CTLT4DE

TRAINING FOR STUDENTS

Contemporary Teaching
and Learning Techniques
for Distance Education

Fikri Tesisat

UNIVERSIDADE LUSÓFONA

UNIVERSITY OF BUCHAREST

University of Humanities and Economics in Lodz

ANADOLU ÜNİVERSİTESİ

WSEI

ANADOLU ÜNİVERSİTESİ

CONTENTS

This publication was produced as part of the project:

Contemporary Teaching&Learning Techniques for Distance Education 2020-1-TR01-KA226-SCH-098489
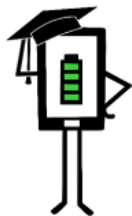
PART 1 – WHAT EXACTLY IS DISTANCE EDUCATION?

INTRODUCTION

The COVID-19 pandemic has produced major changes in education. Concepts like "digital education", "distance education", "remote learning" have become more and more known and used. Digital applications have become an important engine of everyday life and business. Due to the restrictions imposed by the pandemic around the world, most people have started using the computer for a variety of purposes: internet banking, e-commerce, e-medicine and new opportunities in education and professional training.

The skills that students acquire in school must allow them to be practically anchored in the real world. Worldwide education systems are facing the fast development of the knowledge-based society, where information-handling skills and abilities are absolutely necessary to survive. Economic and industrial competition deepens the contradiction between the possibilities of assimilation available to the student and the requirements of everyday life, or the current structure of the school.

On a global level, many countries have the digitization of education as their main goal. The pandemic of the last two years has forced the digitization of several education systems, with distant education being the fast solution adopted by many states.

In general, we call distance education when the teacher and students are separated by physical distance and technology (audio, video, computer networks, printed matter), sometimes combined with face-to-face communication, being used for instruction (Istrate, 2000).

Distance education or e-learning is based on multimedia resources, allowing you to learn from their own computer. In e-learning format, text, sound, graphics and video content are now brought together in a single "multimedia" document. Multimedia means a set of:

- ✓ content,
- ✓ images,
- ✓ sound,
- ✓ graphics,
- ✓ interactivity,
- ✓ sensory communication.

E-learning- multiple formats, multiple forms, multiple messages

Quality multimedia results from a balanced combination of all these elements. However, the planning and writing of such a course is different from a traditional course. The publication of a structured course according to the traditional model is not desirable, because the teacher is not present to give instructions and the formulation of questions and answers will be delayed.

An e-learning course involves the use of multimedia tools and the Internet, cooperation and remote information exchange between teachers and students (Savu et al. 2010). Then, the courses are developed on platforms that try to replicate what teachers do in the classroom, in face-to-face lessons. We can consider e-learning a kind of virtual "alter ego" of the class.

E-learning platforms are software-controlled learning infrastructures that try to replicate what teachers do in the classroom, in face-to-face lessons. They are connected to the Internet and are accessed via a web browser (Savu et al. 2010).

ADVANTAGES AND DISADVANTAGES OF E-LEARNING

Advantages of e-learning courses (Savu et al. 2010):

- 👍 breaking the barriers of time and space;
- 👍 cost reduction (organizing and teaching online courses requires lower costs compared to traditional education);
- 👍 the reaction capacity of the users is amplified;
- 👍 globalization of information and knowledge;
- 👍 personalization of learning (the student can learn at what time he wants, in what order it seems more accessible, using attractive resources for him).

Disadvantages of e-learning courses:

- 👇 dependence on internet connection;
- 👇 the difficulty of adapting to the new method of preparation;
- 👇 risk of isolation (especially if the student does not participate in discussions on chats or forums);
- 👇 difficulty keeping up with the class;
- 👇 possible demotivation / disinterest after a longer period.

Online learning largely reproduces traditional learning, the biggest difference being that a classroom is no longer real, physical, but virtual, with the teacher and students being able to communicate through technology.

The educational environment comes to life as you become familiar with technology, and face-to-face friendships begin to expand in the online environment.

💡 TYPES OF DISTANCE EDUCATION

artist:"SasinParaksa" AND @gettyimagespro

👉 *Synchronous education* involves, according to specialized studies, the simultaneous participation of all students and teachers. The interaction between you and the teacher is done in real time, using audio and video means (for example, video conferencing, chat, smartphone use) (Savu et al. 2010; Huang et al. 2020).

👉 *Asynchronous education* does not require the simultaneous participation of teachers and students, even if it is also a form of distance education. You do not have to be together with the teacher in the same space at the same time. In this situation, you can choose your own study time and can gather bibliographic resources from educational forums, platforms, e-mail, other forums.

💡THE EDUCATIONAL EFFECTIVENESS OF DIGITAL TOOLS

According to research by the UK Agency for Communications and Educational Technology (ACET, 2003), the use of digital communication tools in schools to support students with special needs enables learners to communicate, participate in lessons and learn more effectively. The key results of this research are described as follows:

GENERAL FINDINGS:

- 👍 technology increases your autonomy as a student;
- 👍 technology facilitates the unlocking of the hidden potential of people with communication difficulties;
- 👍 technology allows you to demonstrate the fulfillment of work tasks in special ways, for which there would be no equivalent in traditional methods;
- 👍 digital communication tools allow work tasks to be tailored to suit individual skills.

EFFECTS OF USING TECHNOLOGY FOR STUDENTS:

- 👍 computers can improve the degree of independent access to education (Moore & Taylor, 2000; Waddell, 2000);
- 👍 students with special needs are given the opportunity to complete tasks at their own pace (Waddell, 2000);
- 👍 visually impaired students who use the Internet can easily access information with their peers (Waddell, 2000);
- 👍 students with profound and multiple learning difficulties may communicate more easily (Detheridge, 1997);

👍 students who use assistive voice communication technologies gain trust and social credibility at school and in their communities (Buckler & Peterson, 2012);

👍 increasing students' familiarity with the digital field motivates them to use the Internet at home for both training and entertainment purposes (Waddell, 2000).

