



LEAD Method in My Educational Work

Handbook for Teachers and Adult Learners

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LEAD Method in My Educational Work – Handbook for Teachers and Adult Learners

Abstract

“LEAD” is an abbreviation for the Learning in Difficult Times project. The LEAD method is a pedagogical approach that fosters a collaborative learning community, enabling individuals to continue learning despite difficulties and extraordinary conditions. It emphasises that the learning experience of individuals should not be interrupted no matter what, and measures should be taken to facilitate their learning journey. Information technology is crucial for connecting individuals and fostering a supportive learning community. Therefore, the LEAD method is a method that combines pedagogy and learning technology. This handbook aims to provide information about learning in difficult life situations with digital learning channels and tools, inviting the audience to be part of this collaborative learning community.

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From the Editors

“LEAD” is an abbreviation for the Learning in Difficult Times project. The LEAD method is a pedagogical approach that fosters a collaborative learning community, enabling individuals to continue learning despite difficulties and extraordinary conditions. It emphasises that the learning experience of individuals should not be interrupted no matter what, and measures should be taken to facilitate their learning journey. Information technology is crucial in connecting individuals and fostering a supportive learning community. Therefore, the LEAD method is a method that combines pedagogy and learning technology. This handbook aims to provide information about learning in difficult life situations with digital learning channels and tools, inviting the audience to be part of this collaborative learning community.

Again, the primary purpose of the LEAD project is to ensure the continuation of an individual’s educational journey under all circumstances. For this purpose, institutions active in adult education from Romania, Sicily (Italy), Ireland and Finland, under the coordination of Turkey, came together and developed the LEAD method. This method provides practical guidance for maintaining the education of communities affected by natural disasters such as earthquakes, epidemics, fires and floods.

We want to thank all the participants who contributed to this study and emphasise our gratitude for their support.

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1 CHAPTER 1: Introduction to the LEAD Method

Learning in Difficult Times

Authors

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A Brief Overview of the LEAD Method

Difficult situations arise when ordinary circumstances deviate from the norm. In these challenging times, when life is anything but normal, societies may face many changes and problems in the realms of psychology, economics, social dynamics, and politics. Difficult situations such as war, terrorism, insurgency, ethnic conflicts, economic crisis, drought, Earthquakes, fires, floods, volcanic eruptions, avalanches, epidemics, famine, etc., bring chaos and uncertainty (Twigg, 2015). Education is undoubtedly one of the areas where these difficult situations are intensely affected, and their effects are felt for a long time (Taymaz, 2005; Wisner et al., 2004).

The roots of education in difficult situations can be found in the services provided to meet the educational needs of people displaced by World War II, where the Universal Declaration of Human Rights and the Geneva Conventions established that education is a right that must be exercised even during war. In difficult situations, some problems are encountered in the form of reduced access to and participation in education, academic performance problems, physical problems, social problems, personnel problems, economic problems, administrative problems and educational planning problems (Tong et al., 2012).

In difficult situations, uncertainty or chaos can make it difficult for individuals to access education and reduce participation. This difficulty can sometimes manifest as primary school children not starting school or learners being absent continuously. Difficult situations can also negatively affect learners' academic achievement. Sudden changes in learners' psychology can also affect their academic performance (Penrose & Takaki, 2006). Damage to school buildings and educational equipment, as well as physical problems in difficult situations, is a significant problem. It is evident that temporary education spaces, such as tents, and prefabricated spaces, are inadequate in terms of health and ergonomics compared to permanent education buildings, particularly concerning heating, lighting, and usability. In addition, damage to educational equipment poses significant problems for the sustainability of education (Kasapoğlu & Ecevit, 2001). Difficult situations impact all segments of society, including learners, parents, teachers, school administrators and school staff, who are

educational stakeholders in a social context. Painful events experienced by families, learners and teachers, such as forced relocation, profound unhappiness and insecurity, can lead to alienation and weaken social relations (Türmen, 2012). As a result of difficult situations, the lack of a peaceful living environment and fears and anxieties can also trigger individuals to abandon their profession. Teachers, who are experts in their field, can be affected in many different ways (fear, grief, guilt, anger, psychological destruction, etc.), which can negatively impact their educational processes. In particular, traumas can be constantly replayed in the minds of teachers, and the emotional states created in the consciousness by the new reality can disrupt the mental balance. Difficult situations also make it difficult to carry out educational programs. Due to difficult times; the main reason for this difficulty is the need to make changes and be flexible in educational programs, methods and techniques. These changes and flexibilities may prevent the realisation of educational activities at the desired level (Peterson, 2011). Difficult situations also bring economic problems. Difficult times can sometimes cause loss of life and economic problems due to destroyed schools and educational equipment. In addition, the economic losses of learners, parents and staff may constitute another dimension of the impact on education. Difficult situations can also make education management problematic. Administrative processes such as planning, organising, coordination, division of labour, participation in decisions, taking initiative, democratic governance and supervision may become more difficult in difficult situations (Talbot, 2013).

Social groups prioritise education even in difficult situations and often locate learning spaces in the centre of the areas where social groups live. This positioning represents hope for future generations. While until recently, humanitarian assistance in difficult situations was seen as providing water, food, shelter, hygiene and health services, education is now recognised as critical to sustaining life. This vital importance was better understood in 2019 when the coronavirus disease, which started in China, spread to countries worldwide and was declared a pandemic worldwide. In this difficult situation, countries have suspended education at specific intervals. Countries have turned to distance education, a new approach that has become a necessity of the age in line with social, economic and technological developments, providing cheaper, faster and easier access to education to many more people (Bates, 2005; Holmberg et al., 2005; Shearer et al., 2020). Distance education is a learning-teaching activity in which teachers and learners are in different places without time and space limitations. Distance education is a system with other dynamics in its structure. These dynamics are psychological, social, technological, instructional, and organisational structures. Psychological structure refers to the motivation, beliefs and attitudes of individuals involved in the distance education process; social structure refers to the communication and responsibilities of individuals involved in the education process; technological structure refers to the software and hardware technology needed to create the flexibility and instructional ground of distance education; instructional structure refers to the teaching techniques and methods used during education; and organisational structure refers to the necessary institutional structure and coordination. The interaction of these five structures constitutes

the distance education system (Brigham, 1992; Ehrman, 1990; Essary, 2014; Maguire, 2005; Menchaca & Bekele, 2008). Distance education models are classified in the literature according to the type of communication used. These are synchronous, asynchronous and blended education. In synchronous education, despite being in different physical environments, communication is smooth, and the education offered in the form of live lectures and conferences is a distance education model. Asynchronous education is an education model in which learners and teachers come together in different physical environments and at other times, and it is offered through video recordings, e-mails and electronic documents. Blended education is a model that considers the advantages and disadvantages of synchronous and asynchronous education models. In this model, the resources involved in the training are delivered to the learner in advance so that the learner has prior knowledge. Afterwards, the learner and the teacher unite simultaneously to prevent incomplete and incorrect learning through mutual feedback (Anderson & Dron, 2011; East et al., 2014; Richardson, 2007; Simonson, 2015; Vlachopoulos, 2016).

Distance education offers numerous benefits, such as providing access to educational opportunities for all individuals during difficult situations, fulfilling individual and societal educational goals, eliminating geographical boundaries, lowering the high costs associated with traditional education, and being easily adaptable to meet specific needs. It also enables reaching large audiences effortlessly. However, distance education comes with certain drawbacks, including limited face-to-face interaction, which is crucial for applied courses, challenges in socialisation, difficulties for individuals who lack self-study habits, delays in receiving immediate assistance for learning problems, communication challenges due to large numbers of learners, and potential issues for individuals with low technological literacy. (Barker, 1990; Erihovna, 2016; Kismetova & Abdrasilova, 2021; Sadeghi, 2019).

In the distance education model, which is actively utilised in difficult situations, the teacher prepares the environment and materials that enable the learner to learn independently. Consequently, in this model, the teacher takes on the mentor role. Beyond this role, teachers in distance education can also assume diverse responsibilities that require different skills and insights, such as assessment and evaluation specialists, technicians, socialisation specialists, psychologists, technology specialists, editors, graphic designers, communication specialists, and content specialists. Teachers are not expected to fulfil these roles only within a specific time. Teachers are expected to continue these responsibilities and roles before, during and after education (Karadağ & Şen, 2014). In other words, this understanding of education refers to a learning process in which the role of the teacher evolves rather than ends.

In the distance education model implemented in challenging situations, the role of the learner is to provide feedback to the teacher, working collaboratively with the teacher in their role as a mentor, and act as a researcher seeking to solve any problems that may arise from the information provided by the teacher (Gülbahar, 2009). Along with all these, the

responsibilities of the learner in distance education can be listed as follows (Hall, 2006): In the distance education process, the learner is primarily responsible for their success and should diligently adhere to the instructions provided by the teacher, ensuring that all expectations are met thoroughly and on time. In addition, the learner should attend classes regularly, complete homework and projects, and make the necessary effort to solve technical problems. In the light of all this information, when we look at the roles given to the learner in distance education, it is possible to say that they share a joint role with the teacher, information is transferred through mutual interaction and communication, and the learner, just like the teacher, assumes specific tasks and roles such as socialisation expert, researcher, leader and psychologist.

As technology is used in learning, the learner's knowledge of information technologies also increases. The fact that learning takes place through technology makes it compulsory for the learner to be technologically literate, even at a minimum level. Learners should be able to solve problems arising from the system they use to meet their learning needs.

In the distance education model carried out in difficult situations, technological materials (videos, animations, e-brochures, e-books, etc.) are used in addition to traditional written materials to implement training programs. The success of distance education undoubtedly depends on the ability to use these information technologies effectively (Kaya, 2002; Uşun, 2006).

Conclusion

Based on all this information, the process that began with sending educational content to learners as letters by mail in difficult situations has evolved significantly. This process also changes depending on the development of technology. Today, this process leverages all types of modern technology and continues to evolve alongside technological developments. Undeniably, individuals, as part of nature, frequently face challenges created by the natural world, which can disrupt their everyday lives. Despite these interruptions, the need for ongoing education remains crucial. Distance education technology plays a significant role in meeting these educational needs. In addition to utilising this technology for learning, individuals should develop self-learning and lifelong learning skills.

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2 CHAPTER 2: What are Adult Education and Digital Learning

Adult Education and Digital Learning

Author

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Definition

Andragogy is a theory of adult learning developed by Malcolm Knowles in the 1970s. It is a term used to describe the methods and principles used to teach adults, as opposed to pedagogy, which refers to teaching children. He defined it as "the art and science of helping adults learn." The term "andragogy" is derived from the Greek words "andr", meaning man, and "agogos", meaning leading. The andragogy theory suggests that adults have different learning needs than children and, therefore, require a different approach to teaching. Andragogy emphasises the importance of active learning, self-directed learning, and practical applications of knowledge. Andragogy aims to empower adult learners to take ownership of their education and to support them in achieving their personal and professional goals.

The importance of andragogy in adult education lies in its ability to empower learners to take ownership of their learning and to apply what they learn in real-world settings. By emphasising the practical applications of knowledge and using learners' experience, andragogy can help adult learners develop the skills and knowledge they need to achieve their personal and professional goals.

Andragogy has been used in various educational settings, including vocational training, continuing education, and professional development. By providing a learner-centred approach to teaching, andragogy can help adult learners stay engaged and motivated, leading to more effective and meaningful learning outcomes.

The Principles of Andragogy

The fundamental principles of andragogy are central to adult learning theory and guide educators' approaches to working with adult learners.

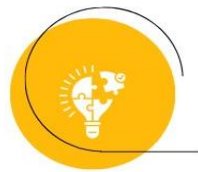
KNOWLES' 4 PRINCIPLES OF ANDRAGOGY



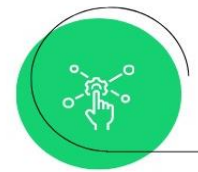
1
It is crucial for adults to participate in the planning and evaluation of their instruction.



2
Experience (including mistakes) provides the basis for the learning activities.



3
Adults are most interested in learning subjects that have immediate relevance and impact to their job or personal life.



4
Adult learning is problem-centered rather than content-oriented.

Here are the four key principles of andragogy, including self-directed learning, relevance, problem-centred learning, and the use of experience as a resource for learning:

Self-Directed Learning: Adults are autonomous learners who take responsibility for their own learning. This means they can identify their own learning needs, set goals, and choose the best ways to achieve them. Self-directed learning involves learners actively participating in their education, setting their own pace, and seeking feedback and support when needed.

Use of Experience as a Resource for Learning: Adult learners have a wealth of experience that can be used as a resource for learning. They bring their perspectives and insights to the learning process and can learn from their own experiences as well as the experiences of others. Educators need to tap into this resource by providing opportunities for learners to reflect on their own experiences and to learn from the experiences of others.

Relevance: Adult learners must understand the relevance of what they learn in their personal lives and work. They are more likely to be motivated when they see how their learning directly connects to their goals and experiences. Therefore, educators must help learners understand how their teaching content relates to their lives and work.

Problem-Centred Learning: Adult learners are motivated to learn when the learning is focused on solving real-world problems and issues. Problem-centred learning involves learners working collaboratively to identify and solve problems, using the knowledge and skills acquired through the learning process. This approach to learning is often applied in vocational training and professional development settings.

Characteristics of Adult Learners



Adult learners have unique characteristics that distinguish them from child learners and require a different approach to teaching. Here are some of the key characteristics of adult learners, including their motivation to learn, their life experiences, and their learning preferences:

Motivation to Learn: Adult learners are often motivated by intrinsic factors, such as personal growth and development, career advancement, or the desire to learn new skills or knowledge. They are also more likely to be self-directed learners who take responsibility for their own learning.

Life Experiences: Adult learners bring many life experiences to the learning environment, including work experience, family responsibilities, and personal interests. These experiences can be used as a learning resource, making the learning experience more relevant and meaningful.

Learning Preferences: Adult learners often have preferred learning styles or preferences, such as visual, auditory, or kinesthetic learning. They also prefer learning that is relevant to their lives and work, problem-centred, and experiential.

Prior Knowledge: Adult learners come to the learning environment with prior knowledge and experience. This prior knowledge can be used to build on and expand their understanding of new concepts and ideas.

Time Constraints: Adult learners often have time constraints that can impact their ability to participate in traditional classroom settings. This can include work and family responsibilities, as well as other commitments.

Collaboration: Adult learners often prefer collaborating with their peers and engaging in discussions and activities that allow them to share ideas and experiences.

By understanding these unique characteristics of adult learners, educators can design learning experiences that are more effective and engaging. This may involve using more experiential and problem-centred learning approaches, providing opportunities for collaboration and discussion, and recognising the prior knowledge and experience that adult learners bring to the learning environment.

Applying Andragogy in Practice

Andragogy is a robust framework for designing effective and engaging learning experiences for adult learners. Here are some examples of how andragogy can be applied in practice through experiential learning, project-based learning, and mentoring:

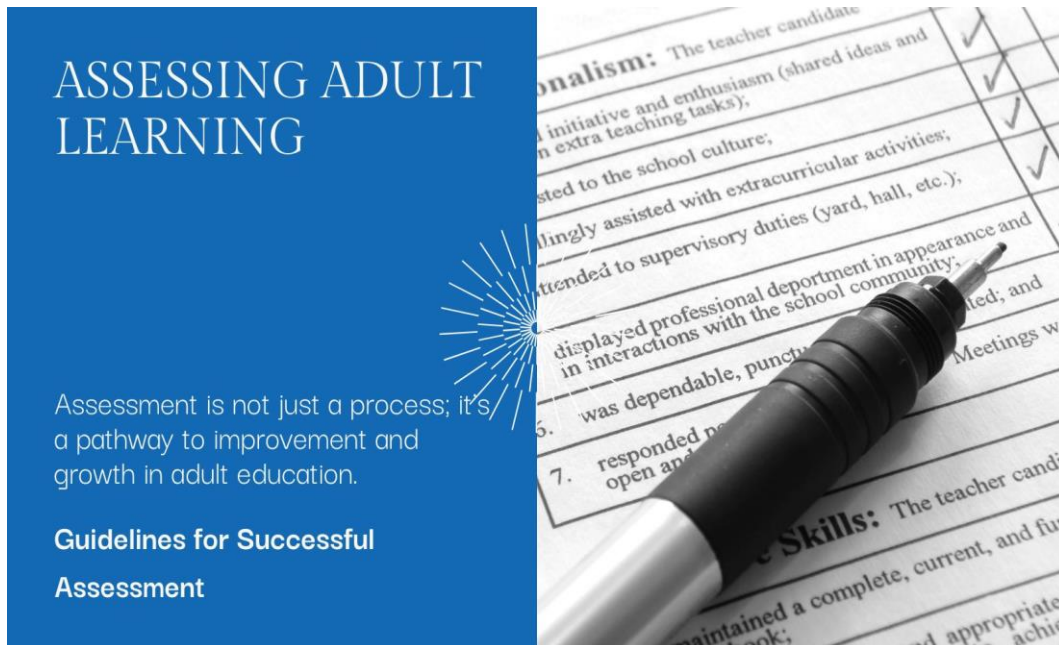
Experiential Learning: Experiential learning involves engaging adult learners in hands-on activities that allow them to apply what they are learning in real-world contexts. For example, in a leadership development program, adult learners might be asked to take on a leadership role in a community project or non-profit organisation, allowing them to practice their leadership skills in a real-world context. Similarly, in a business training program, adult learners might participate in a simulated business exercise or a case study analysis that allows them to apply what they learn to real-world business scenarios.

Project-Based Learning: Project-based learning involves engaging adult learners in collaborative, problem-centred projects that allow them to apply their knowledge to real-world problems and issues. For example, in a project-based learning program focused on sustainability, adult learners might be asked to design and implement a sustainability project in their workplace or community, such as a recycling program or a community garden. This type of learning allows adult learners to develop critical thinking, problem-solving, and collaboration skills while contributing to their community and workplace.

Mentoring: Mentoring involves pairing adult learners with experienced mentors who can provide guidance, support, and feedback as they learn and develop. For example, in a mentoring program for new managers, adult learners might be paired with experienced managers who can provide guidance and support as they navigate their new roles. Similarly, in a professional development program, adult learners might be paired with mentors who can give feedback and guidance as they work on specific skill areas, such as public speaking or project management.

In all of these examples, the key principles of andragogy are applied, including self-directed learning, relevance, problem-centred learning, and using experience as a resource for learning. By designing learning experiences aligned with these principles, educators can create more effective and engaging learning experiences for adult learners.

Assessing Adult Learning



Assessing adult learning is an essential component of any adult education program, as it allows educators to measure the effectiveness of their teaching strategies and the extent to which learners have achieved the intended learning outcomes. It is the key to understanding, improving, and enhancing adult learning. Here are some ways adult learning can be assessed:

Self-Reflection: Self-reflection is a powerful tool for adult learners to assess their own learning and development. It involves learners reflecting on their learning experiences, identifying their strengths and weaknesses, and setting goals for future learning. Self-reflection can be done through journaling, reflective writing, or guided reflection exercises.

Peer Feedback: Peer feedback is another effective way to assess adult learning. It involves learners giving feedback to each other on their work or performance, which can provide valuable insights into their learning strengths and weaknesses. Peer feedback can be done through peer review exercises, small group discussions, or collaborative learning activities.

Formal Evaluation: Formal evaluation is a more structured and systematic approach to assessing adult learning. It involves using formal assessment tools, such as quizzes, exams, and performance evaluations, to measure learning outcomes and evaluate the effectiveness of teaching strategies. Formal evaluation can be done through written tests, oral presentations, or practical demonstrations.

Observation: Observation involves educators or peers observing adult learners in action, whether in the classroom or real-world contexts, and providing feedback on their

performance. This approach can be particularly effective for assessing skills-based learning, such as leadership or communication skills.

Portfolio Assessment: Portfolio assessment involves learners collecting evidence of their learning over time, such as samples of their work, self-reflection exercises, and feedback from peers and educators. This approach allows learners to demonstrate their learning holistically and can be particularly effective for assessing complex learning outcomes.

Various assessment strategies can help educators gain a more comprehensive understanding of adult learners' strengths, weaknesses, and learning outcomes.

Guidelines for successful assessment:

1. Regular Feedback: Frequent feedback to guide learners.

Feedback is a critical component of the assessment process. It serves as a compass for learners, helping them understand their progress, strengths, and areas that need improvement. To make this guideline effective:

- ❖ **Timely Responses:** Provide feedback promptly, preferably shortly after the assessment. Quick feedback ensures learners can reflect on their performance and apply the insights to future activities.
- ❖ **Specific and Constructive Feedback:** Offer specific, constructive, and actionable feedback. Point out what the learner did well and where improvements can be made. Avoid vague or overly critical comments.
- ❖ **Encourage Self-Reflection:** Encourage learners to self-reflect and respond to the feedback. This dialogue fosters a deeper understanding of their learning process.

