete our lecture on adult learning.

The literature analysis has been performed on online databases (Scopus, Web of Science, SAGE, EBSCO, Google scholar) searching by keywords ("remote teaching-learning" and "distance teaching-learning"). The term "remote teaching-learning" appears in a few number of articles from 2010-2019. It becomes popular during the COVID-19 pandemic. In the last decades, other terms have been used, such as "distance teaching-learning", or "online teaching-learning".

From the literature analysis, ten remarkable articles have been selected.

1. *Simonson, M., Zvacek, S. M., & Smaldino, S. (2019). Teaching and learning at a distance: Foundations of distance education 7th edition.*
2. *Alshammari, R. (2021). Adopting Remote Teaching in the Time of Covid-19: Challenges and Opportunities. Arab World English Journal (AWEJ) Special Issue on CALL, (7).*
3. *Badiozaman, I. F. A., Leong, H. J., & Wong, W. (2020). Embracing educational disruption: a case study in making the shift to a remote learning environment. Journal of Applied Research in Higher Education.*
4. *Hartshorne, R., Baumgartner, E., Kaplan-Rakowski, R., Mouza, C., & Ferdig, R. E. (2020). Special issue editorial: Preservice and inservice professional development during the COVID-19 pandemic. Journal of Technology and Teacher Education, 28(2), 137-147.*
5. *Hodges, C. B., Moore, S., Lockee, B. B., Trust, T., & Bond, M. A. (2020). The difference between emergency remote teaching and online learning.*
6. *Ferri, F., Grifoni, P., & Guzzo, T. (2020). Online learning and emergency remote teaching: Opportunities and challenges in emergency situations. Societies, 10(4), 86.*
7. *Bozkurt, A., & Sharma, R. C. (2020). Emergency remote teaching in a time of global crisis due to the CoronaVirus pandemic. Asian journal of distance education, 15(1), i-vi.*
8. *Rapanta, C., Botturi, L., Goodyear, P., Guàrdia, L., & Koole, M. (2021). Balancing technology, pedagogy and the new normal: Post-pandemic challenges for higher education. Postdigital Science and Education, 3(3), 715-742.*
9. *Moorhouse, B. L., & Wong, K. M. (2022). Blending asynchronous and synchronous digital technologies and instructional approaches to facilitate remote learning. Journal of Computers in Education, 9(1), 51-70.*
10. *Le Grange, L. (2020). Could the Covid-19 pandemic accelerate the uberfication of the university?. South African Journal of Higher Education, 34(4), 1-10.*

Teaching and Learning at a Distance by Simonson, Zvacek, and Smaldino (2019) is a book written for preservice or in-service teachers. It provides readers with the basic notions of distance education. It defines the concept of distance education through a literature review. Then, the best practices in distance education are presented and discussed, and, additionally, the role of media used for distance education is analyzed. The book also presents a set of techniques to assessing learning, assessing grades, and determining academic progress of students in a distance learning environment.

Adopting Remote Teaching in the Time of Covid-19: Challenges and Opportunities by Alshammari, R. (2021) is an article that explores the challenges and opportunities for adopting remote teaching during COVID-19. It presents and discusses a survey conducted among Shaqra University, Saudi Arabia, students on online teaching-learning. The collected data is analyzed qualitatively and quantitatively. Analysis emerges that it is necessary to facilitate the continuity of education through remote learning mode in response to the immediate impact of school closures. For this purpose, digital devices, internet infrastructure, and skilled teachers are crucial.

Embracing educational disruption: a case study in making the shift to a remote learning environment by Badiozaman, Leong, and Wong (2020) is an article that reports on a survey carried out at Swinburne University of Technology Sarawak (Malaysia). Approximately 136 questionnaires containing close-and open-ended items have been distributed to the university's teaching staff to gather information about their perceptions of online teaching and learning, e.g., their familiarity with online teaching-learning or the usefulness of platforms such as Microsoft Teams and Google Classrooms. The findings revealed very mixed responses regarding teachers' familiarity with online teaching-learning. Nonetheless, the majority of teachers evaluated remote teaching-learning positively.

Special issue editorial: Preservice and inservice professional development during the COVID-19 pandemic (2020) by Hartshorne, Baumgartner, Kaplan-Rakowski, Mouza, and Ferdig (2020) is the editorial presentation of a set of articles focusing on the teaching-learning situation during the COVID-19 pandemic. It reports that the special issue articles have been categorized according to five key themes: 1. Building Communities 2. Online Professional Development/Coaching 3. Simulated/Online Teaching Experiences for Preservice Teachers 4. Digital Tools 5. Equity Issues. Editors claim that the response to the call for papers was overwhelming, demonstrating the scientific community's interest in remote teaching-learning. Within three short weeks, 266 papers were submitted. Not every paper met the requirement for publication in a rigorous, peer-reviewed journal, although they shared helpful stories, tools, and implications.