PART 2 – WHAT METHODS AND TECHNIQUES CAN I USE IN DISTANCE EDUCATION?

💡 INTRODUCTION

In this chapter we present some methods that provide opportunities for you to engage in class work.

Dear student!

💡 METHODS MATTER

The aim of the method is to help you know, understand and memorize the information. Here are a few useful methods:

👉 **Instructional lecture;**

👉 **Talking;**

👉 **Storytelling.**

INSTRUCTIONAL LECTURE

The teacher gives information (using demonstration or presentation) and your role is to actively listen.

https://pl.freepik.com/darmowe-wektory/maly-mezczyzna-z-wielkim-olowkiem-oglada-wyklad online_15403811.htm#page=1&query=edukacja&position=16&from_view=author

But how exactly are you supposed to actively listen?

In synchronous lectures:

☞ make sure you are in a safe and quiet space for listening and learning;

☞ put your learning device on a work-area in your room/house (the bed you sleep in does not account for that);

☞ avoid multi-tasking and use only the device needed for the instructional lecture;

☞ don't keep other devices (TV, smartphone, tablet) within your visual field and turn them off/silence them during lectures;

☞ turn your camera on so you can give nonverbal feedback to the teacher and help him/her adapt his/her discourse;

☞ ask questions whenever you have a curiosity or whenever you don't understand something;

☞ if taking notes/ making visual representations of information is your thing and helps you memorize, do that even if the teacher will provide instructional materials.

In asynchronous lectures:

☞ take from the recommendations above what you find useful;

☞ before starting the lecture, ask other people in the house not to interrupt you until you confirm you have finished the lecture;

☞ write the unclear information or the questions you have as you're watching the lecture and ask the teacher for supplementary clarifications next time you see each other in synchronous format;

☞ if during the lecture you're becoming aware that your mind started wandering and you cannot concentrate, you can pause the lecture for 5 minutes and do something active (like dancing a little or jumping).

TALKING

Conversation between you and the teacher, with the idea that the teacher is the person in control.

If good ideas appear during the discussion, write them down and see afterwards if you can transform them into something bigger.

STORYTELLING

Storytelling is the teacher's or student's presentation of some action, real or fictional, that takes place over a period of time.

Your role is to actively listen, but also to raise questions regarding the moral of the story and its usefulness for your development.

Also, after storytelling, you can engage in a guided discussion about the best solutions for the problems targeted in the story.

💡 PROBLEM-BASED METHODS IN DISTANCE LEARNING

The aim of the method is to put you in a situation where you have to:

👉 find and verify solutions to a problem on you own;

👉 implement the principles of the scientific analysis of a problem.

The essence of this type of method is to put you in a difficult situation, which must be overcome by working out a solution individually or in a group.

Problem-based methods help you develop critical thinking skills and activate your curiosity.

A variety of sources of information are used (e.g., didactic films, photographs, drawings, the Internet, numerical data).
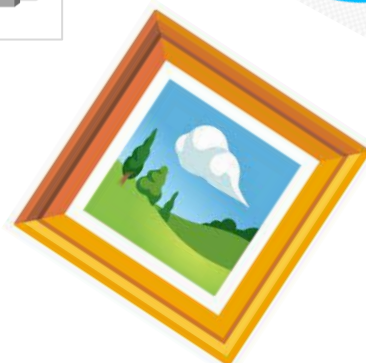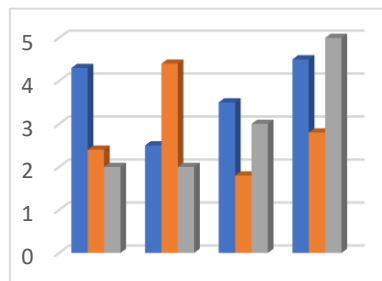
Due to the nature of the method and the variety of problems, the possibilities of implementation in a distance form are virtually unlimited. A few suggestions of an are presented below:

FORUM/CHAT

👉 Group forums or chats and class forum or chat;

👉 Group forums or chats and real-time online meeting.

Get together with your class mates and figure the problem out. Describe, debate si solve the assignment together, as a team.

https://www.shutterstock.com/pl/g/palaganpaksina

OPEN TASK

The problem situation can be presented to you as a task content. It can also be presented in a real-time online meeting with an e-table or text editor where ideas will be written down. You will be asked individually to transfer your proposed solutions to the lecturer. At the end of the course, the teacher arranges an "exchange" of solutions - you can discuss the proposals of others in the forum, or using voting and choose the best solution.

SHARED DOCUMENT

The problem situation is presented in the form of an HTML page, a shared document and you can work out your joint solution in a shared document. At the end, the result of each group's work is discussed in the general forum.

So, it can be implemented through a virtual drive - files for groups e.g., text editor with access for students and teacher and a class forum or online meeting in real time.

⚙️ EXPOSITORY METHODS IN DISTANCE LEARNING

Expository methods are used to shape your values, change them and organize them into a system. The essence of this method is to experience certain feelings. We will describe below:

- 👉 Film, theatre show, performance;
- 👉 Exposition (e.g., online gallery).

FILM, THEATRE SHOW, PERFORMANCE

The teacher may ask you to make a film presenting a certain topic or put together a theatre show with your colleagues.

Take your time to:

👍   Connect with the topic (read about it and choose the information you find most interesting and consistent with the teacher's requirements);

👍 Discuss with your group members what each person will do;

👍 Set deadlines for each person's small task;

👍 Draft the narrative of the film or create the lines in the play and discuss all together what the final narrative will be;

👍 Choose the time, place and technology to make the film happen;

👍 Edit the film properly as to make it clear and catchy (as much as possible);

👍 If you're planning a theatre show, rehearsals and proper costumes are a must have.

EXPOSITION- ONLINE GALLERY

What can you see without leaving home?

👍 museums

👍 science centres

👍 monuments around the world

All have opened up to virtual tours.

The mysterious Pyramid of Cheops, the world-famous Louvre in Paris, or perhaps NASA's science centre?

The internet is full of listings of museums from all over the world that are worth visiting online. Just check with your teacher what online tours are suitable for a particular subject.