2. Clear Criteria: Transparent assessment criteria for fairness.

Clear assessment criteria are the foundation of fair and transparent evaluation. Learners should understand what is expected of them and how they will be evaluated. To achieve this:

- ❖ **Well-defined rubrics:** Develop and share well-defined rubrics or grading criteria. These should outline the specific elements that will be assessed and the standards for each level of achievement.
- ❖ **Transparency:** Make the criteria transparent and accessible to all learners. They should know how their work will be evaluated from the outset of the learning process.
- ❖ **Consistency:** Ensure that all educators involved consistently apply the assessment criteria. This helps maintain fairness and equality.

3. Inclusive Assessment Methods: Ensuring assessments cater to diverse needs.

Inclusive assessment methods are crucial to accommodate adult learners' diverse needs and learning styles. Here's how to implement this guideline effectively:

- ❖ **Multiple Assessment Options:** Offer a variety of assessment methods. Some learners may excel in traditional written tests, while others may perform better in project-based assessments, presentations, or discussions.
- ❖ **Flexible Timing:** Consider flexible assessment timing, allowing learners to choose when they are most comfortable demonstrating their understanding. Some may prefer morning assessments, while others do better in the afternoon or evening.
- ❖ **Support:** Be ready to provide reasonable support for learners with disabilities or specific learning challenges. This ensures that everyone has an equal opportunity to succeed.
- ❖ **Engagement and Participation:** Assess not only the final outcomes but also the engagement and participation of learners. Peer evaluations, group discussions, and self-assessments can be part of the assessment process, especially for those who may not perform well in traditional exams.

Digital Learning in Adult Education

Digital learning has become increasingly important in adult education, particularly in the context of the COVID-19 pandemic. Here are some key points about digital learning and its importance in adult education:



Flexibility: Digital learning allows adult learners to learn at their own pace and on their schedule. Learners can access course materials and participate in online discussions from

anywhere with an internet connection. This is particularly important for adults with work or family commitments that make it challenging to attend in-person classes.

Accessibility: Digital learning can also make education more accessible for adult learners with disabilities or other barriers to learning. Online courses can be designed with accessibility, such as providing closed captioning for videos or using screen readers for text-based content.

Engagement: Digital learning can be designed to be interactive and engaging, using multimedia content, interactive activities, and social learning tools to keep adult learners motivated and engaged.

Personalisation: Digital learning can also be personalised to the needs and preferences of individual learners. For example, online courses can use adaptive learning technology to provide learners with personalised feedback and recommendations based on their progress and learning preferences.

Cost-effectiveness: Digital learning can be more cost-effective than traditional classroom-based learning, eliminating the need for physical classroom space and reducing learners' travel and accommodation costs.

Digital learning enhances adult education access, flexibility, engagement, and personalisation. As the world becomes increasingly digital, adult educators need to embrace digital learning and incorporate it into their teaching practices to meet the evolving needs of adult learners.

There are many digital tools and platforms that can be used for digital learning in andragogy. Here are some examples:

Learning Management Systems (LMS): LMS platforms like Moodle, Canvas, and Blackboard provide a central hub for delivering online courses, managing course content, and facilitating communication between learners and educators.

Video conferencing tools: Video conferencing tools like Zoom, Skype, and Google Meet can facilitate live virtual classes and meetings, allowing learners to connect and collaborate with educators and peers from anywhere with an internet connection.

E-books and online reading materials: Digital reading materials like e-books, online articles, and blog posts can be accessed and downloaded from anywhere with an internet connection, allowing learners to read and engage with course materials independently.

Interactive multimedia tools: Interactive multimedia tools like H5P, Articulate Storyline, and Adobe Captivate can be used to create engaging and interactive learning experiences, including quizzes, simulations, and interactive videos.

Social media and discussion forums: Social media platforms like Facebook, Twitter, and LinkedIn, as well as online discussion forums like Reddit and Discourse, can facilitate communication and collaboration between learners and educators, allowing for peer-to-peer learning and knowledge sharing.

Mobile learning apps: Mobile learning apps like Duolingo, Khan Academy, and Quizlet can provide learners with on-the-go access to course materials and learning resources and facilitate self-directed learning.

Overall, andragogy's digital tools and platforms for digital learning are diverse and continually evolving. By effectively leveraging these tools, adult educators can create engaging and personalised learning experiences that meet adult learners' needs and preferences. [Chapter 5](#) lists digital tools and platforms.

In conclusion, integrating digital tools and platforms into adult education, or andragogy, has become imperative to enhance access, flexibility, engagement, and personalisation in the learning process. Adult educators must adapt to these evolving needs as the world embraces the digital age. The examples provided, such as Learning Management Systems, video conferencing tools, e-books, interactive multimedia tools, social media, and mobile learning apps, offer a glimpse into the vast array of resources.

By effectively leveraging these digital tools, educators can foster a dynamic learning environment that empowers adult learners to engage with course materials on their terms, collaborate with peers and instructors, and even pursue self-directed learning opportunities. The future of adult education is undoubtedly digital, and by embracing this transformation, educators can help learners of all ages achieve their educational and personal goals in an increasingly interconnected and tech-driven world.

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3

CHAPTER 3: Training/Education Needs of Adults

Authors

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Adult education is a particular object of study that includes and combines many fields of knowledge of various scientific disciplines.

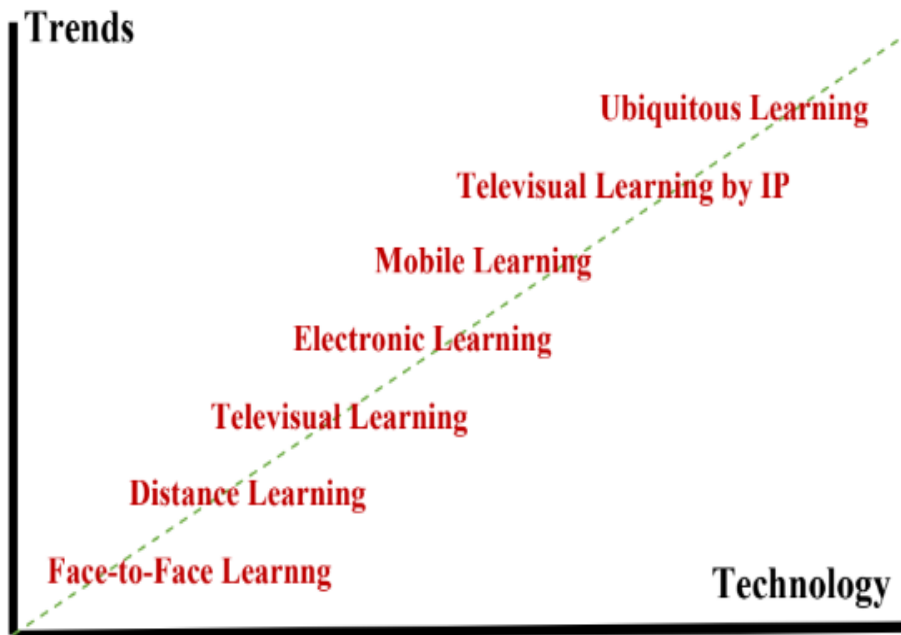
To avoid and clarify its semantic ambiguity, it is necessary to have a clear concept of education. Education is indeed a complex term intertwined with various phenomena, and it must be tailored to meet the specific training needs of adults. Adults will demonstrate sensitivity and attentiveness to the topics covered if they prove helpful in solving immediate daily life problems or enhancing their ability to reflect upon them. The educator cannot ignore them and, as a first step, must dedicate themselves to understanding the background of the person in front of them.

Indeed, every human being expresses themselves through their existence in the world and their growth within it. It is important to note how the progress of adult education sciences moves and develops, echoing the fundamental problems closely linked to individuals' existential questions in their daily lives.

The development of technology is also an essential factor, as it has completely changed the available approaches, potential solutions, and associated needs. We do not live anymore in a world where the need for education is only based on "face to face" methods, and these methods cannot be "copy-paste" to be implemented with the new technologies¹.

Today, particularly among adults, there is a growing demand for learning that can occur anywhere, anytime, and through various systems. We are currently in the era of what is often called 'Ubiquitous Learning.' It's crucial to recognise the specific requirements of the new tools available to ensure adequate training and education through them.

¹ "Operative online education often needs more design and more energy than in- a physical learning process. Is it not a translation of classical teaching in online learning? It demands strict discipline and an active action with a comprehensive effort, and if not managed well, it can quickly turn into 'Zoom Classroom Fatigue.'" Jackowicz S. & Sahin I.,129.



The change caused by technological advances in learning tendencies²

To begin our analysis of needs, it can be helpful to make a primary distinction between 'traditional learning'³ and 'e-learning',⁴; bearing in mind that neither teaching method is necessarily superior to the other, as each has its advantages and drawbacks.

Difficult times, like the COVID-19 epidemic, have spotlighted the need for effective communications through differing means more than ever⁵, boosting the need to be aware and competent. As already said, “copy-paste” did not and does not suffice.

This has caused educators to reconsider their current methods of instruction and give adults various tools to improve learning, hoping that some changes will endure.

These unanticipated occurrences highlighted the shortcomings in the educational systems of many nations, including the need for more technical tools and expertise and the discontent with the general educational approach.

The table³ below highlights the key distinctions between the two methods of instruction.

² Özarslan, Y. In: Jackowicz S. & Sahin I., p.60: *Figure 1. Technology and Learning Tendencies.*

³ Rashty D.

	Traditional Learning	e-Learning
Classroom discussion	The teacher usually talks more than the learners.	The learner talks at least as much as or more than the teacher.
Learning process	The whole class participates in the learning; there is almost no group or individual study.	Most of the learning process takes place in groups or by individual learners.
Subject Matter	The teacher conducts the lesson according to the study program and curriculum.	The learner determines the subject matter; the study is based on various sources of information, including web data banks and net experts located by the learner.
Emphases on the learning process	The learners focus on "what" rather than "how." Both learners and teachers are preoccupied with completing the required subject matter quota. Instead of engaging in inquiry-based education and problem-solving, learners are tasked with assignments set by the teacher.	The learners focus more on "how" rather than "what." The learning process includes research that involves searching for and collecting information from web databases and authoritative sources on the communications network. This approach makes the learning better connected to the real world, with richer subject matter and includes materials in various formats.
Motivation	The learner's motivation is low, and the subject matter feels "distant" and disconnected from their interests.	The learners' motivation is high due to their involvement in relevant topics and their engagement with technology.
Teacher's Role	The teacher holds the role of authority.	The teacher guides the learners to the information.
Location of learning	The learning takes place within the classroom and the school.	The learning takes place without a fixed location.
Lesson structure	The teacher determines the structure of the lesson and allocates time accordingly.	The dynamics of the group influence the structure of the lesson.

Theory

In the scientific literature of adult education, "the changement" is one of the most recurring themes⁴⁵; discussed by various authors in two distinct contexts.

⁴ De Cicco R.

⁵ Cardinali C.

The first context is social, encompassing events that lead to possible role modifications (such as family, work, and civic roles) and induce sociologically evident behavioural changes.

The second context is material, focusing on the cognitive and methodological transformations necessary to equip adults with the skills to manage new, more complex processes.

The materiality profile consists of a set of human relationships characterised by the dual necessity of improving and enhancing communication skills and effectively managing constantly changing socio-professional services.

These needs are evident in the emergence of new professional skills and the requirement to reassign personnel within work and production organisations.

Regardless of their socio-economic condition of belonging, country of origin, cultural sphere, or religious system of reference, the people of our era are all indistinctly perceived as subjects in evolution.

Contemporary reality pushes for frequent adaptation and updating to better respond to the continuous transformations that innovation and the extraordinary processes of economic, scientific and technological globalisation have made even more transversal and profound.

Demetrio⁶, an Italian pedagogist and philosopher, aware of the dynamics taking place, identified what are now considered the four primary objectives of adult education:

- ❖ The facilitation of change;
- ❖ Participation in civic life and the promotion of democratic values;
- ❖ The promotion and increase of economic productivity and entrepreneurship;
- ❖ Enhancing all aspects of personal development and growth.

The author reiterates the importance of enhancing all the learner's life experiences to be understood in the evolution of his personal history to allow learning to take root patiently. The latter does not necessarily have to take place in unintentional educational contexts; in this regard, a distinction is made between:

- (1) Education that occurs in adult age;
- (2) Education for adults.

⁶Demetrio D. - Alberici A.

The first, in particular, encompasses all situations (beyond traditional educational institutions like schools, universities, or training centres) that prompt adults to reconsider their roles and positions in the world.

This concept prompts us to reflect on the significance of education⁷ that can occur in ways not necessarily tied to predefined training programs.

Explored more extensively, adult education and certain civic processes could be strategically reinvested in shaping perspectives and directly managing policies for change and innovation within society.

The challenge is to avoid evaluating adult training strictly through the lens of work and production needs.

The priority at the centre of the processes must be shifted to individuals' possibility and ability to self-realise and the progressive satisfaction that can be obtained from their path of personal growth and active citizenship.

In this different meaning, innovation can innervate educational issues in adulthood.

In this regard, the perception of the epochal transition from the society of work to the society of knowledge is essential; the progressive dematerialisation of work activity has favoured the growth of its intellectual components. In addition, there is a growing interest in focusing training on acquiring skills (and meta-skills) that enhance personal and psychophysical well-being, extending beyond mere professional performance.

The theories of the learning organisation are linked to this. These theories consider the worker as an individual acquiring skills useful for life, both inside and outside the job.

In this context, it is essential to consider the holistic education of adults and their qualifications/training as two similar fields in constant dialogue.

It is Alberici⁸, in one of his recent publications⁹, who emphasises the importance of considering and situating adult education within the context of lifelong learning, which refers to a continuous learning process that spans an individual's entire life.

⁷ Any type of process (spontaneous, casual or designed) that allows the learning of new concepts, methods and behaviours, before which not adequately fielded by the learner, can be considered "educational".

⁸ Italian academic, former politician and Minister of Education.

⁹ Alberici A.

Similarly, the labour market and human resource development are integral to adult education research, not just areas of practical application.

Application/Suggestions

The trainer must have developed good listening and empathy skills to be able to understand how learners/adults intended to represent themselves in the World, their intentions and the hidden values behind those ways.

Understanding the meaning learners want to give to their existence's trajectories is a philosophical question that closely concerns every "researcher of adulthood" and every educator.

In line with this idea, other studies¹⁰ outlined a potential strategy:

❖ Structured design¹¹

¹⁰ Based on the application of e-learning on science materials with survey research that involved several learners at three universities in Central Java Province, Indonesia. In: El-Seoud, M. S. A., Taj-Addin, I. T. F., Seddiek, N., El-Khouly, M. M., Nosseir, A.

¹¹ The need for Structured design brought forward a new discipline, the so-called "Pedagogical design," which development teams apply when designing, creating, and evaluating teaching materials.

It is based on the methodical use of awareness about practical work, building an educational process with an "open architecture," and creating a natural learning environment.

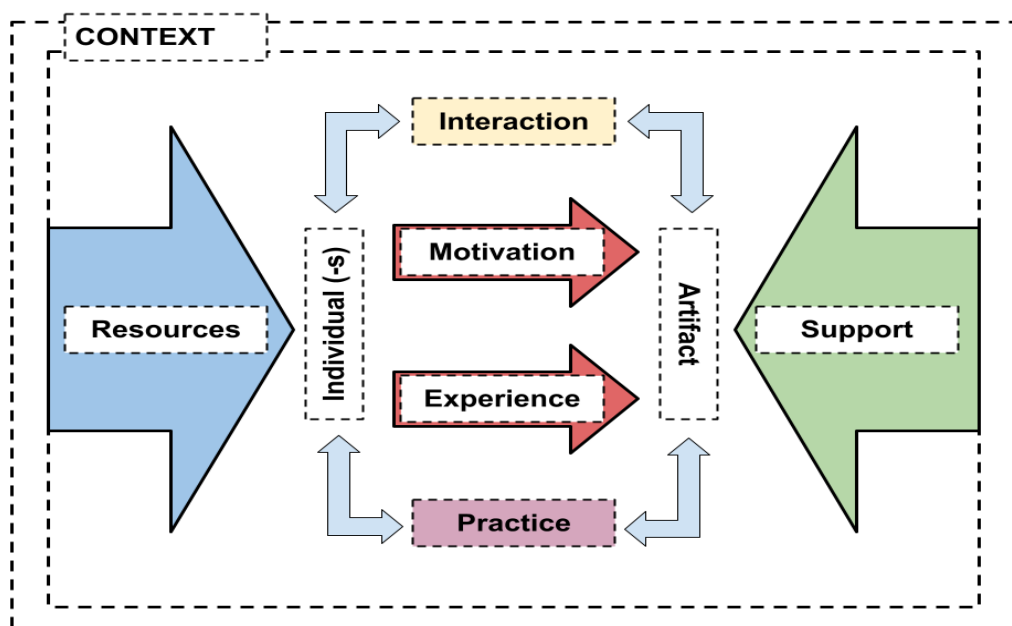
Pedagogical design technology is relatively simple. It requires understanding the needs of learners, defining learning goals and then transferring data and information as rapidly, precisely, and professionally as possible. At the same time, the tasks of a pedagogical designer are extensive and very difficult, such as:

- *Analysis of the target learners' needs, competencies, and expected learning outcomes.*
- *Determination of the goals and objectives of the educational material*
- *Analysis and structuring of materials according to the goals*
- *The choice of means and methods of educational work*
- *Creation of elements, style, and visual design of the course*
- *Development of tests and tasks, controls, and information collection*
- *Create a course using the appropriate tools or task team members to develop specific elements.*

- ❖ Collaboration between learners and teacher;
- ❖ Comprehensive explanations;
- ❖ Experimental/practical activities to put immediately in use the skills;
- ❖ Learning objectives and required performances;
- ❖ Assistance with time management;
- ❖ Exercises to build confidence and motivation about the acquired knowledge.

Some authors go further, indicating that this strategy, in combination with e-learning, proved to be even more efficient than the traditional one as it works much faster¹², but with the condition of keeping a higher level of motivation and self-discipline¹³.

Translating this idea into a table:



The stages of e-learning success¹⁴

- *Development of methods for evaluating the results and effectiveness of materials*
- *Elaboration of solutions for further improvement of educational content Such an exact sequence will ensure the qualitative growth of the educational material as the work progresses and hone the forms of its presentation.”.*

Gumennykova, T., et al.

¹² Jethro, O. O., Grace, A.M., & Thomas, A. K.

¹³ Cevik, H., & Duman, T.

¹⁴ Picture remade from: Noesgaard, S. S., & Ørngreen, R. *Figure 1. Key Factors Influencing E-learning Effectiveness.*

Additionally, for e-learning in particular, the following is considered relevant:

- ❖ A supportive learning environment,
- ❖ A high level of motivation.

The first one can be incorporated within the previously mentioned 'Structured Design', which must consider various essential aspects for maintaining motivation:

- ❖ Ensuring interaction between learners and teachers;
- ❖ Offering opportunities for learners to interact with each other¹⁵;
- ❖ Applying knowledge to real-life situations.

The final key factor, on which many authors concur, is perception. It is regarded as a potent force for enhancing motivation by fostering enthusiasm, leading to the development of advanced skills¹⁶.

These two elements (a supportive learning environment and a high level of motivation) proved to be particularly challenging during the pandemic, as mental stress has a substantial impact on learning outcomes¹⁷.

¹⁵ The relevance of interaction with the content has different impacts:

- *Between learners:*
 - Produces an internal dialogue where they think, discuss, and explore the content; and
 - Allows them to learn to navigate the group dynamics;
- *With the instructors:*
 - It is essential because learners gain experience from an instructor who is a content expert.

In this sense, Moore, M. summarises the previous suggestions in the following list of “*techniques that need to be provided by teachers to stimulate learner motivation in using e-learning:*”

(1) *keeping in mind that learners themselves must experience motivation,*

(2) *explaining to the learners how to use e-learning,*

(3) *creating a learning environment where the learners do not feel like learning alone,*

(4) *encouraging learners to collaborate,*

¹⁶ Kurniawan, D. A., Astalini, D., Putri, Y. E., Jannah, N., & Puspitasari, T. O. Ganeb, M.D. & Montebon, D. R. T.; Radovan, M. & Makovec, D.; Zainal, N. F. A., Shahrani, S., Yatim, N. F. M., Rahman, R. A., Rahmat, M., & Latih, R.

¹⁷ Jackowicz S. & Sahin I.

The additional challenge has always been the time factor. The changes driven by the pandemic significantly accelerated e-learning dynamics worldwide and posed many adaptation difficulties.

Many issues arose with a long-lasting impact on education. Several research were conducted on these issues, and we can now list the most significant ones that emerged ¹⁸:

- ❖ The sudden transformation to online teaching.
 - Rapid global changes confuse every field, and as with any new situation, it can be challenging to adapt initially. This is especially true for teachers and learners new to this communication style. The sudden shift to online teaching notifications resulted in losing interest in learning.
- ❖ Technology and Accessibility Challenges from learners' perspective.
 - Many learners are accustomed to traditional face-to-face teaching. They may be unprepared for this transition, especially elementary learners, who have limited exposure to technological tools like PCs and laptops in many countries.