The difference between emergency remote teaching and online learning (2020) by Hodges, Moore, Lockee, Trust, and Bond, is an article that argue the difference od well-planned online learning experiences and courses offered online in response to a crisis or disaster. Authors sustain that colleges and universities working to maintain instruction during the COVID-19 pandemic should understand those differences when evaluating this emergency remote teaching. They claim that, in contrast to experiences that are planned from the beginning and designed to be online, emergency remote teaching (ERT) is a temporary shift of instructional delivery to an alternate delivery mode due to crisis circumstances. It involves the use of fully remote teaching solutions for instruction or education that would otherwise be delivered face-to-face or as blended or hybrid courses and that will return to that format once the crisis or emergency has abated. The primary objective in these circumstances is not to re-create a robust educational ecosystem but rather to provide temporary access to instruction and instructional supports in a manner that is quick to set up and is reliably available during an emergency or crisis.

Online learning and emergency remote teaching: Opportunities and challenges in emergency situations (2020) by Ferri, Grifoni, and Guzzo is an article that analyses the opportunities and challenges of emergency remote teaching based on experiences of the COVID-19 emergency. The authors adopted a two-steps qualitative research method. In the first step, a thematic analysis of an online discussion forum with international experts from different sectors and countries was carried out. In the second step (an Italian case study), the data and opinion leaders' statements from secondary online sources, including web articles, statistical data, and legislation, were analyzed. Authors argue that their research emerges several technological, pedagogical, and social challenges. The technological challenges are mainly related to the unreliability of Internet connections and many students' lack of necessary electronic devices. The pedagogical challenges are principally associated with teachers' and learners' lack of digital skills and the lack of structured content versus the abundance of online resources. The social challenges are mainly related to the lack of human interaction between teachers and students and the lack of physical spaces at home to receive lessons and the lack of support of parents who are frequently working remotely in the same spaces.

Emergency remote teaching in a time of global crisis due to CoronaVirus pandemic (2020) by Bozkurt and Sharma is an article that analyzes what means the use of the terms remote and distance in an educational context. The authors agree that emergency remote teaching should collaborate with different shareholders (e.g., psychologists, sociologists, therapists, etc.) to offer better and timely solutions. They are persuaded that producing solutions on broader grounds is vital because delivering content is not the only issue of concern during times of crisis. Indeed, caring for and supporting learners at such times is also important. They argue that one should keep in mind that students will remember not the educational content delivered but how they felt during these challenging times.

(2021). Balancing technology, pedagogy and the new normal: Post-pandemic challenges for higher education (2021) by Rapanta, Botturi, Goodyear, Guàrdia and Koole is an article that argues how online teaching-learning implies a certain pedagogical content knowledge, mainly related to designing and organizing for better learning experiences and creating distinctive learning environments with the help of digital technologies. The authors provide some expert insights related to pedagogical content knowledge. They aim to help non-expert university teachers (e.g., those with little experience with online learning) use online resources and tools. They consider the combination of three types of presence (social, cognitive, and facilitatory) and the need for adapting assessment to the new learning requirements.

Blending asynchronous and synchronous digital technologies and instructional approaches to facilitate remote learning (2022) by Moorhouse and Wong is an article is a study based on two-stage qualitative-dominant sequential mixed-method. The authors used an online survey of elementary and secondary school English language teachers (N = 73) and follow-up interviews (N = 10). The aim of their study was to explore how teachers in Hong Kong adapted their instruction to online teaching in responses to COVID-19. Data analysis indicated that teachers adopted either a blend of synchronous and asynchronous instructional approach (n = 42, 57%) or an asynchronous-only instructional approach (n = 31, 43%) during the class suspension caused by COVID-19. The decisions to use asynchronous and/or synchronous technologies and instructional resources or a blend of both, were largely dependent on the affordances of each mode in helping the teacher address the needs of learners during the in-person class suspensions.

Could the Covid-19 pandemic accelerate the uberfication of the university? (2020) by Le Grange is an article that discusses the possibility that the COVID-19 pandemic could accelerate the uberfication of the university. The concept of "uberfication of the university" was first mooted by Gary Hall (2016). According to Gray, the Uberfication of the University explores what neoliberalism's further weakening of the social is likely to mean for the future organization of labor by examining data and information companies associated with the emergence of the corporate sharing economy. It focuses on the sharing economy because it is here that the implications for workers of such a shift to a postwelfare capitalist society are most apparent today. The article's author argues that although uberfication of the university (or its acceleration) is not preordained, the potential for its actualization is already embedded in our present social, educational and technological situation. Although the possibility exists that the present situation can also be a carrier of alternatives to uberfication, vectors of escape from the latter will depend on the active construction of counter-narratives to uberfication.

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