💡 PRACTICAL METHODS IN DISTANCE LEARNING

The aim of this method is to get you involved in practical tasks. What's this all about?

- Diagrams, descriptions, instructions
- Project method

DIAGRAMS, DESCRIPTIONS, INSTRUCTIONS

You will receive from the teacher a set of instructions and rules to follow (e.g., in the form of successive steps of the procedure) in a text file (Word, pdf, instructions in HTML pages and e-books) or in the form of video files, and in the case of software operation - in the form of screencasts.

https://www.shutterstock.com/pl/g/swstock

Here is a list with software you can use to upgrade your diagram and graphic representation skills:

👉 Creately: https://creately.com/
👉 LucidChart: https://www.lucidchart.com/pages/
👉 Miro: https://miro.com/
👉 Sketch: https://www.sketch.com/

A forum may be available for you, where you can get help from the teacher or other participants in case of failure or doubts.

PROJECT METHOD

The project method allows for integration of school and out-of-school knowledge, practical use of knowledge and skills.

👉 It exercises your creative thinking, fosters integration of content from various teaching subjects.

👉 It teaches you how to make independent decisions, plan, work independently and in groups, solve problems, select information, analyses content.

Working on a project is a multi-stage process and usually takes a long time so make sure you clear your schedule for it.

PART 3 HOW TO REMAIN ENGAGED IN DISTANCE EDUCATION?

There are several techniques that you can use to stay engaged in online activities:

👉 it is important to make use of bidirectional channels of communication: raise your hand, ask
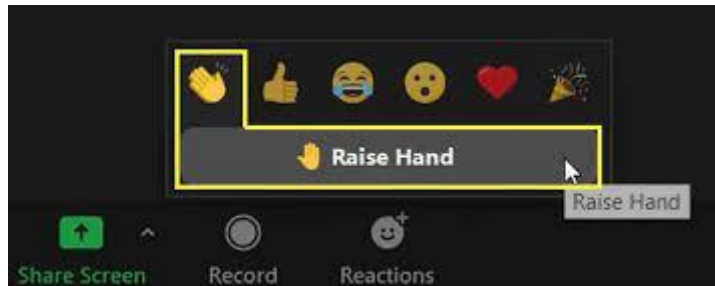
questions, write in chat if possible, make comments every time the teacher encourages you to speak up;

👉 draw on a virtual whiteboard that is shared with the rest of the class;

👉 participate in online small groups made by your teacher (these are usually called breakout rooms in ZOOM);

👉 honestly assess your own work and the work of your classmates when your teacher invites you to (for this, you can use the tools provided in the next section);

👉 rely on trustworthy information sources, even if you have to make an extra effort; try to identify the information source, investigate their reputation and find an alternative or complementary sources of information. In this era of disinformation, it is crucial for you to distinguish clear evidence and facts from ill-documented opinions and preconceptions.

PART 4 - TECHNOLOGICAL TOOLS THAT YOU CAN USE IN DISTANCE EDUCATION

In this section you will find useful tools that can be used to create the best distance learning environment as possible. Depending on your needs you should select the appropriate tool to work with, as each of the ones presented has different functionalities applicable to each case.

Here you can find, distributed by different categories, some information corresponding to each of the platforms presented, namely, the logo and name of the service, a brief description, some of the features to be highlighted, the platforms that are compatible with the software, its price and the link to the respective website.

Feel free to explore any additional features that you think are relevant in addition to the ones presented.

Be creative!

HELPFUL TOOLS FOR Improving INTERACTION

Please note that the values referred in the price section might be subject to change according to the service needs.

Some services offer Free, Commercial or Both Plans

Logo	Service	Description	Features	Platforms	Website
	Google Classroom	Google Classroom is your central place where teaching and learning come together. **Students** ➜ Track classwork and submit assignments. ➜ Check originality, feedback, and grades. ➜ Share resources and interact in the class stream or by email.		All (With Internet Access) Web-Based Windows Macintosh Linux iOS Android	Visit
	Edmodo	Edmodo is a global education network that helps connect all learners with the people and resources needed to reach their full potential.	➜ Discussion forum ➜ Learning material management ➜ Asynchronous document sharing ➜ Content Library allows teachers to store unlimited content for easy sharing and re-use ➜ Secure platforms which ensures safety and privacy for users ➜ No private information is required from students	All (With Internet Access) Web-Based Windows Macintosh Linux iOS Android	Visit

22

- ➜ Students join classes by invitation only from teacher/instructor (via a group code)
- ➜ Teacher/instructor has full management control
- ➜ Teacher/instructor can track student progress
- ➜ Mobile learning - anytime, anyplace
- ➜ Mobile apps for iOS and Android platforms
- ➜ Accessible via mobile browser (m.edmodo.com)
- ➜ Updates and notifications on the go
- ➜ Ability to create polls, quizzes, assignments, notes, blogs, and award badges online

Mentimeter	Build interactive presentations with the easy-to-use online editor. Add questions, polls, quizzes, slides, images, gifs and more to your presentation to create fun and engaging presentations.	➜ Build beautiful interactive presentations in the presentation builder. ➜ Collect polls, data and opinions from participants using smart devices. ➜ Get insights on participants with trends and data export. ➜ 13 interactive question types including Word clouds and Quizzes. ➜ Build entire presentations quickly and easily with Content Slides. ➜ Select from different presentation themes or build your own. ➜ Integrated with free stock image and GIF libraries. ➜ Easy-to-use presenter mode.	All (With Internet Access) Web-Based Windows Macintosh Linux iOS Android	Visit

	Padlet	Padlet provides a cloud-based software-as-a-service, hosting a real-time collaborative web platform in which users can upload, organize, and share content to virtual bulletin boards called "padlets."	➔ The audience interacts anonymously with a smart device.		
			➔ Use the Mentimote to moderate and control presentations.		
			➔ Enable profanity filters in multiple languages.		
			➔ Export data in a PDF or Excel file.		
			➔ Compare data over time with Trends.		
			➔ Segment response to get deeper insights.		
			➔ Collect feedback via surveys.		
			➔ Add posts with one click, copy-paste, or drag and drop.	All	Visit
			➔ Works the way your mind works.	(With Internet Access)	
			➔ Changes are autosaved.	Web-Based	
			➔ Simple link sharing.	Windows	
			➔ Available in 29 languages.	Macintosh	
			➔ Working towards greater accessibility.	Linux	
			➔ Others Contribution - signup not required.	iOS	
			➔ Work with unlimited contributors.	Android	
			➔ Give read-only, writing, moderator, or admin access; revoke at any time.		
			➔ Updates appear instantly across devices.		
			➔ Use your work as a template.		
			➔ Upload files from your computer, take a picture or video from your phone, or link.		
			➔ Post images, documents, videos, music, and files from Photoshop, Illustrator, and more.		

