



TURNING DIGITAL

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Introduction

The aim of this booklet is to help adult educators to learn how to be able to transfer their work online while maintaining its interactive element and ensuring high quality standards. This should serve as an introduction of adult educators to innovative digital methods and a great variety of digital tools they can use and apply in their work, along with a detailed description of how they can use them, where to apply them, what to avoid and how to resolve any upcoming issues, that will significantly raise their capacities in digital education and familiarize them with the digital transformation that our times require.

This initiative is implemented within the project "**Turning Digital**" - building sustainable adult e-learning system working towards providing beneficiaries opportunity for skills development, which is implemented in partnership between Business Innovation Program, Connect International and Backslash, within Erasmus + KA210-ADU - Small-scale partnerships in adult education action framework.

According to Eurostat¹, in year 2021, 95% of young people in Europe used the internet daily, while 64% of young people use it to learn about different subjects. Between 2019 and 2021 the share of young people in the EU who did an online course increased 2.6 times from 13 % to 34 %. These statistics point out that young people choose the internet for activities they have used to do in-person in the past. Global research data show that about half of online university students are millennials (ages 28-38), about one-third are from Generation X (ages 39-54), and the remainder is split between baby boomers (ages 55-73) and Gen Zers (ages 18-22). Many factors impact re-enrolling adults' decision for additional education including: courses and training that fit their schedule (61%), guaranteed employer outcome (ex: wage increase) (59%) and quality online and distance learning opportunities (44%). Eight out of 10 adult learners are interested in pursuing online learning.

¹ https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Being_young_in_Europe_today_-_digital_world

Adult learners over the age of 35 were more than five times as likely as learners under age 26 to say that online or virtual classes had always been their preference.²

As part of this project, a survey was conducted among the education practitioners. It can be concluded that, in general, teachers and other training staff don't have difficulties in utilizing digital sources for preparation of teaching material and the entire distance learning process. The biggest room for improvement is evident in the area of relevant learning theories and different methods in planning lessons/activities when it comes to digital tools. Majority of participants could still benefit from presentation and capacity development of the latest learning theories and methods.

Implementation of the teaching process. In general, vast majority of educators rate their readiness to provide online education as high and are willing to participate in those activities. The results are somewhat different when it comes to utilization of specific online learning tools, so that shows room for capacity building in that regard, thus the clear need for a guide such as this.

Improvement is also needed in the monitoring interaction and communication between students in the distance learning process and possibilities for cooperation with colleagues when implementing the teaching process. In general, respondents report that they use digital tools when evaluating their work through reflection. Respondents were adult educators coming from various formal educational institutions and some non-formal education providers.

There are so many wonderful interactive tools available online, and many seamlessly integrate with other applications. But which tools should you choose for your participants and students?

The results of the survey show that vast majority of respondents use almost all given platforms and tools when creating the content and implementing their activities. Traditional tools like Power point and Moodle are still the most popular, while newest apps

² <https://www.instride.com/insights/online-learning-statistics/>

like Padlet and Quizlet are less known to the respondents. Video content is particularly popular and the majority uses smart phones and combination of in-class and self-study apps.

The answers show that the most common utilization of digital tools is for instructing students to use hardware and software for assignments and giving feedback. Also, the majority of respondents feel like they effectively organize activities in the digital environment, while they also struggle with maintaining positive atmosphere and working conditions during class while using digital tools.

This booklet should help educators make the right decisions on which applications suit their various online subjects the best.

Building an online curriculum

We can more and more see that the formal education sector is becoming more informal since the pandemic and turning more towards online tools, while non-formal learning is simultaneously becoming more formal. It urges a 'rethink' of education to match the online era, using more modern and attractive online tools in order to attract and keep the new learners. The blurring of borders between formal, non-formal and informal will require new teaching skills and constant evolution of the profiles of teachers and educators. A holistic approach to education, more personalized and tailored methods, professional coaching, and experience-based learning is needed when creating an online curricula that would satisfy different learning needs and achieve the goals.