Hence, we analysed the factors in adult education that influence the effectiveness of introducing digital tools in higher education to identify potential solutions:

- ❖ Learners must acquire new skills and competencies that allow them to take full advantage of the dividends of digital technologies.
- ❖ Educational programs should promptly respond to societal and labour market changes.
- ❖ Universities should become a space for designing and piloting social reforms to ensure the opportunity to use the benefits of digitalisation in society.
- ❖ It is necessary to use digital tools to create new educational spaces to increase the availability and quality of educational services.¹⁹

But once again, an effective change will require time; therefore, so far, it seems that “learners still prefer classes over online classes” due to different factors such as:

- ❖ Frustration,

(5) helping learners to be able to interact with fellow learners more effectively, and

(6) always interacting with the learners, monitor learner attendance, and provide ongoing feedback.”.

PP.80-81.

¹⁸ Hassan M.M.

¹⁹ Jackowicz S. & Sahin I.

- ❖ Fear, and
- ❖ Isolation.

If the underlying issues are adequately addressed, teachers can prevent learners from disconnecting during online courses²⁰.

Some authors focused on the difference between two typologies of digital teaching to understand which one produces better results or how the two should interact to make e-learning more effective, as they answer different needs:

Asynchronous communication

“is defined as communication that occurs using e-mail and discussion forums, where the teacher plays a more critical role as a facilitator between

²⁰ Where indicated as an element generating such feelings:

- *No clear picture of the course area and the working process*
- *Loss of awareness of the course target. ILO*
- *Sometimes, there is a weak connection to the university IT department.*
- *Variation of internet availabilities*
- *The availability of learning materials, instructions, devices, and updated Information (the course area and the map)*
 - *A bad connection with course coordinators.*
 - *In many situations, the course literature is unusable.*
- *Absence of application for the tasks, sometimes unsynchronised with what they learned from the book.*
- *Absence of information regarding specific subjects, materials, and solving methods.*
- *It is unpractical to teach the practical exercises of design course in an online mode*
- *Less interactive due to no contact between (learners, teacher), (learner-learner) (Learner – digital lecture), which makes it very dull and quickly lose concentration.*
- *A weak and unproductive communication with the course coordinator*
- *An essential part of the learners is a feeling of loneliness.*

Jackowicz S. & Sahin I.

learners...”²¹, “...Also, pre-recorded video, allowing learners to view multimedia”²².

Benefit:

- ❖ “The flexibility it provides for e-learning anytime, anywhere, is the paramount convenience of online learning”²³;
- ❖ “Allows learners to spend time contemplating their thoughts, interacting more deeply with content, feeling part of the learning community, and posting more thoughtful comments on discussion boards”²⁴;
- ❖ “Enhances cognitive engagement with the content, especially when difficult.”²⁵

Conversely:

Synchronous technology:

“is defined as live video and audio streaming with instant feedback”.

Benefit:

“Ensure that learners are involved in the learning process so that they feel like they are part of the learning process... Higher engagement”²⁶.

Other authors suggested the best solution to combine them, but the results do not seem to encourage that so far²⁷, “there is little recent research on how synchronous interaction motivation can stimulate asynchronous interaction and vice versa”, but it is still true that “Asynchronous communication is the traditional method of attracting learners to the digital education system”²⁸.

²¹ Cacciagrano D., Corradini F.

²² Sharma, D.

²³ Sharma, D.

²⁴ Kayvan K., Kamran R., & Saudi I.

²⁵ Hrastinski, S.

²⁶ Jackowicz S. & Sahin I.

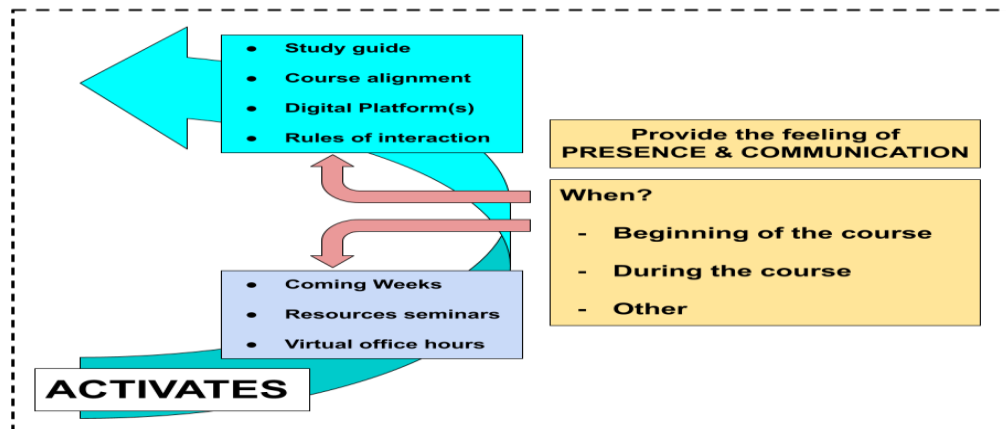
²⁷ Cabero-Almenara, J., et al.

²⁸ Mc-Brien, J. L., Cheng, R., & Jones, P.

Suggestion/conclusion

The fact that interpersonal communication seems to be the most effective factor for the educational process has suggested a psychological approach to the consequences of the digitalisation of education²⁹.

Optimising interpersonal interactions is an effective way to ensure the success of digitalisation to summarise the process with the following table:



*The Actions Required for Creating a Compelling Presence and Communication in Digital Education*³⁰

Going deeper into each phase/part of a course yields various recommendations for enhancing its effectiveness:

Beginning of the course:

Creation of a communication plan with each learner as a personalised approach: The learners will reflect on themselves, set goals, and think critically.

Additionally, other authors suggest:

- ❖ Creating a calendar.³¹
- ❖ Creating an easy and creative study guide with an Intended Learning Outcome (ILO).³²:

²⁹ Lowenthal, P. & Dunlap, J.

³⁰ Picture remade from: Jackowicz S. & Sahin I., *Figure 6. The Actions Required for Creating a Compelling Presence and Communication in Digital Education*, p.138.

³¹ Meens, E., Bakx, A.

³² Hamzah A.

The learning objective should align with the following:

- Goals,
- Learners,
- Assessment.

During the course:

Constantly prove empathy through well-designed communication channels:

- ❖ Weekly open discussion session about “what’s next”³³
- ❖ About their feelings³⁴,
- ❖ Checkpoint system.

Therefore, a system of:

- ❖ What to do next,
- ❖ Weekly checkpoints list.

Other:

- ❖ Effective communication:

It is based on several priority factors, especially in digital communication:

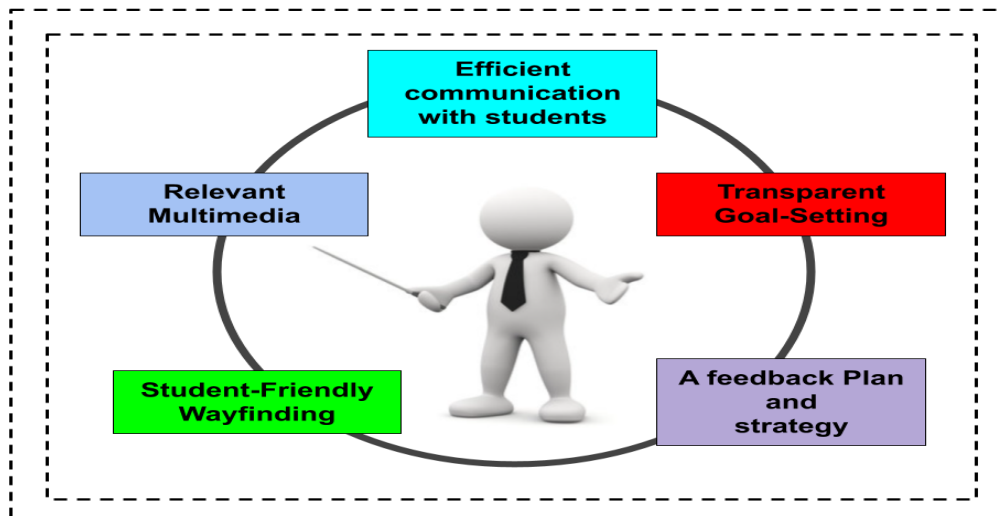
- ❖ Be transparent with the learners about the goals of the course
- ❖ Clarify which competencies will be developed
- ❖ How they will be assessed.

Learners need to reflect and provide evidence of their progress toward mastery of each of those competencies.

³³ Tu, C. & Mclsaac, M.

³⁴ Triacca, S.

As summarised by the following picture:



*The Influential Role of Presence and Communication in a Learning Community*³⁵

The first 15 minutes in online teaching are considered crucial for:

- ❖ Checking in on learners' feelings,
- ❖ Understanding their expectations and goals,
- ❖ Identifying potential challenges;

The creation of a positive and engaging connection ensures relaxed and enjoyable communication for the rest of the lesson³⁶.

Methods to achieve this may include asking learners to:

- ❖ Display their full names and photos in their screen area,
- ❖ Participate actively and openly in discussions;

And:

- ❖ Always call them by name,
- ❖ Memorising essential details.³⁷

³⁵ Picture remade from: Jackowicz S. & Sahin I.: Figure 10. *The Influential Role of the Presence and Communication in a Learning Community*.

³⁶ Coman, C., et al.

³⁷ These techniques seem to boost a sense of uniqueness making the learners more inclined to interact and listen.

Gregory, J., (2013).

Additional recommendations for effective management include:

- ❖ Using easy conversational language supported by visual material,
- ❖ Accepting all learners' questions,
- ❖ Creating a feedback system.
 - Specifically to maintain attention, as attention generally drops after the first 12-15 minutes. It is recommended to generate a question time, a moment in which learners are directly engaged in sharing their thoughts³⁸ aloud.
 - At the end of the lecture, consider:
 - Providing a conclusion
 - Summarising key subjects, information, and issues
 - Encouraging opportunities for connections beyond the lecture topic
 - Implementing a conclusive and practical activity.

Many authors recommend breaks during the lecture as they help:

- ❖ Actively process new information³⁹,
- ❖ Enhance learners' focus⁴⁰ on the lecture

It is generally advisable to include breaks approximately every 8-12-15 minutes, with each break lasting 2-3 minutes⁴¹.

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³⁹ Burgan, M.

⁴⁰ Rowe, M.

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4 CHAPTER 4: Methodology for the Education of Adults in Digital Learning

Learn effective strategies for teaching adults in digital learning environments.

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Overview

As discussed in the previous chapters, adult learning is becoming more digitalised, which has been fast accelerated by the events of the 2020 COVID-19 pandemic. A report by the *Organisation for Economic Co-operation and Development* (OECD) noted that 23% of adults with high digital learning skills participate in online learning each year. On average, across OECD countries, only 5% of adults score at the highest level of digital proficiency in the Programme for the International Assessment of Adult Competencies (PIAAC), a survey of adult skills. About 15% of adults lack even the most basic computer skills. The report notes that this chain of events has amplified the need to ensure that adults are not marginalised due to their lack of digital technology experience. This particularly applies to adult learners from less privileged backgrounds who don't have the same level of access to digital technologies as others (OECD, 2020).

We also discussed the various challenges specific to digital learning, which adult learners may find hard to navigate, and the need to do more to ensure that our adult learners from all backgrounds feel confident and included in digital learning.

Introduction to Adult Learning and Digital Pedagogy

To teach adult learners effectively, we must first understand the traits of adult learners to gain better insight into which approaches are most appropriate for educating them. In Chapter 2, we discussed the [Characteristics of Adult Learners](#), and concluded that adults are **self-directed learners** and are more motivated to learn than children. Knowles, a pioneer of adult education, suggests a deep psychological need for adults to be *seen by others* as living a self-directed life (Knowles, 1968). The image below summarises the characteristics discussed in Chapter 2:

Characteristics of Adult Learners

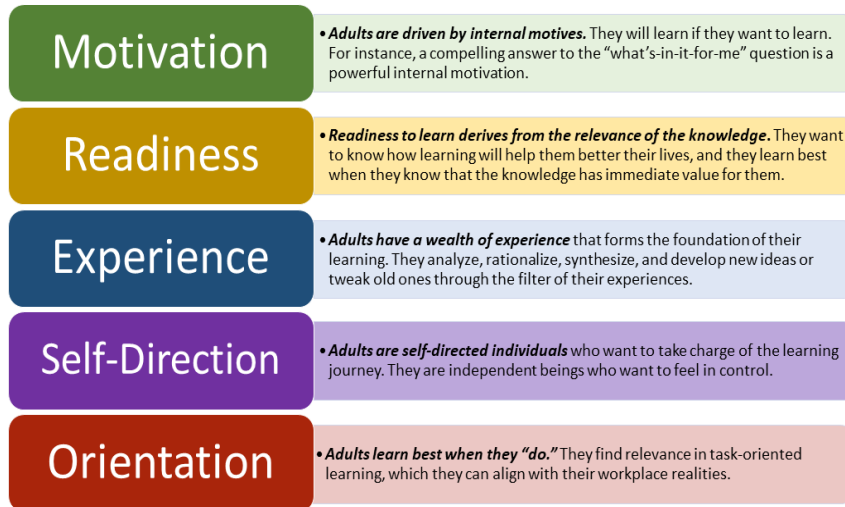


Image source: [LinkedIn article](#)

Additional characteristics of adult learners include facts that adults are:

- ❖ **Goal-oriented;** thus, they enrol in a course or program to gain practical skills, advance their careers, or pursue personal interests. This is in contrast to how children learn, which is subject-focused learning.
- ❖ **Problem solvers,** thus, do not wish to learn simply by revising and regurgitating facts. Learners will be more engaged in the concept at the heart of the question by tying in relevant material and creating a ‘problem’ that needs to be solved.
- ❖ **Relevance-focused,** and they need to see the practical application of their learning. This has been referred to as “immediacy of application” by Hanstock (2004), as they wish to apply their newly acquired knowledge to everyday life as quickly as possible. The short--, medium--, and long-term benefits of learning a new topic must be explained to the learner so that they will buy into it and participate.
- ❖ **Team-orientated,** they enjoy connecting with others in their courses, sharing ideas, and working together to progress in their fields.
- ❖ **Change-resistant** when new approaches are introduced. This relates to the concepts of relevancy and experiences; adult learners believe they know what is best for them regarding learning approaches and do not wish to veer away from this.

Principles of Adult Learning

In Chapter 2, we discussed the [4 principles of andragogy](#), the principles of adult learning, which are based on the idea that adults learn differently than children and

teenagers. Malcolm Knowles (Shift,n.d) identified six principles of andragogy when he developed the concept in 1968. Let's explore the other two principles:



Image source: [Peak Performance Center](#)

The four principles mentioned in Chapter 2 align with the six principles depicted in the image above as follows:

- ❖ “Self-directed learning” aligns with the principle of “Self-directed.”
- ❖ “Use of Experience as a Resource for Learning” aligns with the principle of "Experience."
- ❖ “Relevance” aligns with the principle of "Relevant"
- ❖ “Problem-centred learning” aligns with the principle of "Goal-oriented."

The other two principles are:

1. **Practical:** Adults need to participate actively in the learning process. They don't want to be taught simply by listening to their teacher without interaction. Giving adults control of their learning, such as with massive open online courses (MOOCs) or a project to implement their ideas, is an excellent way to satisfy this need.
2. **Task-oriented:** Adults prefer a team-orientated and respectful learning environment. Adults are more mature learners and like to work together to overcome challenges and help each other progress through tough situations. Exercises such as group work often help adults segment the workload and buy into the task.

These principles highlight the importance of engaging adult learners in learning and making learning relevant to their lives.

Digital Pedagogy

Digital pedagogy has transformed how we teach and learn, offering new opportunities for collaboration, personalisation, and engagement. However, digital pedagogy also presents unique challenges, such as the need for digital literacy skills, the risk of information overload, and the potential for social isolation. Educators must be aware of these challenges and develop strategies to overcome them. Let's look at these challenges in greater depth.

A rude awakening: As mentioned earlier, the catalyst for the influx of adult learners participating in digital learning was the COVID-19 pandemic. Before this, many of our learners, skilled or otherwise, were not taught much digitally. The pandemic highlighted the differences in resources among learners from different backgrounds. The OECD reported that “low- and medium-qualified workers experience a reduction in informal learning due to COVID-19 that is twice as large as among tertiary-educated adults.” This underlines the necessity for creating a digital learning environment that suits everyone's needs and situations (OECD, 2020).

Differences in educational backgrounds: As we have just touched on, learners will have various educational backgrounds and ability levels upon returning to education as adults. This can be a result of domestic issues with their parents at a young age or having to migrate to a new country to flee war or economic deprivation. Whatever the reason, learners with Interrupted Formal Education (SIFE) who are returning as adults can feel very anxious and/or embarrassed by their knowledge gaps (Browne, K, 2019). These learners might feel withdrawn from the group and isolated if not given the correct care and attention. Surprisingly, there is very little academic research yet on SIFE learners, as DeCapua, Smathers, and Tang (2007) described it as ‘practically non-existent.’

Disability considerations: There will, of course, be adult learners who have disabilities of some sort. Disabilities may be physical; a learner may be unable to write, hear, or see. A disability may also be a learning one, such as autism, ADHD, or Dyspraxia. A learner's disability may mean the teaching approach must be altered to cater to them. Some of these disabilities are multifaceted; autism, for example, is a spectrum disorder, so some learners may have certain traits that others do not. Very little academic research is written on how to support adults with autism (Howlin et al., 2015). These factors mean that extreme care and due diligence must be enacted to make sure that adult learners with disabilities are understood and a course of action is agreed upon that is best suited for them specifically.

Lack of interaction: We have already learned that adult learners enjoy the communal aspect of learning, helping one another to understand and better themselves. When this is taken away from them, it can lead to them struggling in the online classroom. A research paper by Croft, Dalton, and Grant (2015) suggested that 22% of adult learners feared isolation would

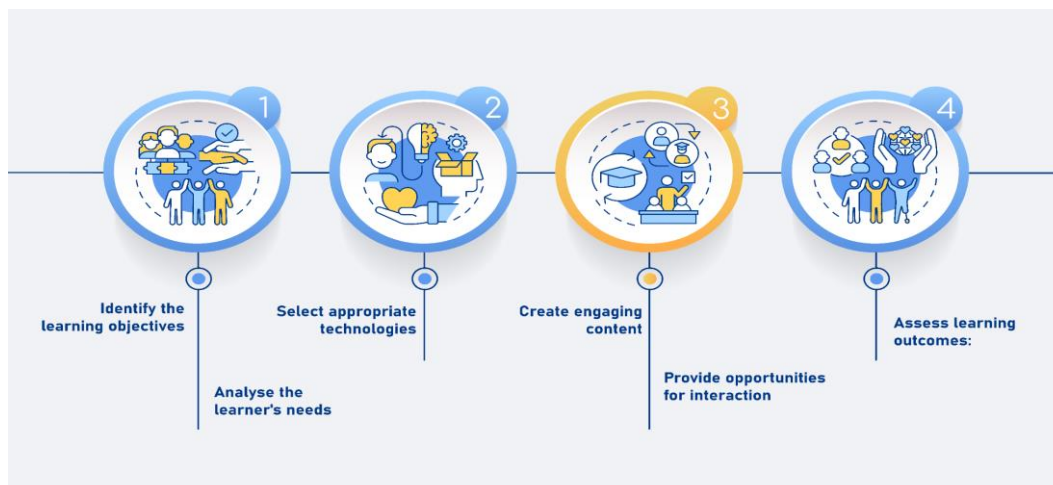
hold them back from their studies. It is hard to replicate the same interpersonal energy on a Zoom call that you would get in a traditional classroom, which is a potential sticking point for our adult learners.

Lack of Motivation: Tying into the lack of interaction, adult learners may lose focus if they have not bought into online conversations. They might find focusing on the discussed topics easier with that social connection. This also relates to adult learners' search for relevance in their learning. They disassociate from it if they are simply revising a topic unrelated to their goals or objectives.

Technological issues: Digital learners can face several potential logistical problems. This issue also has a socio-economic component; not everyone in a course will be in the same income bracket. Not everyone has access to a PC or laptop, with many learners using their smartphones to access Zoom/Teams/Skype. They also rely on Wi-Fi or data connectivity, which varies from person to person. This can lead to disruption in the lesson if learners disconnect due to poor signal. Again, this can lead to other classmates losing focus.

Principles of Instructional Design

Instructional design is a systematic process for creating effective and efficient learning experiences. Several key principles of instructional design are particularly relevant to online learning:



Let's discover each of the four points depicted in the image above:

1. Identify the learning objectives: The first thing to do in designing an online course is to identify the learning objectives:

- ❖ What do you want the learners to know or be able to do at the end of the course?
- ❖ When you identify the learning objectives, developing your lesson plans and structure is more straightforward.

- ❖ It also makes it easier for our adult learners (who, as we know, like to understand what they are learning) to adapt to these new topics.