Edpuzzle	EDpuzzle is a web-based eLearning application allowing users to select a video and customize it by editing, cropping, recording their own audio, and adding quiz questions directly to the video stream.	➔ Embed content from anywhere on the web. ➔ High-quality lessons - Choose from our library of teacher-created content and Edpuzzle Originals, or screen record your own video! ➔ Interactive learning - Embed questions in your videos, and watch them as a class in Live Mode or let your students watch at their own pace. ➔ Student accountability - Let students answer with text or audio, give them instant feedback, and prevent them from skipping key content. ➔ Easy-to-read analytics - Keep track of who understands your lesson and who needs more help, in order to differentiate for your students.	All (With Internet Access) Web-Based Windows Macintosh Linux iOS Android	Visit
Wooclap	Wooclap is an interactive electronic platform used to create polls and questionnaire. The users answer questions anonymously through technology devices such as smart-phones or laptops.	➔ 20 ways to interact - Collaborate with your learners through multiple choice questions, word clouds, competitions and many other features. ➔ Participation via the Web or SMS - Participation has never been so easy and fast. Wooclap does not require any downloads & works on smartphones, tablets or computers. ➔ Synchronous or asynchronous learning - Give your students access to questionnaires and files to work on before or after the class. ➔ Participation with identification or	All (With Internet Access) Web-Based Windows Macintosh Linux iOS Android	Visit

anonymously - Let your participants respond anonymously or ask them to identify themselves. It's your choice.

➔ Live or distance learning - Maintain your online courses interactive to offer your students an awesome and effective learning experience.

➔ Share your questions with your colleagues - Exchange your content with your colleagues in 1 click.

ASSESSMENT AND EVALUATION

In an online teaching environment, assessment can and should be done in the most interactive, interesting and stimulating way possible. Use the tools presented to create quizzes, exercises, puzzles, games or flashcards to help you learn better, self-assess your knowledge and the knowledge of your peers.

Logo	Service	Description	Features	Platforms	Website
	Kahoot	Kahoot! is a game-based learning platform, used as educational technology in schools and other educational institutions. Its learning games, "kahoots", are user-generated multiple-choice quizzes that can be accessed via a web browser or the Kahoot app. Kahoot! can be used to review students' knowledge, for formative assessment, or as a break from traditional classroom activities.	→ Create a quiz in minutes → Add slides with a classic layout → Choose one of our pre-designed templates as the basis → Duplicate and editing existing kahoots → Import questions from a spreadsheet → Search from millions of questions in our question bank → Combine multiple kahoots → Add drawings in our iOS app → Insert YouTube videos into questions → Host kahoots live in class or via video conferencing → Display questions and answers on students' devices in live kahoots → Assign student-paced challenges for review or homework → Get students to play individually or in	All (With Internet Access) Web-Based Windows Macintosh Linux iOS Android	Visit

		teams		
		➔ Add multiple choice quiz questions		
		➔ Grab attention with true/false questions		
		➔ Give more context and teach with slides		
		➔ Adjust timer options depending on complexity of question		
Quizizz	Quizizz is an Indian creativity software company headquartered in Bengaluru, India, that creates and sells a gamified student engagement platform. The software is used in class, group assignments, pre-test review, formative assessments and pop quizzes.	➔ Instructor paced lessons/Quizzes: Teachers control the pace; the whole class goes through each question together.	All (With Internet Access)	Visit
		➔ Student paced lessons/Quizzes: Students progress at their own pace and you see a leaderboard and live results for each question or lesson.	Web-Based	
			Windows	
		➔ Bring Your Own Device (BYOD): Students always see the content on their own device, be it PCs, laptops, tablets, and smartphones.	Macintosh	
			Linux	
			iOS	
			Android	
		➔ Access to millions of Quizzes: Import any public quiz as-is, edit and customise them.		
		➔ (Quiz + Lesson) Editor: Choose from 5 different question types to add images, video and audio to teleporting questions from other quizzes and lessons.		
		➔ Reports: Get detailed class-level and student-level insights for every quiz. Share with parents/guardians to monitor student progress.		
		➔ Options to Customise: Options to customize your quiz sessions to toggle the level of competition and speed.		

| | **Socrative** | Immediate feedback is a vital part of the learning process. Socrative gives you just that for the classroom or office - an efficient way to monitor and evaluate learning that saves time for educators while delivering fun and engaging interactions for learners. | ➔ Sharing & Collaboration: Share your quiz with other instructors and/or ask them to be collaborators.

➔ Remote Computer Monitoring: As reported in 38 Socrative reviews. Monitor student computer activity remotely from an administrator terminal.

➔ Interactive Quizzes: Create and share assessments and quizzes that students can access remotely from their computers. This feature was mentioned in 59 Socrative reviews.

➔ Student Assignment Distribution: Based on 41 Socrative reviews. Assign and distribute homework or classwork to students through the software.

➔ Student Assignment Collection: Collect and grade student homework and classwork through the software. This feature was mentioned in 46 Socrative reviews.

➔ Progress Reporting: Receive detailed reports of student success and progress that can be shared with parents or administrators. This feature was mentioned in 47 Socrative reviews.

➔ Shared Content Libraries: Share files such as class notes, quizzes, and presentations with students or parents through content libraries accessible through the software. 27 reviewers of Socrative have provided feedback on this feature. | All (With Internet Access)

Web-Based
Windows
Macintosh
Linux
iOS
Android
Kindle | Visit |

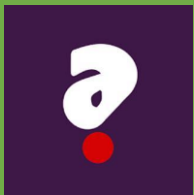|				
Quizlet	Quizlet	Quizlet makes simple learning tools that let you study anything. Start learning today with flashcards, games and learning tools — all for free.	➔ Flashcards - Learners can revise words from a lesson using digital flashcards made by the teacher. Flashcards can be words + meanings or words + images. You could also make question and answer cards. Students could also make their own flashcards if they want. ➔ Learn - Read the meaning/look at the image and type the correct word ➔ Spell - Type the target word you hear ➔ Test - An auto-generated mix of written, multiple choice, and true and false questions based on the vocabulary set ➔ Match/Gravity - a couple of games using the vocab set. Match works well on an interactive whiteboard ➔ Live - play a live game with multiple participants	All (With Internet Access) Web-Based Windows Macintosh Linux iOS Android	Visit
	Poll Everywhere	Poll Everywhere's product allows audiences and classrooms in over 100 countries to use mobile phones, thereby "plotting the obsolescence" of proprietary hardware response devices otherwise known as clickers.	**Asynchronous feedback** ➔ Pinned activities: Keep an open backchannel for questions at any time. ➔ Activity results: Show the results of a multiple choice question when responding. ➔ Dedicated support: Work with the Poll Everywhere team when you have a question. **Before you present** ➔ Team Collaboration: Simultaneously create, present, and collaborate, from anywhere.	Windows Macintosh iOS Android	Visit

➔ Custom keywords: Create a unique text response code that enhances your story.

➔ Custom Usernames: Transform ordinary presentations into unique experiences.

During your presentation

➔ Registered Participants: Reliably track participation with registered participation.

➔ Custom Branding: Personalize your presentation to match your brand.

➔ Moderation: Filter and approve responses as they come in.

After you present

➔ Reporting: A deep dive into your audience's insights

➔ Grading: Assess and track student comprehension

➔ Learning Managment system: Integrate your university- or department-wide account with your learning management system (LMS)

Quizalize	The best quiz platform for remote or face-to-face classrooms. Engage your class with fun, standards-tagged quizzes. Get instant data on student mastery. Automatically assign differentiated follow-up activities.	➔ Quizalize is a virtual teaching assistant: The software acts as a TA, living in the classroom, observing all students and supporting the teacher with insights and recommendations on how to help each and every student's progress.	All (With Internet Access)	[Visit](#)
			Web-Based	
		➔ Quizalize is fun AND engaging: Our software makes formative assessments fun for students.	Windows	
			Macintosh	
		➔ Tagged Curricula: When a teacher creates	Linux	

a quiz they are able to tag the studied curricula to their content.

iOS

Android

→ Automated Personalisation: With Quizalize it is easy to set up personalised follow-on activities for students. For example, teachers can assign custom pathways based on test scores.

→ Freedom: Teachers can use any of the 1 million pieces of content already live in Quizalize or create their own. PDFs, Youtube videos, audio clips, gifs and images can all be used on the Quizalize platform.

FILE SHARING APPLICATIONS

Document sharing may be required. Below is a list of services that you can use to share files free of charge, quickly and effectively, facilitating your interactions with students. They will be able to access the download links without having to create an account with the respective service.

Logo	Service	Description	Features	Platforms	Website
	Google Drive	Google Drive is a file storage and synchronization service developed by Google. Allows users to store files in the cloud, synchronize files across devices, and share files. Google Drive encompasses Google Docs, Google Sheets, and Google Slides, which are a part of the Google Docs Editors office suite that permits collaborative editing of documents, spreadsheets, presentations, drawings, forms, and more. Files created and edited through the Google Docs suite are saved in Google Drive.	➔ Storing files: By default, Google gives you 15 GB of free storage space across Gmail, Google Drive and Google Photos. If you ever hit that limit, you can always pay for more space by upgrading to a Google One account. ➔ Sharing files: Files are private until you share them. But at any time, you can invite others to view, edit, or download files and documents. ➔ Accessing files from anywhere: Files can be accessed from any smartphone, tablet or computer. Offline access is also available. ➔ Comprehensive search: Drive can recognize images and even text in scanned documents, making searching for files even easier. ➔ Secure storage: Drive files are protected by an AES256 or AES128 encryption, the same security protocol used on other Google services.	All (With Internet Access) Web-Based Windows Macintosh Linux iOS Android	Visit

	Dropbox	Dropbox is a file hosting service operated by the American company Dropbox, Inc., headquartered in San Francisco, California, US that offers cloud storage, file synchronization, personal cloud, and client software.	➔ Store and access files from anywhere: Store your files in one safe place, accessible from your computer, phone, or tablet. Back up important folders like your "Desktop"—any changes will sync across your account. ➔ Bring all your content together: Create and edit your work—including cloud content and Microsoft Office files—directly in Dropbox, so you spend less time switching between apps or searching for files. ➔ Work smarter from your desktop: Our desktop experience with smart content suggestions lets you work with your team, content, and tools—all from the convenience of one organized place. ➔ Always be informed: Get notified of progress updates and to-dos added to descriptions, and stay up to date with a recent activity view that lives alongside your work. ➔ Dropbox Paper puts everyone on the same page: With Paper, a collaborative doc for your team, you can create content easily and organize your projects using timelines, to-dos, and tables.	All (With Internet Access) Web-Based Windows Macintosh Linux iOS Android	[Visit](#)
	OneDrive	Microsoft OneDrive is a file hosting service that Microsoft operates. Enables registered users to share and synchronize their files. OneDrive also works as the storage back-end of the web version of Microsoft Office. OneDrive offers 5 GB of storage space free of charge, with 100 GB, 1 TB, and 6 TB	➔ Unlimited file access, anytime ➔ Renders files available from anywhere for collaboration ➔ Organisational platform for files	All (With Internet Access) Web-Based	[Visit](#)