A helpful way to identify these objectives is by identifying the type of learning knowledge, skills, or attitude:

- ❖ What sort of work does the subject or module you are teaching require from your learners?
- ❖ Is it an essay-heavy subject requiring much revision and memorisation (like English or History)? This is **knowledge-based**.
- ❖ **Skills-based** would apply to courses that involve the learners carrying out a specific activity that is more hands-on and requires the use of motor skills - for instance, cooking, sewing, music, and so on.
- ❖ Lastly, **attitude-based** learning covers content that focuses on understanding and values. Subjects such as Ethics, Philosophy, and Politics may fall under this bracket.

When this has been established, different templates can be applied to these learning types to help you develop the objectives as an educator. The SMART template is effective for both the knowledge and skills-based objectives.

- ❖ **S stands for Specific** - what do they need to achieve?
- ❖ **M stands for Measurable** - how do you measure their success?
- ❖ **A stands for Achievable** - are these objectives achievable?
- ❖ **R stands for Relevant** - are these objectives relevant to the learner in the long term?
- ❖ **T stands for Time-Bound** - how long will it take learners to complete these objectives?



In the case of Attitude-based learning objectives, a useful model for development is **A-B-C-D**.

- ❖ **A is for Audience** - Lay out the learning audience within the objective
- ❖ **B is for Behaviour** - What behaviour do you want to see your learners exhibit?
- ❖ **C is for Condition** - Under what conditions/scenarios will these behaviours occur?
- ❖ **D is for Degree** - To what degree will the learner be enabled? In other words, is there more of this to learn going forward?

These formats will allow you to segment your curriculum/lessons more quickly and effectively.

1.1 Analyse the learner's needs: To create an effective learning experience, it's essential to understand the learners' needs:

- ❖ Who are they?
- ❖ What are their goals and motivations for learning?
- ❖ Once this is established, you can tailor your lessons and activities around these needs and goals. This will ensure that learner's needs are met, making them far more likely to engage in digital classes and seminars.

As we know, learners' needs aren't simply their goals and aspirations for the future. An analysis must be carried out to determine the needs of those from underprivileged backgrounds and those with physical and learning disabilities. We know from the previous section that adult learners from these categories can feel left out and find the traditional means of learning difficult for various reasons. Adult SIFE learners' learning, for instance, should be contextualised, multisensory, and experimental, according to research carried out by Allender (1998). For those with disabilities, you as an educator must be mindful of how their condition relates to their learning and adapt your plans accordingly.

Autistic adult learners, for instance, typically have deficits in executive functioning and struggle to relate to peers and accept and use feedback and organisation. Brown et al. (2014) note that an autistic adult learner resembles a 'dysregulated college student' (Brown et al. 2014) due to their poor organisation and reliance on others to motivate and guide them. Because of the lack of academic knowledge of adult learners with these conditions, a generally useful method for these learners is 'differentiated instruction' in a trial-and-error fashion (Mellard, Woods & Lee, 2016). Work around these learners to determine the best course of action for them and see how it works, reviewing it with them and making adjustments where necessary.

2. Select appropriate technologies: Many technologies are available for online learning, from learning management systems to social media platforms. It's important to select technologies that meet the needs of the learners and support the learning objectives. Get to know what resources your learners have ahead of time; do they all have access to the devices necessary for your plans? Do they all have adequate internet connections to carry out these tasks? If you ensure that all learners are on an even playing field, you significantly reduce the risk of individuals feeling isolated or not as involved as the rest of the group.

3. Create engaging content: Online learners can quickly disengage if the content is dry or dull. Use multimedia resources such as videos, images, and audio to make the content more engaging. Use tools such as Moviemaker, PowerPoint or a video from YouTube to get your point across. Better yet, you can assign your learners a task of their own to share with

the rest of the class. This will ensure that they are focused and have a goal to keep them motivated.

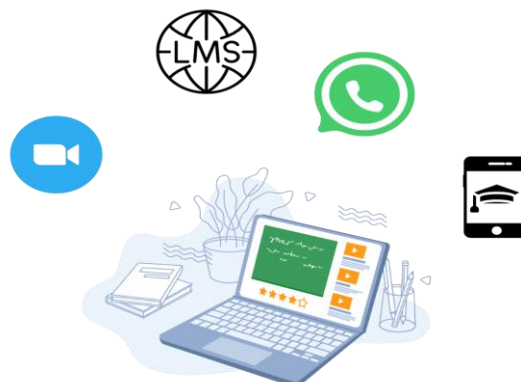
3.1 Provide opportunities for interaction: Online learners need opportunities to interact with each other and with the instructor. This can be achieved through discussion forums, live chat sessions, and collaborative projects. You can also assign a group project, get them to share their content on Google Drive, and have them collaborate. Not only does this keep them motivated, but it helps them remain connected socially. Scholars have also noted that interaction-based learning benefits SIFE learners and those with learning disabilities. Allender (1998) indicated that SIFE learners should ideally be taught in smaller groups in what he describes as a ‘community of learners’.

4. Assess learning outcomes: Finally, assessing whether the learners have achieved the learning objectives is essential. You can plan the next phase of their development when this has been established. You may find a handful needing additional help overcoming a certain topic or concept. By ensuring that you know how each adult learner progresses, you ensure that nobody feels isolated or lost. This can be done by giving the learners quizzes, assignments, or other forms of assessment to complete. Resources like Microsoft Teams and Google Drive benefit from these evaluation methods.

Educators can create effective and engaging online courses for adult learners by following these principles. This set of principles ensures that the learners feel motivated, interested, and connected, crucial aspects of adult learning.

Selecting Appropriate Technologies

Many different types of technologies are available for online learning, each with strengths and weaknesses. Some of the key technologies that are commonly used in online learning include:



Learning management systems (LMS): LMSs allow educators to create and manage online courses. They often include discussion forums, quizzes, and grade books. Popular examples of this are Google Classroom, Moodle, and Blackboard Learn.

Video conferencing tools: Video conferencing tools such as Zoom or Google Meet enable live discussions, lectures, or office hours.

Social media platforms: Social media can be used for discussion, collaboration, and sharing resources. Apps like Facebook, Facebook Messenger, and WhatsApp are suitable for ensuring the group remains connected and can work together to solve problems,

Mobile learning apps: Mobile apps enable learners to access course content on the go.

When selecting technologies for online learning, it's essential to consider the needs and preferences of the learners, as well as the learning objectives. For instance, some group members may own smartphones incompatible with a particular app or tool. This is why it is essential to ensure that you are aware of your class's resources ahead of time, as it ensures there are no logistical stumbling blocks further forward.

Creating Engaging and Interactive Learning Experiences

Creating engaging and interactive learning experiences is essential for keeping adult learners motivated and interested in the course. Here are some tips for creating engaging and interactive online courses that will help stimulate a healthy and energetic learning environment among your learners:

Use multimedia: Incorporate videos, images, and audio into the course content to make it more exciting and engaging. For instance, if something you're teaching is entirely conceptual, use a visual aid as a metaphor for your learners. This will help them establish a reference point and better understand the topic.

Encourage interaction: Provide opportunities for learners to interact with each other and the instructor. This can be done through discussion forums, live chat sessions, and collaborative projects. You could ask a learner to speak to the class via online chat to share their opinions or answers to a question. This encourages social interaction and allows you, as the educator, to ascertain your learners' understanding of the topic.

Provide feedback: Learners need feedback on their progress to stay motivated. As we know, this is mainly the case with adult learners. Provide regular feedback on assignments and assessments. This will ensure that learners feel more aware of where they are and can set their goals accordingly. For instance, this may be carried out as weekly quizzes. This is particularly important to learners who have special circumstances. If you have tailored their objectives or tasks, it's important to use feedback as a means to work out whether or not it is proving successful or whether it needs to be reconsidered.

Personalise the learning experience: Adult learners appreciate personalised learning experiences. There may be learners at different levels of understanding regarding a particular topic or module. Some of them may have specific needs or disabilities that prevent them from carrying out their work the same way as the rest of the class. It is, therefore, essential to use technology to tailor the course content to the needs and preferences of individual learners. It may be beneficial to arrange a one-on-one Zoom call with them to set individual tasks or goals.

Gamify the learning experience: Gamification can make learning more fun and engaging. Use game-like elements such as points, badges, and leaderboards to motivate learners. You could organise a competition where you ask your learners to produce the best work relating to the subject in question. As adult learners are very target-oriented, adding a competitive element to proceedings can result in a higher level of performance from the class and maintain a healthy spirit in the classroom.

By following these guidelines, educators can create effective, engaging, and tailored online courses for adult learners.

Assessment and Evaluation in Digital Learning Environments for Adults

Principles of Assessment

Assessment is a critical component of any educational program. It allows educators to measure the learning outcomes and determine whether the learners have achieved the desired knowledge, skills, and competencies. A study by *Haifa F. Bin Mubayrik, "New Trends in Formative-Summative Evaluations for Adult Education,"* suggests that evaluation and assessment are helpful because they ensure that adult learners are learning and not 'surface learners' simply understanding concepts in basic terms.

Several fundamental principles of assessment are particularly relevant to digital learning environments:



Image source: [genially](https://genially.com)

Relevant: Alignment with learning objectives: Assessments should align with the course's objectives. The questions or tasks should assess the knowledge, skills, and competencies the learners are expected to acquire. As mentioned, some learners may be on more tailored learning plans to accommodate special circumstances. Ensure that, at their core, these altered assessments still meet the overarching learning objectives of the curriculum.

Authentic: Assessments should be authentic and relevant to real-life situations. They should simulate real-world problems and challenges that the learners might encounter professionally or personally. This allows the learners to contextualise their learning skills and how they can be used.

Reliable: Assessments should be reliable, producing consistent results over multiple administrations. We already know that adult learners are creatures of habit who like to keep a similar structure throughout the learning process. Establishing that there will be assessments at a certain point throughout the term allows adult learners to plan, set targets and work toward success.

Valid: Assessments should be valid, meaning they measure what they intend to measure.

Fair: Assessments should be fair, meaning that all learners have an equal opportunity to demonstrate their learning. This relates to what we have covered on the topic of tailored learning. If someone needs specific adjustments, it must still follow the same learning objectives as the rest of the class.

Transparent: Transparency in assessments refers to the clarity and openness with which the assessment criteria, methods, and expectations are communicated to learners. It involves ensuring that learners clearly understand:

- ❖ What is expected of them,
- ❖ How they will be evaluated,
- ❖ The purpose behind the assessments.
- ❖ The relevance and importance of the assessment to their learning journey.

This approach fosters trust and fairness and aids learners in effectively preparing for and engaging with the assessment process.

By following these principles, educators can design practical assessments that accurately measure the learning outcomes of adult learners in digital learning environments.

Designing Effective Assessments

When designing assessments for digital learning environments, educators must consider the unique features and limitations of the technology. Here are some tips for creating effective assessments:

- ❖ **Identifying learning outcomes** and matching these with assessment criteria for the educational programme.
- ❖ **Use various assessment types** such as quizzes, essays, case studies, and projects. This will allow learners to demonstrate their learning in different ways.
- ❖ **Provide clear instructions** for each assessment task, including the format, length, and due date. Learners can then begin to plan and organise themselves in preparation for this, which greatly helps them with their time management.
- ❖ **Use technology to enhance assessments**; for example, online quizzes can provide immediate feedback to learners, and video assignments can enable learners to demonstrate complex skills or competencies. For instance, you can assign the learners to make a short film or trailer to convey the learning objectives you want them to complete.
- ❖ **Ensure that assessments are accessible to all learners**, including those with disabilities. This might involve providing alternative formats or accommodations.

Evaluating Learning Outcomes

Evaluation is the process of measuring whether the learning objectives have been achieved. There are several strategies for evaluating learning outcomes in digital learning environments:

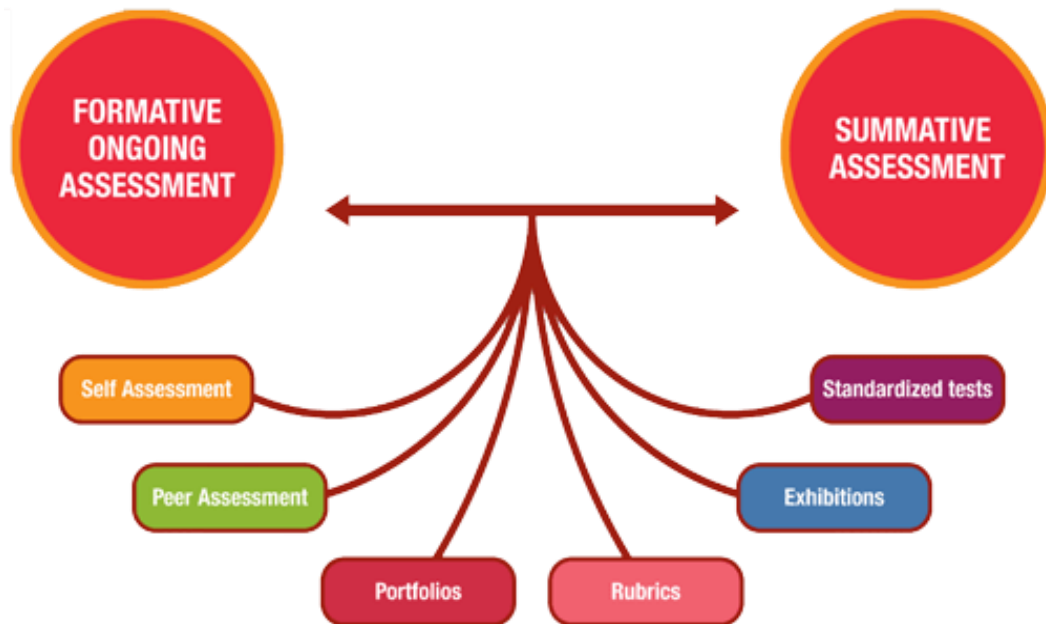


Image source: [Structural Learning](#)

Self-assessment: Encourage learners to reflect on their learning and evaluate their progress toward the learning objectives. Setting up a private call to discuss this would allow you to see if your learners understand where they might be going wrong, which can then be worked upon. It must be noted, however, that adult learners may not be subjects for self-assessment. This is because they tend to respond poorly to criticism regarding their work, as they are typically more worried about not achieving their goals than child learners would be.

Peer assessment: Use peer assessment to allow learners to evaluate each other's work and provide feedback. It is also a good backup plan if the group does not react favourably to self-assessment. An article from the European Commission notes that adult learners tend to be lenient with themselves regarding assessment. They see that side of the learning process as not their responsibility. Implementing peer assessment improves the collaborative spirit in the group and fosters cooperation.

Instructor assessment: Use instructor assessment to provide feedback and assign grades or other achievement measures.

Analytics: Use analytics tools to track learner progress and identify areas where additional support may be needed. Learners can then use the analytics to understand their progression and see what they must do to improve. An article from EPAL highlighted the benefits of implementing tracker-based analytics for both the learners and the Educator and believes that it can 'shape the future of adult learning

By combining these evaluation strategies, educators can comprehensively understand the learning outcomes and adjust the course as necessary.

Practical Exercises

Let's put your knowledge into practice!

In this chapter section, we'll put theory into practice through hands-on activities. Click on the items below to check out each exercise and develop practical skills to help you succeed.

Worksheet 1

Characteristics of Adult Learners

Instructions: In this worksheet, we'll walk you through conducting a survey that examines adult learners' preferred learning preferences, goals and motivations for learning, and prior educational experiences. The survey results will be used to create an online course that meets learners' needs and preferences. Create a survey, adhere to the guidelines, and respond to the questions.

Preferred Learning Styles

Describe the four main learning preferences: reading/writing, auditory, kinesthetic, and visual. (Hint: Conduct research on each learning type and offer succinct summaries.)

Why is it crucial to comprehend adult learners' preferred learning styles while creating an online course? (Offer a succinct justification.)

Make three to five inquiries to help determine adult learners' preferred learning styles. (For example, "Do you prefer learning through visual aids such as diagrams and charts?")

Motivators and Goals

Describe the importance of considering adult learners' goals and motivations when designing courses. (Hint: Consider the effects on learner satisfaction and engagement.)

Create three to five questions that will aid in determining the objectives and drivers of adult learners. (For instance, "What is your main motivation for enrolling in this online course?")

Prior Academic Background

Describe the significance of learning about adult learners' past academic experiences while creating an online course. (Hint: Consider expanding on existing understanding and minimising repetition.)

Asking three to five questions will enable you to discover more about the prior academic experiences of adult learners. (For instance, "What is the highest level of education you have completed?")

Creating Online Courses

How would you evaluate and interpret the survey responses to create an online course that caters to the requirements and preferences of adult learners based on the survey questions created in Sections 1-3? (Offer a succinct justification.)

Based on the survey results, list three essential components or modifications you may make to the online course design. (For instance, adding additional visual aids for visual learners.)

Justify the need for ongoing evaluation and modification of the online course in light of learner input and demands. (Hint: Pay attention to the significance of learner-centred teaching.)

Analysis

Think back on how you created the survey for adult learners. What difficulties did you face, and how did you deal with them? (Offer a succinct response.)

What knowledge or understanding from this activity will you use to create surveys or online courses in the future? (Offer a succinct response.)

The worksheet focuses on designing a survey for adult learners. By completing this, you will significantly contribute to designing an efficient and interesting online course by thoroughly understanding preferred learning methods, goals and motivations, and prior educational experiences.

Worksheet 2

Designing Assessment Tasks

Select a learning objective you have identified earlier, and then select an assessment strategy that fits. For instance, if the learning aim is to "Analyse case studies," the evaluation type can be an essay.

Give precise instructions for the evaluation task you will choose. Comprise the following details:

- A.** Task explanation: Describe what the learners should do.

- B. Instructions for submission: Specify the format (online platform, file type, etc.) for learners to submit their work.
- C. Grading standards: Describe the standards by which the work will be judged.
- D. Due date: Give a deadline for submission.

Think about how technology can improve the assessment. Describe any technical platforms or tools that can make the evaluation process easier or the assignment more valuable. Use a discussion board online, for instance, to get essay criticism from other users

Analysis

Consider how you created the tests for your online course. What factors must be considered when choosing the right assessment types for each learning objective?

Describe the advantages of using technology in evaluations for both learners and teachers. Think of elements like engagement, feedback, and efficiency.

Your careful consideration of assessment formats, alignment with learning objectives, and technological integration will result in effective and interesting tests that support learner learning and accomplishment.

Conclusion

Key takeaways for educators:

- ❖ **Understanding Andragogy and Adult Learners:** The foundation of effective online adult education lies in understanding the unique characteristics of adult learners. This includes their preference for self-directed learning and the need to apply knowledge practically in their daily lives. The Knowles principles of andragogy provide a valuable framework for designing adult learning experiences.
- ❖ **Developing Tailored Online Learning Environments:** Thoughtful instructional design, technology selection, and engaging content creation are crucial. By incorporating Knowledge, Skills, and Attitude (KSA) objectives and using SMART and A-B-C-D templates for learning objectives, educators can create structured and meaningful learning experiences.
- ❖ **Navigating Technological Challenges and Opportunities:** Selecting appropriate digital tools and platforms is crucial. Educators must evaluate each technology's features and compatibility to ensure it aligns with adult learners' needs. Incorporating interactive elements like gamification and multimedia can significantly enhance engagement and retention.
- ❖ **Addressing Digital Literacy and Accessibility:** Acknowledging and mitigating the potential risks of digital technologies is critical. Educators must be cognisant of

issues like information overload, technical difficulties, and the varying levels of digital literacy among adult learners.

- ❖ **Assessment and Evaluation in Digital Learning:** Aligning assessments with learning objectives ensures that they accurately reflect the competencies and skills adult learners should acquire. A mix of formative and summative assessments, peer reviews, self-reflection, and leveraging technology for automated grading and feedback can optimise the evaluation process.

Moving Forward in Difficult Times

The challenges of difficult times, whether natural disasters, economic hardship, conflict or crises, call for educators to be adaptable, innovative, and empathetic in the evolving landscape of digital education. It is crucial to:

- ❖ **Foster Inclusivity and Accessibility:** Ensure that digital learning environments are accessible to all adult learners, regardless of their educational background or digital proficiency.
- ❖ **Promote Engagement and Interaction:** Utilise digital platforms for content delivery and foster community and collaboration among learners.
- ❖ **Continuous Professional Development:** Educators must themselves be lifelong learners, continually updating their knowledge and skills in digital pedagogy and technology.
- ❖ **Adapt to Changing Circumstances:** Be prepared to modify teaching strategies in response to feedback and evolving learner needs, especially in times of crisis like the pandemic.

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5

CHAPTER 5: Mobile Technologies - Mobile Phones

Author

Sofia MEXIA

Selecting Appropriate Technologies

Digital applications and technologies have revolutionised the way we live and work. They have made it possible to communicate with people worldwide, access vast amounts of information, and automate many tasks once done manually. For example, online collaboration tools like Google Docs and Trello allow teams to work together on projects in real-time, no matter their location. This can save time and increase productivity by eliminating the need for lengthy email chains and in-person meetings.