34

		storage options available either separately or with Office 365 subscriptions.	➜ Free-up device storage ➜ Sharable content across teams, large or small ➜ Customisable sync experience (for admin) ➜ Securely store files and information ➜ Supports multimedia	Windows Macintosh Linux iOS Android	
	WeTransfer	WeTransfer is the simplest way to send your files around the world. Share large files and photos. Transfer up to 2GB free. File sharing made easy!	➜ Access Controls/Permissions. ➜ Content Management. ➜ Data Synchronization. ➜ Document Management. ➜ Document Storage. ➜ File Management. ➜ File Sharing.	All (With Internet Access) Web-Based Windows Macintosh Linux iOS Android	[Visit](#)
	Mega	MEGA provides user-controlled encrypted cloud storage that can be accessed through standard browsers and mobile apps. Unlike other cloud storage providers, your data is only encoded and decrypted by your devices, never by us.	➜ MEGA provides massive cloud storage space ➜ Download files using links with no need to sign up ➜ The file transfer centre easily manages your transfers ➜ Complete file and transfer management, even on mobile devices ➜ Install the MEGA Desktop App and enjoy fast synchronisation between your computer and your MEGA Cloud	All (With Internet Access) Web-Based Windows Macintosh Linux iOS Android	[Visit](#)

PRESENTATION PREPARATION TOOLS

The way content is shown can determine the engagement of the audience. Use the tools presented below to create more dynamic and interactive presentations, significantly improving the quality of your work.

Logo	Service	Description	Features	Platforms	Website
Prezi	Prezi	Web-based tool for creating presentations (called prezis for short). It's similar to other presentation software like Microsoft PowerPoint, but it offers some unique features that make it a good alternative. If you're looking to create a presentation that's a bit more eye-catching and engaging, Prezi may be for you.	➔ Presenter View: separate display in the desktop app that shows where you are in your presentation and what's coming next. ➔ Presenter notes: Sometimes we all need a heads-up. Don't freeze on stage, use presenter notes to record your ideas and reminders and then revisit them while presenting. ➔ PDF export: Leave your audience with more than a lasting impression by sharing a PDF version of your presentation. ➔ Downloading a presentation: Use the desktop app to download your presentation to a standalone file that's viewable even without an internet connection. ➔ Live Prezi: With Live Prezi you can present to anyone, from anywhere, in the world. Create a personalized presentation space and invite up to 100 audience members to join remotely and in real time by sending your own unique link. ➔ Presentation online: Navigate your presentation on your phone or tablet with	All (With Internet Access) Web-Based Windows Macintosh Linux iOS Android	Visit

			the Prezi Viewer app so you can focus on conversational presenting while having the freedom to move around the stage and engage your audience.		
	Powtoon	Powtoon is a visual communication platform designed to help businesses to create animated videos & presentations for marketing, HR, IT, training & more. With a large variety of pre-built templates & a drag and drop editor, Powtoon allows businesses and teams to create fully customized presentations.	➔ 115K video backgrounds and full video, animation, GIF, and image file implementation. ➔ Hundreds of templates, thousands of scenes, backgrounds, characters and assets to choose from. ➔ Access to 5 visual looks: modern edge / flat, Infographics, whiteboard, animation, live video and social ➔ Use the drag and drop editor to create custom presentations with ease. ➔ Export created presentations to YouTube, Facebook, LinkedIn, Twitter, Wistia, Hubspot, Ads Manager, Slideshare, and Vimeo, or publish as PPT or PDF.	Web-Based Windows Macintosh	**Visit**
	Canva	Canva is used to create social media graphics, presentations, posters, documents and other visual content. The app includes templates for users to use. The platform is free to use and offers paid subscriptions such as Canva Pro and Canva for Enterprise for additional functionality.	➔ Capture every move with online video recorder ➔ Catch the perfect timing with Trim and Split tool ➔ Resize videos in a few clicks just like magic ➔ Easy video editing with free stock videos ➔ Get even more out of Canva Presentations ➔ Edit and convert your PDFs into online designs ➔ Let your words flow with Text Animations ➔ Tell it with a twist using Curved Text		**Visit**

			➔ Design better together	
			➔ Apply Texture for Homey, Lived-In Designs	
			➔ Crop Your Images for Trim, Precise Compositions	
			➔ Say It Loud with a Drag and Drop Speech Bubble	
			➔ Add Text to Any Photo for a Quick Caption or Compelling Commentary	
			➔ Add Stellar Photo Effects to Make Your Photos Magnificent	
			➔ Straighten Your Photos to Keep Your Snapshots Looking Sharp	
			➔ Create Soft, Dreamy Designs with Transparent Images	
	Visme	Create professional presentations, interactive infographics, beautiful design and engaging videos, all in one place. Visme offers other features including a wide range of fonts, free images and icons to customize the content.	➔ Presentations Keep your audience engaged. ➔ Documents Formalize your branding. ➔ Videos Add movement to your brand. ➔ Infographics Share information visually. ➔ Printables Create content for printing. ➔ Charts and Graphs Bring life to your data. ➔ Social Media Graphics Create scroll-stopping content.	All (With Internet Access) Web-Based Windows Macintosh Linux iOS Android	Visit

	Genially	Use Genially, the most powerful online tool for creating interactive and animated content. Stun with your creations.	**Template Creation**	All	

Genially

Use Genially, the most powerful online tool for creating interactive and animated content. Stun with your creations.

Template Creation

→ Image Upload: Directly upload images to use for your graphic on the platform.

→ Stock Image Library: Choose from pre-loaded images to use for your banner.

→ Drag & Drop Editing: Ability to edit without any coding or design knowledge.

→ Variety Of Banner Types: Create a stactic, animated or interactive banner.

Design & Editing

→ Shape & Clip Art: Insert a variety of shapes and clipart onto your design.