Many free online applications and resources are available, which can be a great way to access tools and information that may otherwise be expensive or difficult to obtain. By taking advantage of these available resources, individuals and businesses can stay competitive and continue to grow and thrive in today's digital world.

This chapter introduces 27 different digital tools and applications that help with task management, cloud storage and file organisation, creativity and design, communication and collaboration, and the creation of educational material.

1. Task management tools

Task management tools provide a structured system for organising tasks, work, deadlines, and projects. They offer support in enhancing efficiency and providing clear roles, responsibilities, deadlines and the current status of tasks. These tools facilitate clear communication, streamline progress tracking, and ensure a well-coordinated educational experience.

Trello

Trello is a task management tool that aims to help you visualise tasks, create a shared perspective on your projects, and organise and prioritise your personal and work life.

Its free task manager has customisable workflows, lists, and cards where you can view deadlines and more. Each task is trackable and shareable with the team. It also allows you to

automate tasks, assign them to team members, set due dates, drag and drop cards, and add a power-up to help you focus on one goal.

The free plan is suitable for individuals or small teams.



Instructions: Using the worksheet below, we'll walk you through the process of learning about several LMSs and other online learning tools. You'll make a comparison table with attributes like price, usability, and compatibility with other devices. Finally, you'll decide which technology is best for your online course. To finish your investigation and analysis, adhere to the guidelines and answer the questions.

Learning Management Systems (LMS) Research

Give an explanation of what an LMS is. (Hint: Conduct research and offer a succinct description.)

Give a list of at least three widely used Learning Management Systems (LMSs) for online education. (Moodle, Canvas, and Blackboard, as examples.)

Study each of the LMSs you mentioned in question 2. Examine their features, capabilities, and pricing strategies by visiting their websites and reading user evaluations.

Chart of Comparisons

Create a comparison table based on the features listed below to assess the various LMSs:

- A.** Cost and any licensing fees, subscriptions, or other charges are essential to consider.
- B.** Usability: Assess the system's user interface, navigation, and intuitiveness.
- C.** Device compatibility: Determine whether the LMS is compatible with laptops, tablets, cell phones, and desktop PCs.

The comparison table should now include the three LMSs you investigated and the pertinent details for each feature.

Choosing the Most Appropriate Technology

Consider your budgetary restrictions, your learners' demands, and the particular requirements of your online course.

Choose the LMS that would be best for your online course based on your study and the comparison chart. Explain how your decision fits the course's demands, learners' needs, and financial limitations.

Consider the importance of picking the appropriate technology for an online course. Consider how it might affect the course's accessibility, learner engagement, and overall success.

Optional Extension

Find at least two more online learning tools that can enhance the LMS you choose for your online course through research. These technologies might include tools for video conferencing, online forums, content creation tools, etc.

Give a succinct overview of each technology, emphasising its main characteristics, advantages, and compatibility with the LMS of your choice.

You have completed this worksheet focusing on learning management systems (LMSs) and other online learning technologies. With your extensive investigation and analysis, you can choose the most suitable technology for your particular online course.

Worksheet 3

Designing Effective Assessments

Designing Assessments for an Online Course: Student Worksheet

Instructions: Using this worksheet, we'll walk you through creating a number of evaluations for an online course that is in keeping with the course's learning objectives. You'll mix up your evaluation methods, such as projects, essays, and quizzes. You will also investigate how technology might be used to improve the tests and give clear directions for each assessment job. To develop your evaluation plan, adhere to the guidelines and respond to the offered questions.

Understanding Assessment Types

Define the subsequent assessment categories:

A quiz, an essay, for a project;

Describe the significance of including various evaluation methods in an online course. (Hint: Consider the advantages of evaluating various skill and knowledge domains.)

Linking Evaluations to Learning Goals

For your online course, list three learning goals. (For instance, show that you comprehend important psychological theories.)

Determine whether assessment formats—quizzes, essays, or projects—would be most appropriate for gauging the success of each learning aim. Describe how each assessment type fits your learning objective to support your decisions.

[Trello video](#)

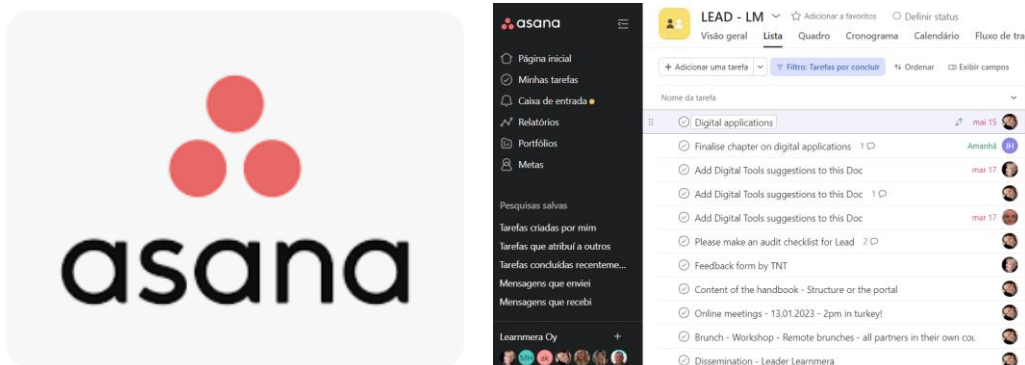
[Asana](#)

Asana is a cloud-based task management software that aims to help teams manage projects of any size and type.

The project management tool lets you organise your tasks with lists and assign them to team members, helping your workers know what they need to do.

It also lets you schedule and see the jobs via the calendar view. Your workers can see which tasks are the priority along with their deadlines. As an admin, you can view and track the state of your team’s work and visualise data.

The number of users in Asana’s free plan is limited to 15 teammates.



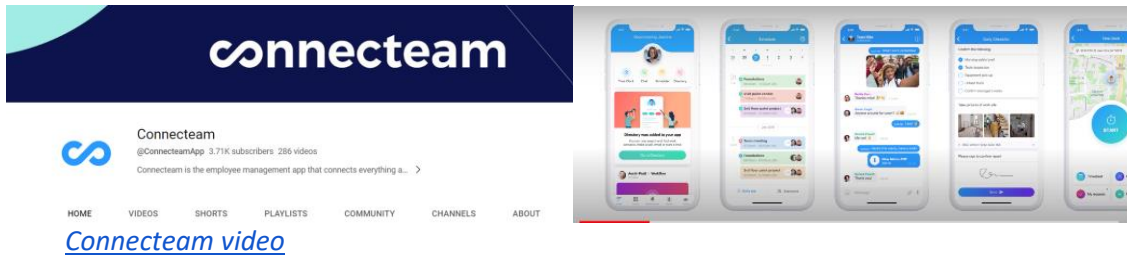
[Asana video](#)

[Connecteam](#)

Connecteam is an employee management application that allows you to track the work hours of your team members.

Connectteam's package of features includes real-time communication between colleagues through chats, updates, and notifications.

It helps you integrate your mobile human resources under one app, allows the software to autopilot your talent management, and gives your team members more flexibility, mobility, and task-specific functions.



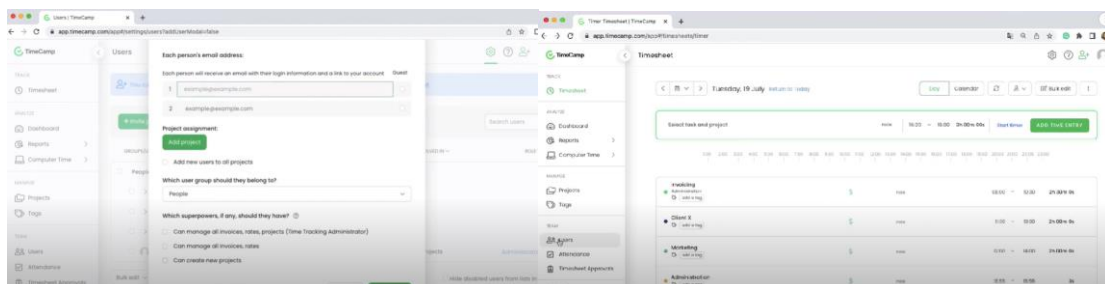
TimeCamp

TimeCamp is a task management tool focusing on project and task time tracking.

It allows you to measure your team's performance and productivity by tracking the time spent on a project or task, receiving their proof of work, and measuring how much time they spent on different apps and websites. You can also measure the profitability of your projects and see if they are still within the budget.

You can add time manually or use graphical or activities timesheets.

TimeCamp's free task manager plan has no limitations on the number of users and projects but has restricted capabilities.



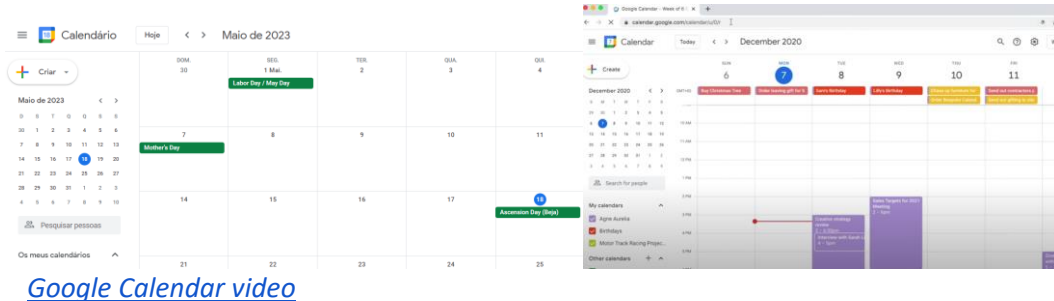
[TimeCamp Video](#)

Google Calendar

Google Calendar is a time-management and scheduling calendar service developed by Google.

It allows users to create and edit events. Reminders can be enabled for events, with options available for type and time. Event locations can also be added, and other users can

be invited to events. Users can enable or disable the visibility of special calendars, including birthdays, where the app retrieves dates of birth from Google contacts and displays birthday cards every year, and holidays, a country-specific calendar that displays dates of special occasions.



[Google Calendar video](#)

2. Cloud storage and documents

Cloud storage is becoming increasingly popular in all fields, including adult education. Cloud systems allow learners to access educational resources and materials from any internet connection device. They provide flexibility and facilitate seamless collaboration among learners and educators, including real-time information sharing, enhancing the overall efficiency and accessibility of materials.

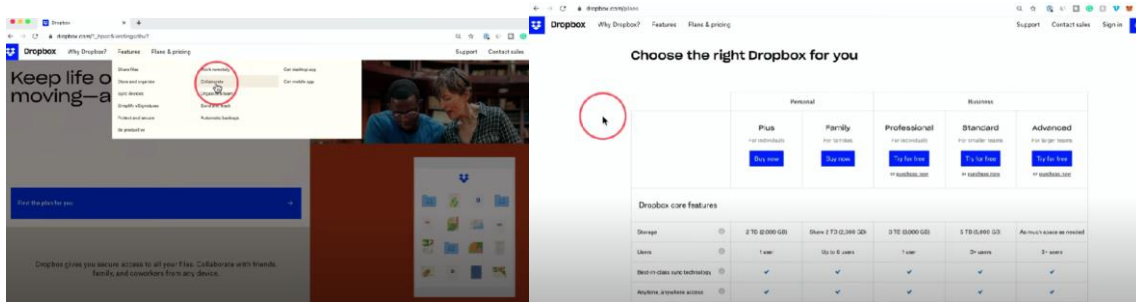
Dropbox

Dropbox is a cloud-based file hosting and sharing service that allows users to store and synchronise their files across various devices.

The core functionality of Dropbox revolves around the concept of a virtual folder that syncs files across multiple devices. Users can install the Dropbox application on their computers, smartphones, and tablets, creating a dedicated folder on their local storage. Any files or folders placed within this folder are automatically uploaded and synchronised with the user's Dropbox account in the cloud.

The cloud-based nature of Dropbox enables seamless access to files from any device with an internet connection.

Dropbox offers both free and paid plans. The free plan provides limited storage space, and the paid plans offer larger storage capacities and additional features. Dropbox Business is available for teams and organisations, providing advanced collaboration and administrative controls.

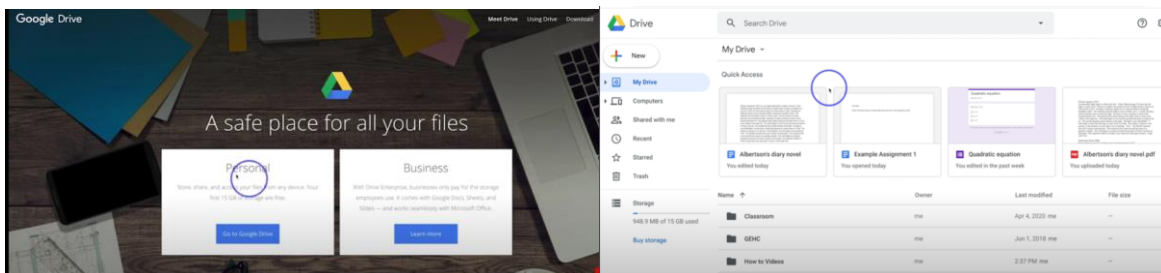


[Dropbox video](#)

Google Drive

Google Drive is a cloud-based file storage and synchronisation service provided by Google. It allows users to store, access, and share their files and documents from anywhere using any device with an internet connection. Google Drive offers a convenient and secure way to store various file types, including documents, spreadsheets, presentations, images, videos, and more.

One of Google Drive's key advantages is its seamless integration with other Google services. Users can easily create, edit, and collaborate on documents using Google Docs, Sheets, and Slides, all within the Drive platform. Multiple users can simultaneously work on the same document, making it ideal for team projects or real-time collaboration.

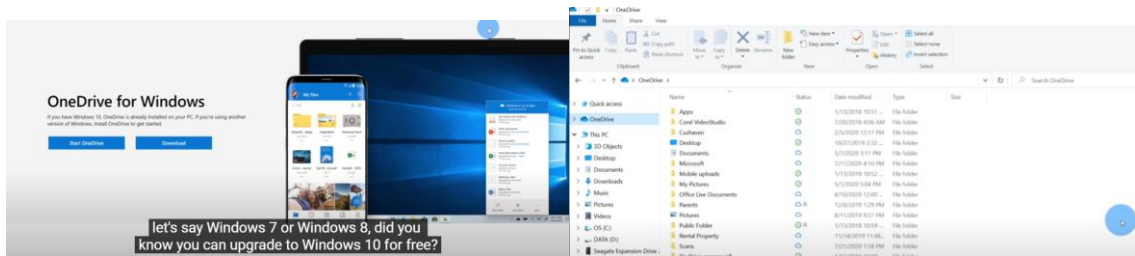


[Google Drive video](#)

OneDrive

OneDrive is a cloud-based file storage and synchronisation service developed by Microsoft. It allows users to store and access their files and folders from anywhere, using any device with an internet connection. With OneDrive, you can securely store your documents, photos, videos, and other files and easily share them.

OneDrive offers seamless integration with Windows operating systems, making saving and accessing files directly from your computer or laptop easy. It also has dedicated apps for iOS and Android devices, allowing you to access your files on the go.

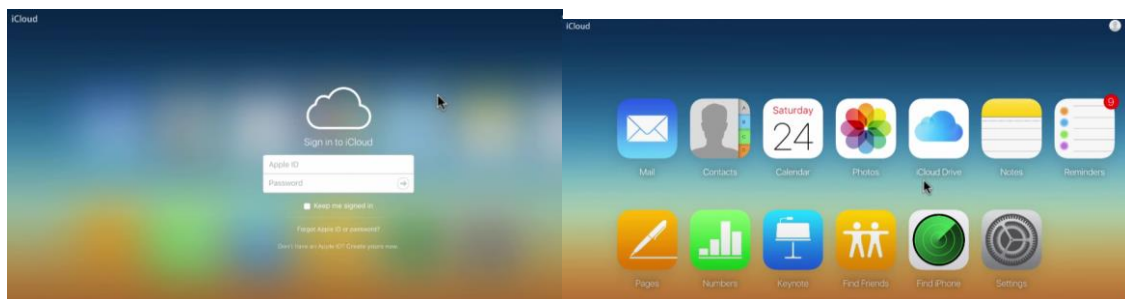


[OneDrive video](#)

[iCloud](#)

iCloud is a cloud-based storage and synchronisation service developed by Apple Inc. It was launched in 2011 and has become an integral part of the Apple ecosystem, providing users seamless access to digital content across various devices.

At its core, iCloud is designed to store and manage a user's data, including documents, photos, videos, music, app data, and more. This data is securely stored on remote servers, also known as the cloud, rather than on individual devices. By storing data in the cloud, users can access and manage their files from any device with an internet connection.



[iCloud video](#)

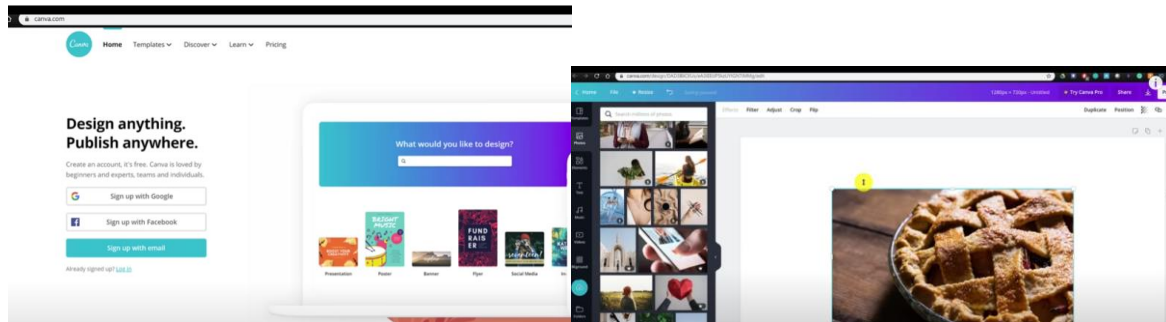
3. Creativity and Design

Creativity and design tools are important in adult education. User-friendly platforms allow adults to express their ideas, fostering an engaging and dynamic learning experience. The tools empower users to create visually appealing materials they can create and design to their needs.

[Canva](#)

Canva is a graphic design platform that allows users to create professional-looking designs for various purposes, such as social media posts, presentations, and more. It offers a wide range of templates, images, fonts, and design elements that users can customise to suit their needs. Canva is user-friendly and accessible, making it a popular choice for individuals and businesses.

Canva offers a free and a pro version. You can also share your designs with collaborators. Canva has a huge library of templates, images and music you can use.



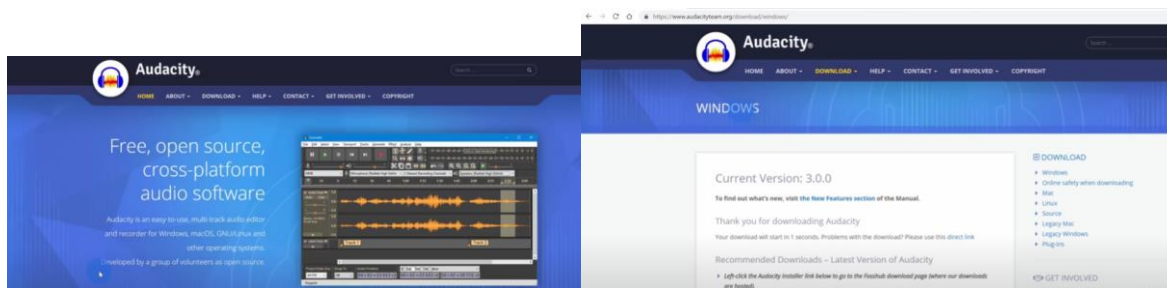
[Canva video](#)

Audacity

Audacity is a free, open-source, cross-platform audio editing software that provides users with various tools and features for recording, editing, and manipulating audio. It has gained significant popularity and has become a go-to choice for beginners, audio editors, and production professionals.

Audacity lets users record audio directly from a microphone, line input, or other external sources. It supports multi-channel recording, enabling users to simultaneously capture audio from multiple sources. Users can also perform editing tasks on audio files, such as cutting, copying, pasting, and deleting audio sections. It offers a simple and intuitive interface for precise waveform editing.

Audacity is a robust and feature-rich platform for audio editing and production. Its powerful tools, flexibility, and cost-effectiveness make it an excellent choice for anyone working with audio, whether podcasters, musicians, voiceover artists, or hobbyists.

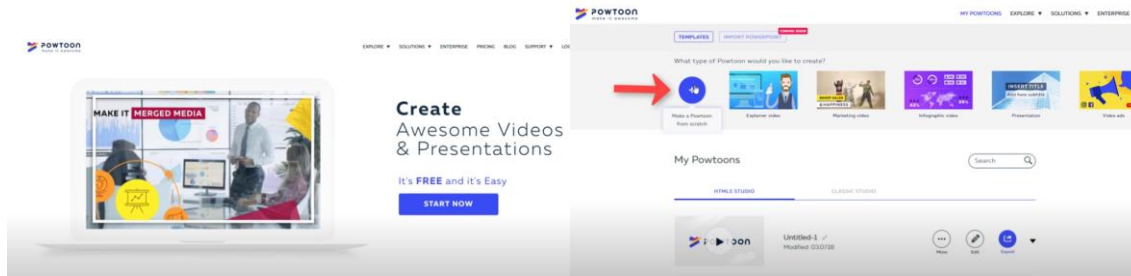


[Audacity video](#)

Powtoon

Powtoon is a cloud-based software platform that allows users to create animated videos and presentations. It provides an intuitive and user-friendly interface, making it accessible to beginners and professionals. Powtoon offers a range of pre-designed templates, characters, backgrounds, and props to help users quickly create engaging animated content.

The platform offers a drag-and-drop editor, enabling users to add and arrange elements within their projects easily. Users can customise their videos by adding text, images, shapes, and animations. Powtoon also provides a library of royalty-free music tracks and sound effects to enhance the audio of the videos.



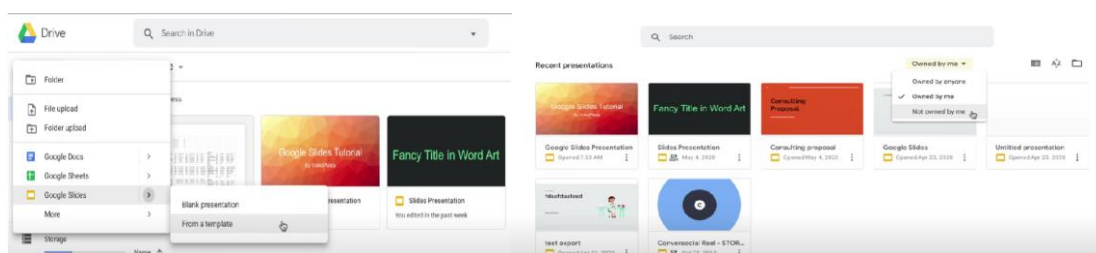
[Powtoon video](#)

[Google Slides](#)

Google Slides is a web-based presentation software developed by Google. It is part of the Google Workspace suite of productivity tools (formerly known as G Suite). Google Slides allows users to create, edit, and share presentations online, making it a popular choice for collaboration and remote work.

Google Slides provides a user-friendly interface for creating and editing presentations. Users can add text, images, videos, shapes, charts, and other media elements to their slides. It offers various formatting options, such as fonts, colours, and styles, to customise the appearance of the slides.

As with all other Google software, Google Slides features vast collaboration capabilities. Multiple users can work on the same presentation simultaneously and easily share their presentations with others by providing them a view or edit access.



[Google Slides video](#)

4. Communication and Collaboration

Communication and collaboration tools are vital for effective, efficient, and instant communication between learners. They foster collaboration and community, enabling instant and timely interaction. They allow users to exchange information and ideas, provide support, and enhance the overall learning experience, regardless of geographical location.

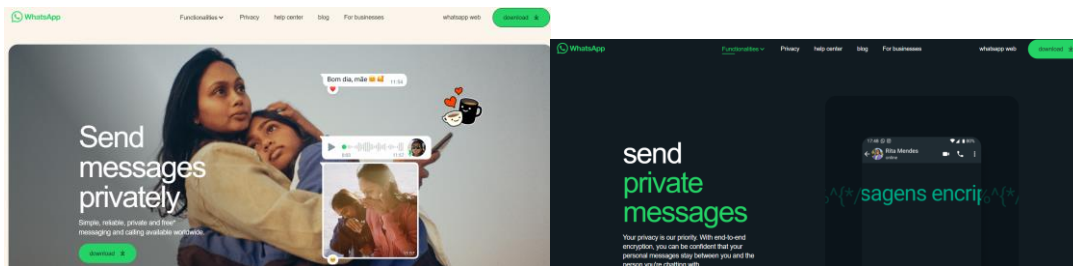
WhatsApp

WhatsApp is a popular messaging application that allows users to send text messages, make voice and video calls, share media files, and engage in group chats. It was created by Jan Koum and Brian Acton and was launched in 2009. In 2014, Facebook acquired WhatsApp, which since has become one of the most widely used messaging apps globally.

WhatsApp incorporates end-to-end encryption by default, meaning messages and calls are secured and can only be accessed by the intended recipients.

Like Stories on other platforms, WhatsApp offers a "Status" feature that allows users to share text, photos, videos, and GIFs with their contacts. These messages disappear after 24 hours.

WhatsApp is available for free on Android and iOS devices. It uses an internet connection (via Wi-Fi or mobile data) to send and receive messages and make calls.



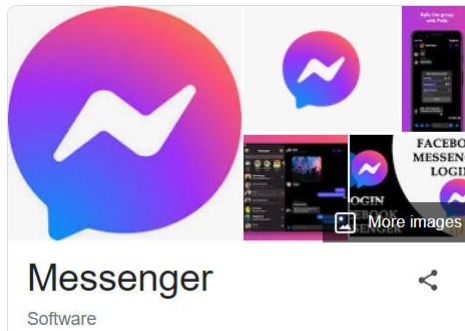
[WhatsApp video](#)

Messenger

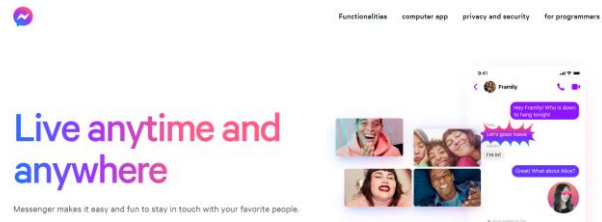
Messenger is a popular instant messaging application developed by Facebook. It allows users to send messages, make voice and video calls, share photos and videos, and engage in group chats. Messenger is available on various mobile devices (iOS and Android) and desktop computers (Windows and macOS).

Messenger offers various chat extensions that allow users to access and share content from other apps within the Messenger interface. For example, users can order food, make reservations, or play games without leaving the app.

Messenger is closely integrated with other Facebook products. Users can easily sync their contacts from Facebook and Instagram and connect with friends on those platforms. Additionally, Messenger can be used to communicate with businesses and receive customer support.



[Messenger video](#)

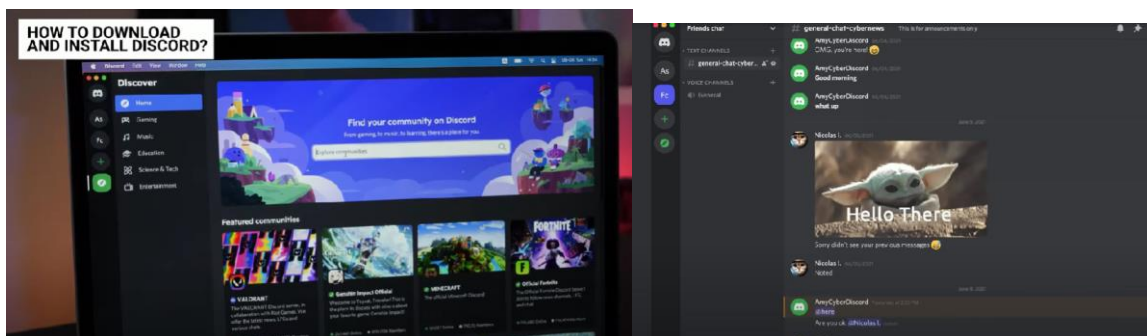


Discord

Discord is an online communication platform designed to create communities and connect people through voice, video, and text chat. It provides a range of features that make it popular among gamers, hobbyists, professionals, and various interest-based communities.

Discord operates on a server-based model. Users can create their servers or join existing ones. Each server acts as a dedicated space for communication and collaboration.

Servers consist of different channels where users can engage in discussions. Text channels allow for written conversations, while voice channels facilitate real-time voice communication.



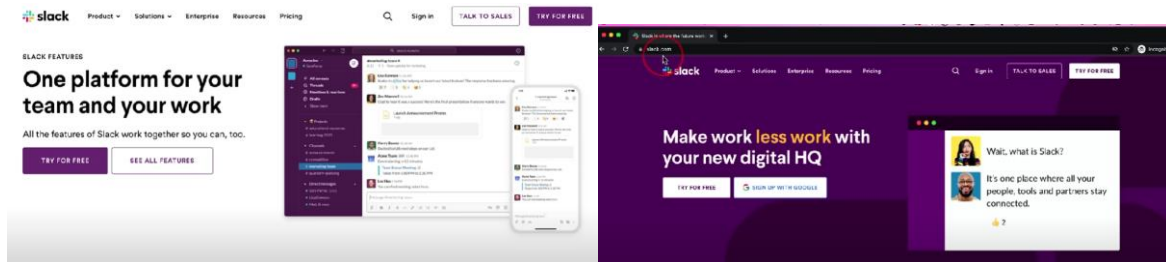
[Discord video](#)

Slack

Slack is a cloud-based collaboration tool designed to facilitate organisational communication and teamwork. It provides a platform for team members to communicate, collaborate, share files, and manage projects in real-time.

Slack organises conversations into channels, which can be either public or private. Public channels are open to all team members, while private channels are limited to specific members. Channels allow for focused discussions and can be organised based on teams, projects, or topics.

Slack offers free and paid plans, with the paid plans providing additional features, storage, and advanced administration options.



[Slack video](#)

Zoom

Zoom is a widely popular video conferencing platform that allows users to hold virtual meetings, webinars, and events. It was created by Eric Yuan and launched in 2013. The platform gained significant prominence during the COVID-19 pandemic when remote work and distance learning became more prevalent.

Zoom allows participants to connect through video, audio, and chat. It supports high-quality video and audio, making it suitable for one-on-one meetings and large-scale conferences.

Users can share their screens, making presentations, collaboration, and remote troubleshooting convenient. Zoom also allows sharing individual applications or specific screen portions and recording meetings.

Zoom offers various subscription plans to cater to different needs. The free plan provides basic functionality for small-scale meetings, while paid plans unlock additional features, such as longer meeting durations, increased participant limits, and advanced administrative controls.



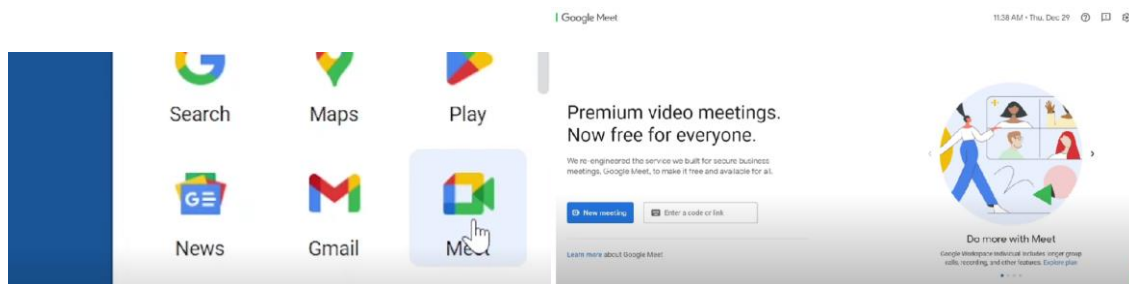
[Zoom video](#)

Google Meet

Google Meet is a video conferencing and online meeting platform developed by Google. It allows users to communicate and collaborate remotely through audio and video calls, screen sharing, and instant messaging. Originally designed for business and educational

purposes, it has gained significant popularity for virtual meetings, webinars, and remote learning.

Google Meet offers both free and paid versions. The free version provides basic functionalities and is suitable for individual users. In contrast, the paid version, known as Google Workspace (previously G Suite), offers advanced features and is intended for businesses, schools, and organisations.



[Google meet video](#)

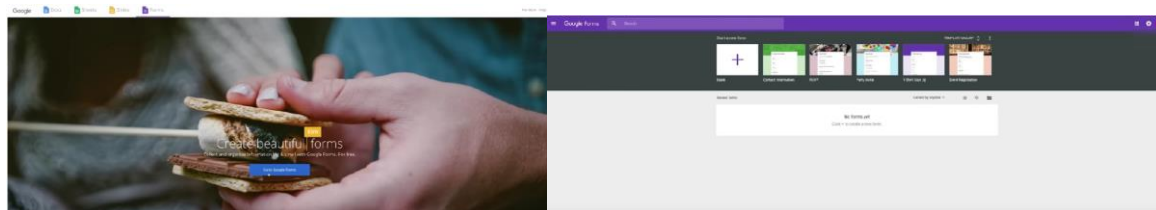
Google Forms

Google Forms is an online survey and data collection tool developed by Google. It allows users to create custom forms and questionnaires for various purposes, such as conducting surveys, collecting feedback, organising events, etc.

Form creation: Google Forms provides an intuitive interface that enables users to create forms easily. You can add various questions, including multiple-choice, checkboxes, dropdown menus, short answers, long answers, file uploads, and more. Forms can be customised with different themes, colours, and images.

As respondents fill out the form, their responses are automatically collected and stored in a Google Sheets spreadsheet. This makes it easy to view, analyse, and export the data for further processing or integration with other tools.

Google Forms is a versatile tool suitable for various applications, from simple surveys to complex data collection projects. Its user-friendly interface, collaborative features, and integration with other Google tools make it a popular choice for individuals, businesses, educators, and organisations seeking an efficient way to gather and analyse data.



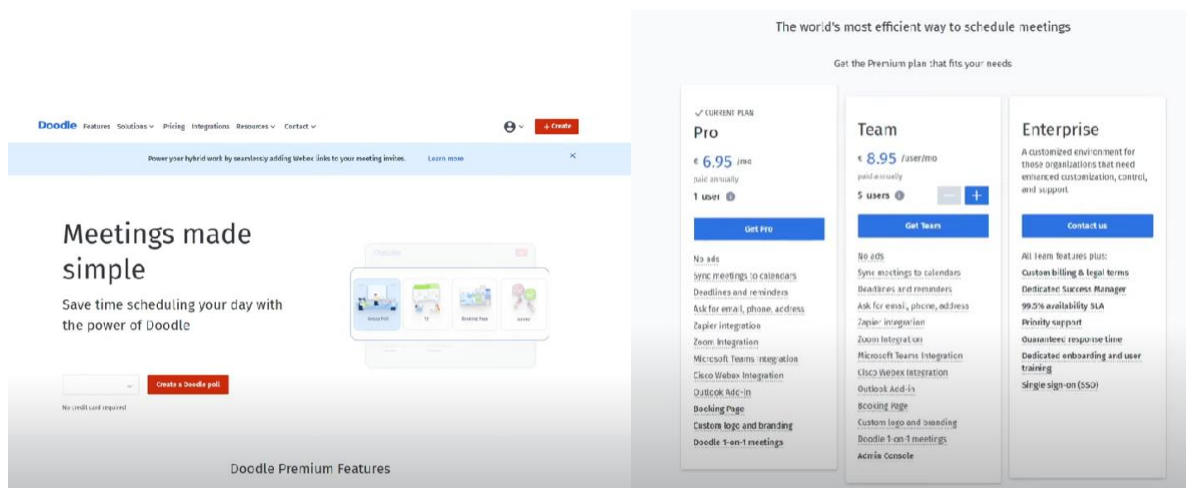
[Google forms video](#)

Doodle

Doodle is a web-based scheduling tool that allows individuals or groups to plan and organise events, meetings, or activities easily. It simplifies finding the best time and date that works for everyone involved. Doodle is widely used for personal and professional purposes and has gained popularity for its simplicity and effectiveness.

Users can create an event or poll with a specific title, description, and potential dates or time slots. Event organisers can invite participants by sharing a unique URL or email invitations. Participants do not need a Doodle account to respond.

Doodle also offers a quick poll feature where users can create simple yes/no or multiple-choice questions to gather opinions or preferences.



[Doodle video](#)

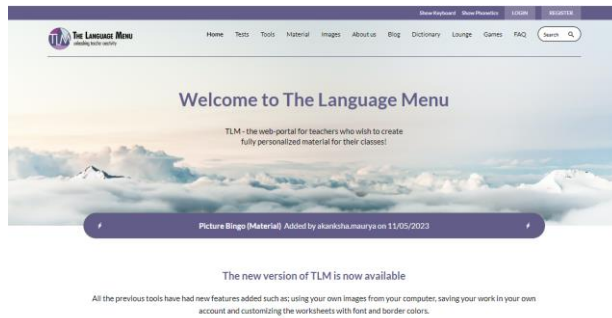
5. Educational material creation

Educational material creation tools and apps have an important role in educational settings. They empower learners and teachers to produce bespoke content tailored to individual requirements. The tools enhance engagement and allow the learners to participate actively in producing the materials.

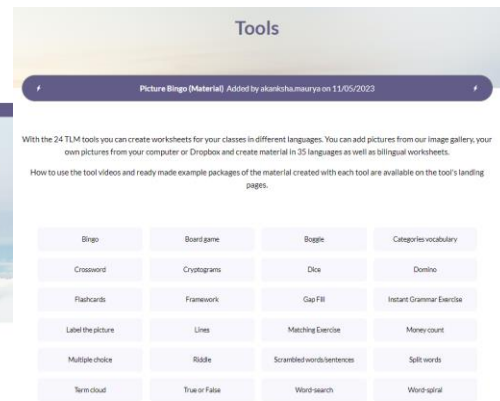
The Language Menu

The Language Menu website is an online platform designed specifically for teachers teaching languages. It offers a wide range of resources and tools to support language instruction and create engaging learning experiences for learners.

The website provides a comprehensive resource library with lesson plans, worksheets, activities, games, flashcards, and more. These resources cover various language levels and skills, allowing teachers to easily find relevant materials for their learners.



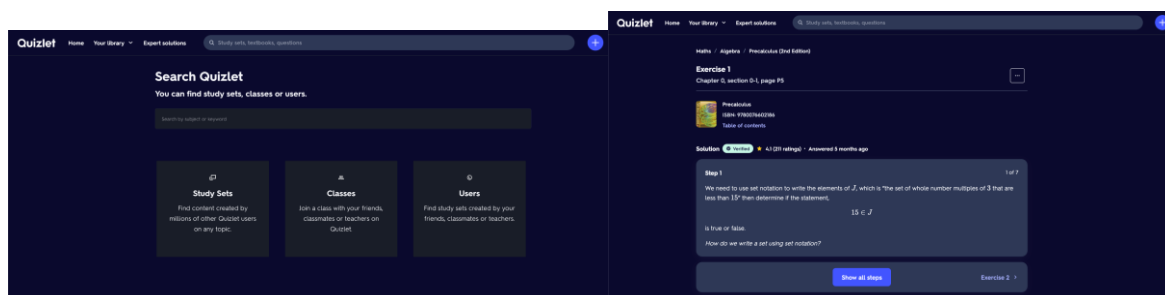
[The Language Menu video](#)



Quizlet

Quizlet is an online platform that offers a variety of study tools to help learners learn and retain information. With Quizlet, you can create your own study sets or choose from millions of pre-made sets covering a wide range of subjects. The platform offers a variety of study modes, including flashcards, quizzes, and games, to help you learn in a way that works best for you.

Quizlet allows you to create your own study sets or choose from millions of pre-made sets covering various subjects. You can add text, images, and audio to your study sets to make them more engaging and effective.

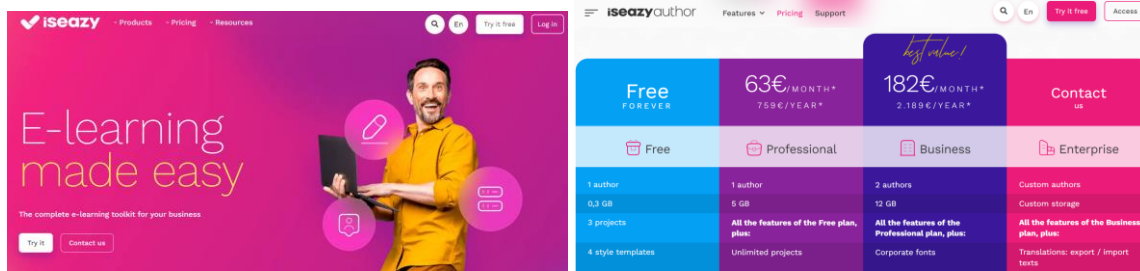


[Quizlet video](#)

isEazy

isEazy is a cloud-based e-learning authoring tool that allows users to create interactive and engaging online courses and presentations. It is designed to simplify the course creation process and make it accessible to individuals with little or no programming skills.

With isEazy, users can create multimedia-rich courses using a drag-and-drop interface. The platform offers a wide range of pre-designed templates and themes, allowing users to customise the look and feel of their courses. It also provides a library of ready-to-use content blocks, such as text, images, videos, quizzes, and interactive elements, which can be easily added to the course.