→ Font Selection: Chose from a variety of fonts to layer over your graphic.

→ Scale: Scale your image to a variety of sizes.

Ad Management

→ Ad Sets: Ability to duplicate and save your design as an ad set.

→ Export As Different File Types: Ability to save your image as a variety of file types.

→ Schedule: Schedule banners to be published ahead of time.

Analytics

→ Reporting: Ensure your ads are reaching your target demographic.

→ Heatmap: Ability to see how your audience is interacting with your ads.

All
(With Internet Access)

Web-Based
Windows
Macintosh
Linux
iOS

→ Budget: Ability to adjust your campaign budget.

Planning

→ Collaborative Editorial Calendars / Scheduling Content: Create editorial calendars that can be accessed by multiple users. Schedule content in advance to post at a later date.

INTERACTIVE WHITEBOARD APPLICATIONS

In face-to-face classes it becomes easier to show (through drawings, diagrams and figures) what we intend to teach, making the process of explaining a given topic easier. Did you know that in an online environment you can also use digital boards to draw what you want, exemplifying to students how they should perform a certain task, through examples. See the list below with some of the tools you can use.

Logo	Service	Description	Features	Platforms	Website
	Google Jamboard	Jamboard is a digital interactive whiteboard developed by Google to work with Google Workspace, formerly known as G Suite. It has a 55" 4K touchscreen display and can be used for online collaboration using Google Workspace. The display can also be mounted onto a wall or be configured into a stand.	**Simple as a whiteboard, but smarter** ➔ Jamboard is one smart display. Quickly pull in images from a Google search, save work to the cloud automatically, use the easy-to-read handwriting and shape recognition tool, and draw with a stylus but erase with your finger – just like a whiteboard. **Share ideas in brainstorms or lectures** ➔ Jamboard makes learning visible and accessible to all collaborators on the jam session. Plus, It's easy to present your jams in real time through Meet, allowing for easy sharing or making real-world connections. **Students can jam from anywhere** ➔ Educators can engage all students in the learning process, whether working together in a traditional classroom, a group seminar setting, or through distance learning. The Jamboard app for Android and iOS makes it	Windows Macintosh Linux iOS Android (Requires a Jamboard Device to Work)	[Visit]

easy for students and educators to join in on the creativity from their phone, tablet, or Chromebook.

	Name	Description	Features	Platforms	Link
	Microsoft Whiteboard	Microsoft Whiteboard is an infinite, collaborative canvas for effective meetings and engaging learning. You can use Whiteboard to collaborate with other people and accomplish many activities, from brainstorming and planning to learning and workshops.	➜ Running effective meetings. ➜ Brainstorming. ➜ Learning and coaching. ➜ Sprint planning. ➜ Project management. ➜ Problem solving. ➜ Continuous improvement. ➜ Incident management.	Web-Based Windows Macintosh Linux iOS	[Visit](#)
miro	**Miro**	Miro is the online collaborative whiteboard platform that enables distributed teams to work effectively together, from brainstorming with digital sticky notes to planning and managing agile workflows	➜ Create, collaborate, and centralize communication for all your cross-functional teamwork. ➜ Templates & frameworks: Use pre-built templates or create your own templates and smart frameworks. ➜ Infinite Canvas: Unleash your creativity and work the way you want to with an infinite canvas. ➜ Widget: Utilize sticky notes, freeform pen, shapes, arrows, smart drawing, and more. ➜ Mouseover collaboration: See collaborators' cursors to track how team members engage with your boards. ➜ Easy screen sharing & presentations: Share your work directly from the Miro platform. ➜ Embedded video, chat, & commenting: Get feedback, reviews, and approvals with multiple	Windows Macintosh Linux iOS	[Visit](#)

communication options.

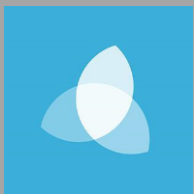|					
	Explain Everything	The online interactive whiteboard app where people share and learn without boundaries. Join from any device and collaborate in real-time both visually and audibly. Turn ideas into understanding with Explain Everything.	→ Explain Everything is an interactive whiteboard platform where people collaborate, share, and learn without boundaries. Every project starts with an infinite canvas where you can add new and existing media (including video, images, PDFs, and web browsers), annotations, and text to create truly unique visual stories. → Teachers create explainer videos for students to view (either from Explain Drive or an LMS). → Teachers provide live instructions with the app. Students can work on assignments alone or in small groups together. → Both teachers and students create explainer videos. → Both teachers and students actively collaborate within the app on a cloud project. Students can work on their own and download any number of projects. → Students do not create their own projects and only work live on projects provided by teachers. Students cannot work on projects in the absence of the teacher.	All (With Internet Access) Web-Based Windows Macintosh Linux iOS	[Visit]
	Stormboard	Use Stormboard's shared workspace to generate more ideas, and then prioritize, organize, and refine those ideas to make your meetings, brainstorms, and projects more productive and effective.	→ Infinite digital canvas – Generate ideas and collaborate with others on an infinitely created digital whiteboard. → Add images, text, files, and videos – Make your ideas come to life with inspirational reference materials. → Connect and collaborate across devices – The	All (With Internet Access) Web-Based Windows	[Visit]

tool is available on all devices, making it easy to connect.

Macintosh

Linux

iOS

➔ Choose from a wide selection of templates to easily and quickly create a workspace suited to your specific needs.

➔ Templates: Choose from hundreds of templates, including calendars, project management, Agile, and Design Thinking.

➔ Getting Started: This crash course will provide you with the tools and resources needed to get started.

➔ Video Tutorials: Learn visually through these helpful walkthrough tutorial videos.

➔ Training Programs: Choose from several training programs that can help you and your team get custom-tailored help with the software tool.

REFERENCES

👉 Buckler, T., Peterson, M. (2012). Is there an app for that? Developing an evaluation rubric for apps for use with children with special needs, The Journal of BSN Honors Research, 5 (1). archie.kumc.edu/handle/2271/1092.