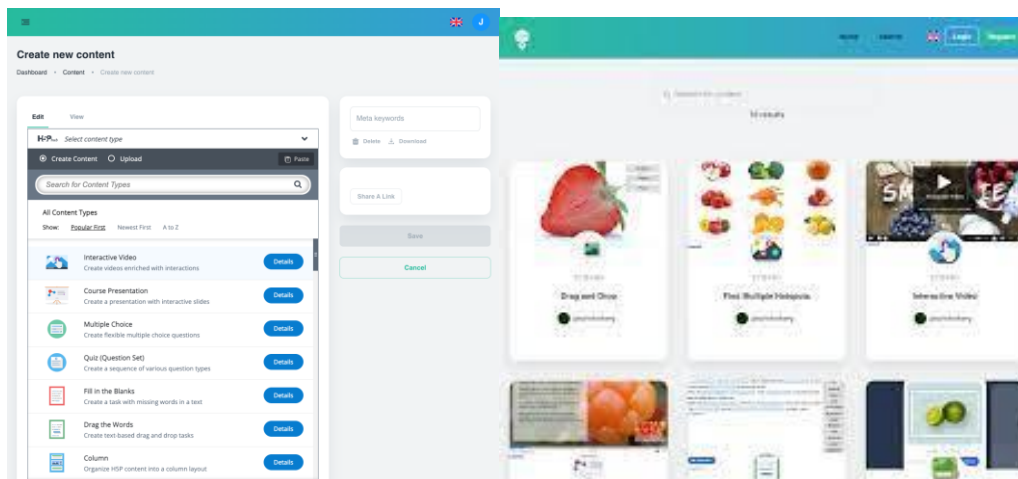


[iseazy video](#)

Lumi

With Lumi, you can create, edit, and view interactive HTML elements (H5P packages) on your desktop. You can choose from over 60 content types (templates), which include interactive videos and all common quiz types such as fill-in-the-blanks and multiple-choice questions. You do not need any programming knowledge to work with Lumi.

With Lumi Desktop, you can edit your offline content, share, sell, and distribute it. The content is compatible with all devices and browsers, and you can import it to Moodle, WordPress, Canvas, itsLearning, etc.



[Lumi video](#)

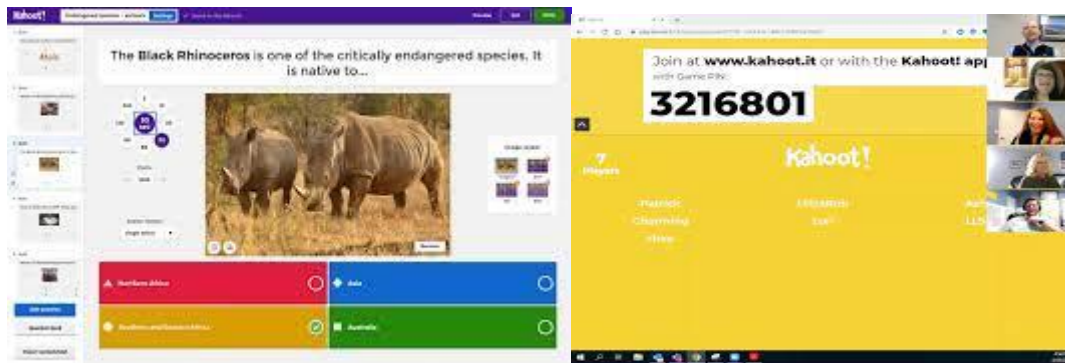
Kahoot!

The platform is primarily known for its game-based learning approach, where users participate in quizzes and challenges using their smartphones, tablets, or computers. Kahoot! quizzes are designed to be engaging and can be customised with images, videos, and music to make the learning experience more enjoyable.

Once a Kahoot! is created, the host can launch it in a live session. Participants join the session by entering a unique game PIN on their devices.

Kahoot! can be used in various educational settings, from classrooms to corporate training sessions. It promotes active participation, collaboration, and gamification, making learning more enjoyable and effective.

In addition to the basic features, Kahoot! offers a premium version called Kahoot! Plus, it provides additional functionalities like advanced analytics, team collaboration, and saving and reusing quizzes.



[Kahoot! video](#)

Actionbound

Actionbound is a mobile application and platform that allows users to create, share, and play interactive and location-based games, also known as "bounds". It combines elements of scavenger hunts, quizzes, and augmented reality to create engaging and immersive experiences for participants.

Bounds is designed to be played in specific physical locations, using mobile devices' GPS capabilities. Players must be present at the designated spots to interact with the content and complete the challenges.



[Actionbound video](#)

Conclusion

In conclusion, adult education can greatly benefit from incorporating digital applications and tools, which can also transform the learning environment. Using task management software, learners can effectively prioritise and organise their assignments,

ensuring productivity and timely completion. The usage of distributed storage and document association applications considers consistent admittance to instructive materials from any place, wiping out the problem of conveying actual materials.

In addition, adult learners are given the ability to visually communicate their concepts thanks to the inclusion of software for creativity and design, which fosters imagination and improves critical thinking abilities. Tools for communication and collaboration allow for real-time interaction and feedback between learners and teachers across distances. Ultimately, making instructive materials with computerised devices urges learners to become dynamic members of their schooling, developing a feeling of responsibility and commitment.

By embracing these computerised applications, adult training becomes more proficient, adaptable, captivating, and customised. Learners' ability to personalise their learning experience can improve motivation and knowledge retention. In light of the ever-changing digital landscape, incorporating these tools into adult education ensures learners have the skills they need to succeed.

This handbook shares knowledge to take advantage of the revolutionary potential of digital applications and tools in adult education.

6 CHAPTER 6: Applications: Case Scenarios

This section presents exemplary scenarios for adult learning in difficult times. The scenarios are based on lesson plans and cover content for diverse situations in difficult times.

Earthquake-Scenario 1.1

Title	Environmental Issues and Solutions During After-Earthquakes			
Difficult Time	Earthquake			
Objectives	Learners will use online tools and platforms to explore and analyse environmental issues, collaborate to find solutions and present their findings through virtual media.			
Content	Key concepts and processes regarding environmental issues			
Materials:				
Computers or laptops with internet access				
Projector and screen for virtual presentations				
Google Workspace or Microsoft Office for collaboration				
Online research databases				
Video conferencing platform (e.g., Zoom, Google Meet)				
Interactive online whiteboard tool (e.g., Google Tools)				
Digital survey tools (e.g., Google Forms)				
Online multimedia creation tools (e.g., Canva)				
Learning Activities	Name of Activity	Explanation	Used Digital Tool	Time

Title	Environmental Issues and Solutions During After-Earthquakes		
	Introduction	<p>Guide learners to explore online research databases, environmental websites, and articles to gather information on assigned environmental issues.</p> <p>Encourage collaboration through Google Workspace or Microsoft Office for real-time editing and sharing of resources.</p> <p>Use an interactive online whiteboard tool for learners to analyse the causes and effects of their assigned issues collectively.</p>	<p>Google Workspace</p> <p>15</p>
	Research and Analysis	<p>Divide learners into virtual breakout rooms.</p> <p>Assign each group an environmental issue and have them collaborate using video conferencing tools and shared documents to discuss and outline potential solutions.</p> <p>Encourage the use of multimedia and interactive elements in their virtual collaboration.</p>	<p>Asana, Discord</p> <p>30</p>
	Virtual Group Collaboration	<p>Divide learners into virtual breakout rooms.</p> <p>Assign each group an environmental issue and have them collaborate using video conferencing tools and shared documents to discuss and outline potential solutions.</p> <p>Encourage the use of multimedia and interactive elements in their virtual collaboration.</p>	<p>Doodle, Zoom, Quizlet</p> <p>40</p>
	Solution Presentation	<p>Have each group create a multimedia presentation using online tools like Canva or Adobe Spark.</p> <p>Use the video conferencing platform for virtual presentations, allowing learners to share their screens and present their findings to the class.</p> <p>Facilitate a Q&A session for learners to discuss and ask questions after each presentation.</p> <p>Group Discussion and Reflection (20 minutes):</p> <p>After all presentations, reconvene as a class for a virtual group discussion.</p>	<p>Canva PPT</p> <p>40</p>

Title	Environmental Issues and Solutions During After-Earthquakes			
		<p>Discuss the feasibility and potential impact of the proposed solutions.</p> <p>Have learners collect feedback on the presentations and solutions using digital survey tools.</p>		
	Conclusion	<p>Summarise key takeaways from the virtual exploration of environmental issues and solutions.</p> <p>Assign follow-up tasks or projects that allow learners to implement some of the proposed solutions in their digital community.</p>	Discord	15
Measurement & Assessment of Understanding	<p>Evaluation of group collaboration and engagement during virtual activities.</p> <p>Assessment of the multimedia presentations and the clarity of the proposed solutions.</p> <p>Feedback is collected through digital surveys.</p> <p>Optional: Assign grades based on individual reflections or short written responses on the lesson's relevance to their lives and communities.</p> <p>This virtual lesson plan provides a structured and engaging way for learners to explore environmental issues and solutions using various online tools and platforms.</p>			

Earthquake-Scenario 1.2

Title	Environmental Issues and Solutions During After-Earthquakes
Difficult Time	Earthquake
Objectives	Learners will use online tools and platforms to explore and analyse environmental issues, collaborate to find solutions and present their findings through virtual media.
Content	Key concepts and processes regarding environmental issues
<p>Materials:</p> <p>Computers or laptops with internet access</p> <p>Projector and screen for virtual presentations</p> <p>Google Workspace or Microsoft Office for collaboration</p> <p>Online research databases</p>	

Title	Environmental Issues and Solutions During After-Earthquakes			
<p>Video conferencing platform (e.g., Zoom, Google Meet)</p> <p>Interactive online whiteboard tool (e.g., Google Tools)</p> <p>Digital survey tools (e.g., Google Forms)</p> <p>Online multimedia creation tools (e.g., Canva)</p>				
Learning Activities	Name of Activity	Explanation	Used Digital Tool	Time
	Introduction	<p>Guide learners to explore online research databases, environmental websites, and articles to gather information on assigned environmental issues.</p> <p>Encourage collaboration through Google Workspace or Microsoft Office for real-time editing and sharing of resources.</p> <p>Use an interactive online whiteboard so learners can collectively analyse the causes and effects of their assigned issues.</p>	Google Workspace	15
	Research and Analysis	<p>Divide learners into virtual breakout rooms.</p> <p>Assign each group an environmental issue and have them collaborate using video conferencing tools and shared documents to discuss and outline potential solutions.</p> <p>Encourage the use of multimedia and interactive elements in their virtual collaboration.</p>	Asana, Discord	30
	Virtual Group Collaboration	<p>Divide learners into virtual breakout rooms.</p> <p>Assign each group an environmental issue and have them collaborate using video conferencing tools and shared documents to discuss and outline potential solutions.</p>	Doodle, Zoom, Quizlet	40

Title	Environmental Issues and Solutions During After-Earthquakes			
		Encourage the use of multimedia and interactive elements in their virtual collaboration.		
	Solution Presentation	<p>Have each group create a multimedia presentation using online tools like Canva or Adobe Spark.</p> <p>Use the video conferencing platform for virtual presentations, allowing learners to share their screens and present their findings to the class.</p> <p>Facilitate a Q&A session for learners to discuss and ask questions after each presentation.</p> <p>Group Discussion and Reflection (20 minutes):</p> <p>After the presentations, reconvene as a class for a virtual group discussion.</p> <p>Discuss the feasibility and potential impact of the proposed solutions.</p> <p>Have learners collect feedback on the presentations and solutions using digital survey tools.</p>	Canva PPT	40
	Conclusion	<p>Summarise key takeaways from the virtual exploration of environmental issues and solutions.</p> <p>Assign follow-up tasks or projects that allow learners to implement some of the proposed solutions in their digital community.</p>	Discord	15
Measurement & Assessment of Understanding	<p>Evaluation of group collaboration and engagement during virtual activities.</p> <p>Assessment of the multimedia presentations and the clarity of the proposed solutions.</p> <p>Feedback is collected through digital surveys.</p> <p>Optional: Assign grades based on individual reflections or short written responses on the lesson's relevance to their lives and communities.</p> <p>This virtual lesson plan provides a structured and engaging way for learners to explore environmental issues and solutions using various online tools and platforms.</p>			

Pandemic-Scenario 2.1

Title	Understanding Budgeting and Financial Planning			
Difficult Time	Pandemic			
Objectives	<p>To enable participants to understand the basics of budgeting and financial planning.</p> <p>To equip participants with practical skills for managing personal finances.</p> <p>To provide insights into budgeting during the COVID-19 pandemic.</p>			
Content	<p>Introduction to Budgeting</p> <p>Definition of Budget</p> <p>Importance of Budgeting</p> <p>Types of Budgets (e.g., zero-based budget, 50/30/20 rule)</p> <p>Components of a Budget</p>			
Materials:				
Computers or laptops with internet access				
Google Classroom for collaboration				
Video conferencing platform - Google Meet				
Interactive online whiteboard tool - Google Tools				
Digital survey tools -Google Forms				
Google spreadsheet				
Learning Activities	Name of Activity	Explanation	Used Digital Tool	Time
	Introduction to Budgeting	<p>Presentation: Use Google Slides to explain the basics of budgeting.</p> <p>Q&A Session: Encourage participants to ask questions and share their thoughts.</p>	Google Classroom	45
	Components of a Budget	<p>Group Activity: Break participants into small groups on Google Classroom. Each group creates a sample budget.</p> <p>Discussion: Groups present their budgets, and the class discusses different approaches.</p>	Google Classroom	60
	Financial Planning	Interactive Poll: Use Google Forms to anonymously gather participants' financial goals and priorities.	Google Forms	45

Title	Understanding Budgeting and Financial Planning			
		Case Study: Analyse a real-life financial planning scenario, discussing strategies and potential pitfalls.	Google Classroom	
	Budgeting during COVID-19	<p>Guest Speaker: Invite a financial expert to discuss budgeting during a pandemic via a video conference on Google Meet.</p> <p>Reflection: Participants share their reflections on how the pandemic has affected their finances.</p>	Google Meet	60
Measurement & Assessment of Understanding	<p>Quiz (15 minutes)</p> <p>Conduct a quiz on Google Forms to assess participants' understanding of budgeting concepts.</p> <p>Budget Analysis (30 minutes)</p> <p>Participants submit their budgets on Google Classroom for evaluation.</p> <p>Provide constructive feedback on the completeness and feasibility of their budgets.</p> <p>Reflection Essays (20 minutes)</p> <p>Participants write a short reflection essay on their key takeaways from the session.</p> <p>Assess understanding, application, and critical thinking skills demonstrated in the essays.</p> <p>Participation (10 minutes)</p> <p>Evaluate participants' engagement in discussions, group activities, and Q&A sessions.</p>			
Note	<p>Ensure participants can access Google Classroom, Google Slides, Google Forms, and Google Meet.</p> <p>Encourage active participation through discussions and group activities.</p> <p>Provide resources and references for further reading and learning.</p> <p>This lesson plan aims to engage participants remotely while addressing the challenges posed by the COVID-19 pandemic.</p>			

Pandemic-Scenario 2.2

Title	Creativity and Hobbies			
Difficult Time	Pandemic			
Objectives	<p>Introduce participants to artistic pursuits such as painting, writing, or music.</p> <p>To encourage participants to learn a new hobby or craft remotely during the COVID-19 pandemic.</p> <p>To foster a creative mindset and inspire participants to explore their creative potential.</p>			
Content	<p>Introduction to Creativity and Hobbies</p> <ul style="list-style-type: none"> ● Definition of Creativity ● Importance of Hobbies for Mental Health ● Overview of Artistic Pursuits (Painting, Writing, Music, etc.) <p>Exploring New Hobbies and Crafts</p> <ul style="list-style-type: none"> ● Choosing a Hobby: Self-assessment and Interest Exploration ● Remote Learning Resources: Online Courses, Tutorials, and Workshops ● Setting Goals for Learning a New Hobby <p>Developing a Creative Mindset</p> <ul style="list-style-type: none"> ● Overcoming Creative Blocks ● Cultivating Creativity Through Daily Practices ● Finding Inspiration and Motivation 			
Materials:				
Computers or laptops with internet access				
Google Classroom for collaboration				
Video conferencing platform - Google Meet				
Interactive online whiteboard tool - Google Tools				
Digital survey tools -Google Forms				
Google Slides for presentations				
Learning Activities	Name of Activity	Explanation	Used Digital Tool	Time

Title	Creativity and Hobbies			
	<p>Introduction to Creativity and Hobbies</p>	<p>Presentation: Use Google Slides to introduce the concept of creativity and the benefits of hobbies.</p> <p>Discussion: Facilitate a discussion on participants' favourite hobbies and interests.</p>	<p>Google Classroom</p>	<p>45</p>
	<p>Exploring New Hobbies and Crafts</p>	<p>Brainstorming Session: Participants share potential hobbies they would like to learn remotely.</p> <p>Research Activity: Use Google Classroom to share resources and websites to learn new hobbies.</p>	<p>Google Classroom</p>	<p>60</p>
		<p>Goal Setting: Participants set SMART goals for acquiring a new hobby.</p>		
	<p>Developing a Creative Mindset</p>	<p>Group Activity: Break participants into small groups to brainstorm strategies for overcoming creative blocks.</p> <p>Creative Exercise: Conduct a guided meditation or visualisation session to stimulate creativity.</p> <p>Reflection: Participants share insights on developing a creative mindset.</p>	<p>Google Classroom Google sites</p>	<p>45</p>
<p>Measurement & Assessment of Understanding</p>	<p>Quiz (15 minutes)</p> <p>Conduct a quiz on Google Forms to assess participants' understanding of creativity and hobbies.</p> <p>Hobby Progress Report (30 minutes)</p> <p>Participants submit a progress report on Google Classroom detailing their experiences learning a new hobby.</p> <p>Provide feedback and encouragement based on their progress.</p> <p>Creative Portfolio (20 minutes)</p> <p>Participants create a digital portfolio showcasing their creative work (e.g., paintings, writings, music compositions).</p> <p>Evaluate the portfolio based on creativity, originality, and effort.</p> <p>Participation (10 minutes)</p> <p>Evaluate participants' engagement in discussions, group activities, and reflections.</p>			

Title	Creativity and Hobbies
Note	<p>Ensure that participants can access Google Classroom, Slides, Forms, and other online resources to learn new hobbies remotely.</p> <p>Encourage participants to explore a variety of hobbies and crafts to discover their interests and talents.</p> <p>Provide guidance and support for participants to overcome creative blocks and stay motivated throughout their creative journey.</p>

Economic Crisis-Scenario 3.1

Title	Frugal Fitness and Nutrition
Difficult Time	Economic Crisis - Hard Financial Times
Level	Level 3
Objectives	<p>Understand the importance of a balanced diet and regular exercise.</p> <p>Learn how to maintain a healthy lifestyle on a budget.</p> <p>Identify affordable and nutritious food options.</p> <p>Develop a cost-effective exercise routine.</p>
Content	<p>Basics of nutrition and the importance of a balanced diet. Impact of exercise on health.</p> <p>Strategies for eating healthy on a limited budget.</p> <p>Low-cost exercise options that don't require gym membership or expensive equipment.</p>
Scenario	Learners are given a scenario where they have a limited budget but want to maintain a healthy lifestyle. They need to figure out how to eat healthily and stay active without spending much money.
Learning Activities	<p>Introduce the activity using Google Slides, then divide learners into groups of 2-4 in breakout rooms. Use a collaborative whiteboard so learners can develop their solutions, which they will present to their classmates.</p> <p><u>Name of Activity:</u> Budget Meal Planning.</p> <p><u># of Participants:</u> Whole class.</p> <p><u>Used Digital Tools:</u> Online recipe databases and budgeting apps.</p> <p><u>Duration:</u> 30 minutes.</p> <p><u>Name of Activity:</u> DIY Fitness Challenge.</p> <p><u># of Participants:</u> Pairs or small groups.</p>

Title	Frugal Fitness and Nutrition
	<u>Used Digital Tool:</u> Fitness tracking apps (optional). <u>Duration:</u> 30 minutes.
Measurement & Assessment of Success	A short quiz on nutrition and budget-friendly health practices. Learners present a one-week budget meal plan. Learners share their DIY fitness routine and reflect on its feasibility.

Economic Crisis-Scenario 3.2

Title	Navigating Stress in Tough Economic Times
Difficult Time	Economic Crisis - Hard Financial Times
Level	Level 3
Objectives	Understand the impact of financial stress on mental health. Learn stress management techniques that require minimal financial resources. Develop personal coping strategies for challenging times.
Content	The relationship between financial stress and mental health. Free or low-cost stress management techniques (e.g., mindfulness, breathing exercises). Building a support network.
Scenario	Learners face a situation where they or their families are experiencing financial difficulties, leading to increased stress and anxiety. They need to find ways to manage this stress effectively.
Learning Activities	Introduce the activity using Google Slides, then divide learners into groups of 2-4 in breakout rooms. Use a collaborative whiteboard so learners can develop their solutions, which they will present to their classmates. <u>Name of Activity:</u> Mindfulness Workshop. <u># of Participants:</u> Whole class. <u>Used Digital Tool:</u> Guided meditation apps or online videos. <u>Duration:</u> 30 minutes. <u>Name of Activity:</u> Stress Diary. <u># of Participants:</u> Individual. <u>Used Digital Tool:</u> Online journaling platforms (optional). <u>Duration:</u> One week (with periodic check-ins).
Measurement & Assessment of Understanding	Participation in mindfulness activities. Reflection essays on personal stress management strategies. Group discussions on coping with financial stress.

Economic Crisis-Scenario 3.3

Title	Affordable Alternative Health Strategies
Difficult Time	Economic Crises - Hard Financial Times
Level	Level 3
Objectives	Explore various alternative health practices. Understand the benefits and limitations of alternative health methods. Identify cost-effective alternative health options.
Content	Overview of alternative health practices (e.g., herbal remedies, acupuncture, yoga). Assessing the credibility of alternative health information. Finding affordable resources and practitioners.
Scenario	Learners are tasked with finding alternative health practices that are both effective and affordable, especially in times when traditional healthcare may be financially out of reach.
Learning Activities	Introduce the activity using Google Slides, then divide learners into groups of 2-4 in breakout rooms. Use a collaborative whiteboard so learners can develop their solutions, which they will present to their classmates. <u>Name of Activity:</u> Alternative Health Research Project. <u># of Participants:</u> Small groups. <u>Used Digital Tools:</u> Internet for research. <u>Duration:</u> 2 class periods. <u>Name of Activity:</u> Yoga and Meditation Session. <u># of Participants:</u> Whole class. <u>Used Digital Tool:</u> Online yoga and meditation guides. <u>Duration:</u> 30 minutes.
Measurement & Assessment of Understanding	Group presentations on different alternative health practices. Reflection on personal experiences with the yoga and meditation session. Class discussion on the feasibility of alternative health practices in a tight budget.

Immigration-Scenario 4.1

Title	English Language Skills with Lumi Platform
Difficult Time	Difficult times, emphasising accessible and engaging education.
Level	Basic English language skills
Objectives	<ul style="list-style-type: none"> • Acquire basic English language skills for communication. • Utilise the Lumi platform to access interactive content. • Foster an engaging language learning experience during difficult times.
Content	<ul style="list-style-type: none"> • Welcome, and Icebreaker. • Introduction to the Lesson. • Basic English Phrases. • Introduction to Lumi. • Interactive Language Learning on Lumi. • Create Interactive Content on Lumi. • Sharing and Reflection.
Materials	<ul style="list-style-type: none"> • Computers or mobile devices with internet access. • Lumi platform.
Duration	90 minutes
Scenario	Learners acquire basic English language skills and utilise the Lumi platform for an engaging language learning experience during difficult times.
Learning Activities	<ul style="list-style-type: none"> • Welcome and Icebreaker (5 minutes) - Warm greeting of the learners and initiating an icebreaker activity. • Introduction to the Lesson (10 minutes) - Discuss learning challenges during difficult times. • Introduce Lumi as a tool for an exciting learning experience. - Basic English Phrases (25 minutes) • Teach essential English phrases through role-playing, pair discussions, and language games. • Introduction to Lumi (20 minutes): Demonstrate the Lumi platform, emphasizing its features. Guide learners through navigating Lumi and creating interactive content. • Interactive Language Learning on Lumi (15 minutes) - Assign tasks for learners to explore language learning content on Lumi. • Practice and Application (15 minutes) - Instruct learners to create interactive content related to learned phrases on Lumi. • Conclusion (10 minutes) - Allow learners to share created content. Facilitate a discussion on using Lumi for language learning. Highlight the advantages of personalised learning materials.

Title	English Language Skills with Lumi Platform
Measurement & Assessment of Understanding	Assess learners' participation in activities, engagement with Lumi, and the quality of the content they create. Use informal assessments during discussions and reflections to evaluate learners' understanding of basic English phrases and the Lumi platform.

Note:

This lesson plan is designed to address language learning challenges during difficult times. It incorporates the Lumi platform to enhance the learning experience. Adjust the timing and activities based on the learners' proficiency levels.

Tutorial Video: <https://youtu.be/hKsLFWxaaj8>

Immigration-Scenario 4.2

Title	Visual Communication Skills with Powtoon Tool for Language Learning
Difficult Time	Difficult times, emphasising accessible and engaging education
Level	Basic visual communication skills for language learning
Objectives	<ul style="list-style-type: none"> ● Acquire basic visual communication skills using the Powtoon tool. ● Understand the importance of visual communication for language learning during difficult times. ● Apply Powtoon to enhance language acquisition and engagement.
Content	<ul style="list-style-type: none"> ● Welcome, and Icebreaker. ● Introduction to the Lesson. ● Basic English Phrases. ● Integration of Powtoon for language learning.
Materials	<ul style="list-style-type: none"> ● Computers or mobile devices with internet access. ● Powtoon tool.
Duration	90 minutes
Scenario	Learners acquire basic visual communication skills using Powtoon for language learning, emphasising engagement during difficult times.
Learning Activities	<ul style="list-style-type: none"> ● Welcome and Icebreaker (5 minutes) - Greet learners and initiate an icebreaker activity.

Title	Visual Communication Skills with Powtoon Tool for Language Learning
	<ul style="list-style-type: none"> ● Introduction to the Lesson (10 minutes) - Discuss learning challenges during difficult times. Introduce Powtoon as a tool for an exciting learning experience. ● Basic English Phrases (25 minutes) - Teach essential English phrases through role-playing, pair discussions, and language games ● Integration of Powtoon for language learning (20 minutes) - Explore Powtoon for language learning purposes. Discuss its benefits in enhancing language acquisition and engagement. ● Assign a task for learners to create a Powtoon video related to language learning.
<p>Measurement & Assessment of Understanding</p>	<p>Assess learners' participation in activities. Evaluate the creativity and effectiveness of the Powtoon language learning videos. Encourage reflection on how visual communication tools can enhance language learning during difficult times.</p>

Note:

This modified lesson plan integrates the importance of Powtoon in language learning during challenging times, focusing on its role in enhancing vocabulary retention, fostering creativity, and maintaining engagement in language acquisition. Adjust the timing and activities based on the learners' language proficiency and familiarity with visual communication tools.

Tutorial Video: <https://youtu.be/ggR1n7YKoRo>

Immigration-Scenario 4.3

Title	Personalised Language Learning with The Language Menu (TLM)
Difficult Time	Fostering autonomy and engagement in language acquisition during challenging periods
Level	Tailored for individual language learning journeys
Objectives	<ul style="list-style-type: none"> ● Explore and utilise the features of The Language Menu (TLM) website. ● Create personalised language learning materials. ● Foster autonomy and engagement in language acquisition.
Content	<p>Welcome, and Icebreaker.</p> <p>Introduction to The Language Menu (TLM).</p> <p>Exploration of TLM. Class Management.</p> <p>Online Quizzes and Tests.</p> <p>Sharing and Reflection.</p> <p>Homework Assignment.</p>
Materials	<p>Computers or mobile devices with internet access.</p> <p>The Language Menu (TLM) website.</p>
Duration	90 minutes
Scenario	Learners explore TLM to create personalised language learning materials, enhancing autonomy and engagement in their language acquisition journey.
Learning Activities	<p>Welcome and Icebreaker (5 minutes).</p> <p>Introduction to The Language Menu (TLM) (10 minutes).</p> <p>Exploration of TLM (30 minutes).</p> <p>Class Management (10 minutes).</p> <p>Online Quizzes and Tests (10 minutes).</p> <p>Sharing and Reflection (10 minutes).</p>
Measurement & Assessment of Understanding	<p>Evaluate learners' engagement with TLM during the class. Assess the effectiveness of the personalised materials created by learners.</p> <p>Encourage reflection on the advantages of using TLM for individual language learning journeys.</p>

Note:

This 90-minute lesson plan centres on fostering personalised language learning with The Language Menu (TLM). Aimed at enhancing autonomy and engagement, the plan guides

learners through exploring TLM's features, creating customised materials, and utilising tools like online quizzes. The lesson encourages reflection on TLM's advantages, promoting a dynamic and learners-centred approach to language acquisition during challenging times.

Tutorial videos of different tools:

<https://www.youtube.com/channel/UCxv9Yv1ZdD66gcWi1ofj06A>

War-Scenario 5.1

Title	Actionbound Team Building Scavenger Hunt
Difficult Time	Working and Playing in Teams - Team building During challenging times, the significance of working and playing in teams and effective team building becomes an undeniable cornerstone of the learning process. Whether individuals are confronted with unexpected challenges, navigating uncertainty, or adapting to new circumstances, collective effort and collaboration are indispensable for personal and organisational development.
Level	Level 2-3
Objectives	<ul style="list-style-type: none"> ● Enhance team collaboration, communication, and problem-solving skills. ● Create and participate in a team-building scavenger hunt using the Actionbound app. ● Gain familiarity with Actionbound features like GPS, quizzes, and missions.
Content	Introduction to gamified team building. Explanation of Actionbound app features. Hands-on experience with creating a team-building scavenger hunt.
Materials	<ul style="list-style-type: none"> ● Actionbound app on participants' smartphones or tablets. ● Internet access is needed to create and publish the bounds. ● GPS-enabled smartphones or tablets. ● Access to the Actionbound website. ● Pen and paper for note-taking.
Duration	2 Hours
Scenario	Participants use the Actionbound app to participate in a team-building scavenger hunt focusing on effective communication, collaboration, and problem-solving.
Learning Activities	Understanding Actionbound (30 minutes) <ul style="list-style-type: none"> ● Download the Actionbound app.

Title	Actionbound Team Building Scavenger Hunt
	<ul style="list-style-type: none"> ● Demonstrate features: GPS, maps, compass, quizzes, and missions. ● Guide participants in creating a simple bound. <p>Creating the Team-Building Bound (45 minutes)</p> <ul style="list-style-type: none"> ● Divide into small teams (4-6 members per team). ● Task: Create a team-building scavenger hunt using Actionbound. ● Emphasise the use of GPS, quizzes, and missions. <p>Team-Building Scavenger Hunt (45 minutes)</p> <ul style="list-style-type: none"> ● Publish created bounds on the Actionbound app. ● Exchange devices and play each other's bounds. ● Focus on effective communication, collaboration, and strategy. <p>Debrief and Reflection (15 minutes)</p> <ul style="list-style-type: none"> ● Discuss challenges, strategies, and overall experiences. ● Relate the activity to real-world teamwork scenarios. ● Allow teams to share thoughts and insights.
<p>Measurement & Assessment of Understanding</p>	<p>Observation of team collaboration during the scavenger hunt.</p> <p>Participant engagement in creating and playing bounds.</p> <p>Reflection session.</p> <p>A quiz to measure learners' understanding.</p>

Video Tutorial - Beginners - How it works and what can be done:

https://youtu.be/t_sQkCCjm8c?list=PLqWAuTWTD3CR81cwrKRRX4jcePTmgmJhE

War-Scenario 5.2

Title	LUMI Interactive Quiz Team Building
Difficult Time	<p>Working and playing in teams - Team building</p> <p>During challenging times, the significance of working and playing in teams and effective team building becomes an undeniable cornerstone of the learning process. Whether individuals are confronted with unexpected challenges, navigating uncertainty, or adapting to new circumstances, collective effort and collaboration are indispensable for personal and organisational development.</p>
Level	Level 2-3
Objectives	<p>Enhance team collaboration, communication, and problem-solving skills using the LUMI platform.</p> <p>Create and participate in a team-building activity through an interactive quiz using LUMI.</p> <p>Gain familiarity with LUMI features for quiz creation and participation.</p>
Content	<p>Introduction to gamified team building with LUMI.</p> <p>Explanation of team building benefits, focusing on improved communication, collaboration, and problem-solving.</p> <p>Overview of LUMI, its features, and creating interactive quizzes.</p>
Materials	<ul style="list-style-type: none"> ● LUMI app on participants' smartphones or tablets. ● Internet access for creating and hosting interactive quizzes. ● Projector or screen for displaying quiz questions. ● Access to the LUMI website or app. ● Pen and paper for note-taking.
Duration	2 Hours
Scenario	Participants engage in a team-building quiz challenge using the LUMI platform, emphasising effective communication, collaboration, and strategy.
Learning Activities	<p>Understanding LUMI (30 minutes)</p> <ul style="list-style-type: none"> ● Download the LUMI app. ● Demonstrate features: interactive quiz creation, participation, and real-time feedback. ● Guide participants in creating engaging quizzes. <p>Creating the Team-Building Quiz (45 minutes)</p> <ul style="list-style-type: none"> ● Divide learners into small teams (4-6 members per team).

Title	LUMI Interactive Quiz Team Building
	<ul style="list-style-type: none"> ● Task: Create a team-building quiz using LUMI. ● Encourage creative questions, multimedia elements, and a collaborative approach. <p>Team-Building Quiz Challenge (45 minutes)</p> <ul style="list-style-type: none"> ● Present created quizzes on the LUMI platform. ● Exchange devices and play each other's quizzes. ● Emphasise effective communication, collaboration, and strategy. <p>Debrief and Reflection (15 minutes)</p> <ul style="list-style-type: none"> ● Discuss challenges, strategies, and the overall experience. ● Relate the activity to real-world teamwork scenarios. ● Allow teams to share thoughts and insights.
Measurement & Assessment of Understanding	<p>Observation of team collaboration during the quiz challenge.</p> <p>Participant engagement in creating and using quizzes.</p> <p>Reflection session participation.</p> <p>Quiz related to the lesson's objectives to assess understanding.</p>

Creating Interactive Quiz Using Lumi – Tutorial https://youtu.be/qvQ7PQXe_A0

War-Scenario 5.3

Title	Google Drive Collaborative Document Team Building
Difficult Time	<p>Working and playing in teams - Team building</p> <p>During challenging times, the significance of working and playing in teams and effective team building becomes an undeniable cornerstone of the learning process. Whether individuals are confronted with unexpected challenges, navigating uncertainty, or adapting to new circumstances, collective effort and collaboration are indispensable for personal and organisational development.</p>
Level	Level 2-3
Objectives	<p>Enhance team collaboration, communication, and problem-solving skills using Google Drive.</p> <p>Create and participate in a team-building activity through collaborative document creation and sharing on Google Drive.</p> <p>Gain familiarity with Google Drive features for document creation and real-time collaboration.</p>

Title	Google Drive Collaborative Document Team Building
Content	<p>Introduction to collaborative team building with Google Drive.</p> <p>Explanation of team building benefits, focusing on improved communication, collaboration, and problem-solving.</p> <p>Overview of Google Drive, its features, and creating collaborative documents for team-building purposes.</p>
Materials	<ul style="list-style-type: none"> ● Google Drive accounts for participants. ● Internet access for accessing Google Drive. ● Laptops, tablets, or smartphones for participants. ● Projector or screen to demonstrate Google Drive features. ● Pen and paper for note-taking.
Duration	2 Hours
Scenario	Participants engage in a team-building document challenge using Google Drive, emphasising effective communication, collaboration, and strategy.
Learning Activities	<p>Understanding Google Drive (30 minutes)</p> <ul style="list-style-type: none"> ● Access Google Drive using participants' accounts. ● Demonstrate features: document creation, sharing, real-time collaboration. ● Guide participants in creating a shared document. <p>Creating a Collaborative Document (45 minutes)</p> <ul style="list-style-type: none"> ● Divide learners into small teams (4-6 members per team). ● Task: Create a team-building document using Google Drive. ● Encourage collaborative writing, multimedia elements, and a unified approach. <p>Team-Building Document Challenge (45 minutes)</p> <ul style="list-style-type: none"> ● Present created documents on Google Drive. ● Exchange devices and review each other's documents. ● Emphasise effective communication, collaboration, and strategy. <p>Debrief and Reflection (15 minutes)</p> <ul style="list-style-type: none"> ● Discuss challenges, strategies, and the overall experience. ● Relate the activity to real-world teamwork scenarios. ● Allow teams to share thoughts and insights.
Measurement & Assessment of Understanding	<p>Observation of team collaboration during the document challenge.</p> <p>Participant engagement in creating and reviewing documents.</p> <p>Reflection session.</p>

Tutorial video - How to work with Google Drive <https://youtu.be/gdrxAoqfvbA>

War-Scenario 5.4

Title	Stay active and connected			
Difficult Time	War			
Objectives	<p>Learners will use online tools and platforms to:</p> <ol style="list-style-type: none"> enhance interpersonal skills: <ul style="list-style-type: none"> improving communication and public speaking skills; building effective networking and relationship-building skills; enhancing conflict resolution and negotiation skills. retain professional development: <ul style="list-style-type: none"> developing leadership and management skills; learning new software or tools used in their field; acquiring new skills relevant to their current job or future career; Stay updated on industry trends and advancements. 			
Content	Key concepts and processes regarding interpersonal skills and personal development during difficult or emergencies, particularly in war.			
Materials:				
<ul style="list-style-type: none"> In times of war, having access to a computer and the internet can be very difficult. Therefore, the focus must be on user-friendly sources, even from small devices like mobile phones. It is even better if the programs have an inbuilt automatic save system online with real-time editing and sharing, a digital voice recorder, auxiliary batteries, and power banks. Adapters and additional storage devices also become necessary over time to ensure stability. Social media and digital platforms with high impact allow users to learn and share information quickly (e.g., Instagram, Facebook, Blogspot, Mixcloud, X). Platforms that can enhance chances of self-promotion and learning, especially work-related (e.g., LinkedIn, Indeed). Video conferencing platforms (e.g., StreamYard, Zoom, Google Meet, Skype). Online tools with real-time editing and sharing of resources with the automatic saving system to prevent loss of data in case of internet outage (e.g., Google Tools, Adobe). Online tools to create content with the automatic saving system to prevent loss of data due to internet outages (e.g., Cupcatr) Phone-friendly learning platforms (e.g., Duolingo, Preply, Italki). Other websites that enable users to find and share learning material (e.g., YouTube). Websites and apps that allow users to download and/or save contents which are not download-able otherwise, especially in the case of internet shortcuts (e.g., yt5s.best, wave.video, xrecorder) 				
	Name of Activity	Explanation	Digital tool used	Time

Title	Stay active and connected			
Learning Activities	Introduction	<p>In this scenario, everything around the users is fragile. A small change, like losing an internet connection, can be as profound as the need to evacuate suddenly. In both cases, users can lose all their data and connections instantly, so it is necessary to provide them with effective and practical tools to combat these problems.</p> <p>The primary focus is on using small devices to their full capabilities. The main focus must be helping users maintain connections, share effective short content, and download and save content that requires studying or creating time. Even if the small device functions, the battery and storage needed to save the data can soon become problematic.</p>	Prepare a mobile or small device with internet access and sufficient internal storage. Moreover, ready power banks, external storage, and adapters are vital.	
	Techniques to use the devices to the best of their capabilities.	<p>After preparing the hardware, it is necessary to have the software ready. It is better to download some apps in advance and know how to use them on the device. Some programs have a simpler version explicitly created for phones with fewer features to work smoothly, but the habit of using them on bigger devices can make it difficult for users to adapt.</p> <p>A good exercise could be to let the user practice the same program on both devices to be aware of the differences.</p> <p>If the same program does not exist for both (e.g., phone and computer), it is helpful to have a proper substitute already.</p>	Being practical with different versions of the same program on different devices or using a similar one on other devices.	
	Research	Through a group project, we explore interpersonal skills and personal development. This method is widely used because it produces reliable results.		
	Set-up	Divide learners into virtual rooms to work in subgroups. This is important to maintain heterogeneity and to maximise everyone's potential.	Asana, Discord	30
	Virtual Group Collaboration	Assign each group an environmental issue and have them collaborate using video	Doodle,	40

Title	Stay active and connected			
		<p>conferencing tools and shared documents to discuss and outline potential solutions.</p> <p>Encourage the use of multimedia and interactive elements in their virtual collaboration.</p>	Zoom, Quizlet	
	Solution Presentation	<p>Have each group create a multimedia presentation using online tools like Canva or Adobe Spark.</p> <p>Use the video conferencing platform for virtual presentations, allowing learners to share their screens and present their results to the class.</p> <p>Facilitate a Q&A session after each presentation for learners for discussions.</p> <p>Group Discussion and Reflection (20 minutes):</p> <p>After the presentations, reconvene as a class for a virtual group discussion.</p> <p>Discuss the feasibility and potential impact of the proposed solutions.</p> <p>Have learners collect feedback on the presentations and solutions using digital survey tools.</p>	Canva PPT	40
	Conclusion	<p>Summarise key takeaways from the virtual exploration of environmental issues and solutions.</p> <p>Assign follow-up tasks or projects that allow learners to implement some of the proposed solutions in their digital community.</p>	Discord	15
Measurement & Assessment of Understanding	<p>Evaluation of group collaboration and engagement during virtual activities.</p> <p>Assessment of the multimedia presentations and the clarity of the proposed solutions.</p> <p>Feedback is collected through digital surveys.</p> <p>Optional: Assign grades based on individual reflections or short written responses on the lesson's relevance to their lives and communities.</p> <p>This virtual lesson plan provides a structured and engaging way for learners to explore environmental issues and solutions using various online tools and platforms.</p>			

LEAD

Learning in Difficult Times



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