👉 Detheridge, T. (1997). Bridging the Communication Gap for Pupils with Profound and Multiple Learning Difficultiesm, British Journal of Special Education, 24 (1), 21-26.

👉 Huang, R.H., Liu, D.J., Tlili, A., Yang, J.F., Wang, H.H., et al. (2020). Handbook on Facilitating Flexible Learning During Educational Disruption: The Chinese Experience in Maintaining Undisrupted Learning in COVID-19 Outbreak. Beijing: Smart Learning Institute of Beijing Normal University.

👉 Moore, D., Taylor, J. (2000). Interactive Multimedia Systems for Students with Autism, Journal of Educational Media, Routledge, 25 (3), 169-175.

👉 Savu, T., D'Angelo, G., Dumitrescu, A. (2010). Introduction to telework, RBA Media Publishing.

👉 Waddell, L. (2000). The Pilot Internet Project: Evaluation Report. Royal National Institute for the Blind, London, England.

👉 https://www2.deloitte.com/global/en/pages/about-deloitte/articles/gx-preparing-tomorrow-workforce-for-the-fourth-industrial-revolution.html

👉 https://marketbusinessnews.com/financial-glossary/keller-plan/

👉 https://efe-project.eu/methods/

👉 https://www.onlineeducation.com/guide/instructional-methods

👉 https://www.womczest.edu.pl/new/wp-content/uploads/2020/06/metody-formy-i-techniki-pracy-zdalne.pdf

👉 https://e-pasje.pl/metody-nauczania-online-rodzaje-metod-ksztalcenia-zdalnego/

👉 https://www.cen.gda.pl/download/2020-04/3535.pdf

AUTHORS

www.ahe.lodz.pl   www.puw.pl

Lidia Mirowska - methodologist, teacher, trainer. Certified by the Association of Academic e-Learning, e-learning methodologist and e-teacher. In the team of the Polish Virtual University senior coordinator for the quality of distance learning. Provides methodological support in working on the platform for teaching staff, in the form of online training and individual consultations. Mentor of the course Open educational resources in the SpołEd library. Author of scenarios and materials for mobile courses on digitisation and e-learning. Participant of international projects on modern teaching methods.

www.unibuc.ro

Ruxandra Folostina is a Senior Lecturer at the Faculty of Psychology and Educational Sciences, University of Bucharest. She is also Associate Professor at the National University of Physical Education and Sports in Bucharest and President of the Romanian Association of Special Education. She worked for many years in the therapy of autism spectrum disorders, and she provides now clinical psychology service to children with ADHD, intellectual disability, adopted children, children with learning disorders and children victims of bullying. She attended training programs in playtherapy and dramatherapy, Feuerstein Instrumental Enrichment Programs (Standard and Basic).

Claudia Iuliana Iacob has a Ph.D. in Psychology and works as a teaching assistant in the Department of Applied Psychology and Psychotherapy at the University of Bucharest. In addition, she is a clinical psychology and cognitive-behavioural psychotherapy supervisor accredited by the Romanian College of Psychologists. She has over 12 years of professional experience in the psychological care of children and adults with emotional and neurodevelopmental disorders. Since 2017, she has combined psychological practice with teaching and research activities. She activates as a researcher in the Laboratory of Health Psychology and Clinical Neuropsychology from the University of Bucharest and

in several projects funded by the Erasmus + program. Her research interests include disability, resilience, education, vulnerable groups, and mental and behavioural health.

www.ulusofona.pt/en/

Paulo Ferreira's research domains include e-marketing, web advertising, eye tracking for web usability, social uses of technology an audience research. Since 2004, Paulo Ferreira has published several articles and delivered presentations at international conferences. He is the IT coordinator for the implementation and innovation of e-learning systems at Universidade Lusófona; he is involved in several projects for the development of mobile applications for distance learning; he is responsible for the in-house programs for the training of academic teachers in the use of new technologies.

Bruno Lino is specialized in IT Management and Multimedia Products Development. He holds a Degree in Applied Communication: Marketing, Advertising and Public Relations and a postgraduate in Digital Marketing. He is responsible for managing the social networks and content of some of Lusófona University institutions and integrates some research projects related to multimedia content production in the E-Learning area such as: IC-ENGLISH - Innovative Platform for Adult Language Education (2018-1-PL01-KA204-050784); MMTLA - Montessori Method in Teaching 2nd Language to Adults (2019-1-TR01-KA204-074258); VIRTEACH - A Virtual Solution for a Comprehensive and Coordinated Training for Foreign Language (2018-1-ES01-KA203-050045); PESE: Professional English Skills For Employability Across EU (2020-1-UK01-KA202- 079035).

Fikri
Tesisat

www.fikritesisat.com

Inanc Ayar was born in 1971 in Istanbul. After graduating from Boğaziçi University, Department of Teaching Mathematics, he did his master's degree in Philosophy at Galatasaray University. He received his Postgraduate diploma in "Drama in Education" from Birmingham City University and is currently writing his Ph.D. thesis in Philosophy

at Galatasaray University. He took part in Boğaziçi University Players as an actor. After university, he worked as a theater coach at Galatasaray High School and later as a theater director at Galatasaray University, among the founders of Galatasaray Stage. In 1999, he wrote and directed the short film "Thirty Four," which received many awards at national festivals and was screened at international festivals. He worked for ten years as an education designer and consultant at TUBITAK-Turkey Industry Management Institute, which he entered in 2002. While continuing his doctoral studies, İnanç Ayar, who has been teaching part-time at Boğaziçi University Faculty of Education since 2006, carries out the HerGünÖğren and Fikri Tesisat initiatives.

We all hope that this publication will help you improve your learning process during online/distance education courses.
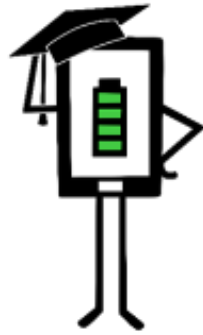
Contemporary Teaching
and Learning Techniques
for Distance Education

Co-funded by the
Erasmus+ Programme
of the European Union