Virtual learning isn't a one-size-fits-all solution. Challenges exist because of technological limitations and access for some students. Although online teaching benefits student learning experiences, most students prefer the traditional school environment for its social connection with other students and direct communication with teachers, but can also be applied to most adult learners, too. In person training has many benefits. The personal

element of the training is also a huge chapter that affects the learning process in the form of getting insight of other people.

While in person trainings usually require a certain amount of time spent before and after the pure training hours/days, being involved in an online training can happen anywhere and is limited to the activity set duration.

The world of online learning

For the last several decades, much of the learning industry has primarily focused on applying solid instructional design principles when creating learning content. However, more recently, there's been a shift towards designing for the total user experience, rather than just the content alone³.



As in the classroom learning, how you approach your online education very much depends on the desired learning outcome of your online course, the nature of your audience, and much more.

There are different types of the online learning. A lot of thought goes into planning an online course; how it is organized, what type of content is presented, and particularly accessibility issues for students with special needs. We will mention here some of the most common types of online learning approaches.

³ Heggart, K., Dickson-Deane, C. What should learning designers learn?. J Comput High Educ 34, 281–296 (2022). <https://doi.org/10.1007/s12528-021-09286-y>

Synchronous events take place in real time. Synchronous communication between two people requires them to both be present at a given time. Examples of synchronous learning are chat and instant messaging (Viber, WhatsApp and similar apps), video and audio conference, live webcasting, application sharing, whiteboard, polling, and virtual classrooms.

Asynchronous events are time-independent. A self-paced course is an example of asynchronous learning because online learning takes place at any time. E-mail or discussion forums are examples of asynchronous communication tools. In such cases, students ideally complete the course at their own pace, by using different learning platforms. Examples of asynchronous learning are audio/video, e-mail, discussion forum, wiki/blog, webcasting/conferencing, simulations, game-based learning. Nowadays this is the most common method which uses wiki, blog and any reading material like ppt, pdf files to offer the initial knowledge to the learners.

Blended/hybrid learning approach

This combines both the synchronous and the asynchronous ways of learning. Some training, like soft-skills, have to have a face-to-face component in order to be truly impactful. A blended approach works best where the classroom is utilized to conduct exercises and interactions.

Mobile Learning

The easy availability and affordability of mobile devices has created the space for mobile-enabled learning or mobile learning. Simply converting online classes to mobile compatible modules is not enough. The capabilities of the mobile device, including disk space, internet connectivity, and the screen size has to be taken into consideration, but smart phones are getting smarter and can be used very efficiently. But many learning apps can be used on the mobile phones and this should help greatly, if used as an aspect of blended/hybrid learning.

Social Learning

The impact of social media is very strong and it can be utilized for online learning as well. More and more education institutions are realizing the true power of social learning and including social media into their plans. Students collaborate and network on social platforms to discuss problems, queries, and experiences. We're social animals and lack of social interaction is one of the biggest challenges with self-paced online learning. Consider building an online community for your students as a way to facilitate meaningful connections between you and your students. Learning communities complement online courses perfectly, because they enable social learning, peer-to-peer support, and student-to-instructor support.

Game-based learning

Games are considered to be fun by all, but they can be a powerful medium of experiential learning as well. Nowadays many organizations focus on the term gamification⁴ which helps them to increase knowledge and skills by motivating them to learn with game-based courses. Such courses focus on creating engagement and motivation for the learners to learn the things while they play.

As you can see, you don't need to be that teacher, the one that practically puts you to sleep, with monotone voices, advanced concepts, and way too much theory. You can plan out your class thinking about how you can give your students those tiny bites or mini-wins along the way. Allow your students to taste victory along the way, and learn something new during each lesson. Allow them to visualize what life is like when they

⁴ Gamification has been shown across multiple levels of academic instruction to have a positive impact on task completion by augmenting the experiential elements encountered by students who are engaging in the learning process. When a task becomes mundane, it typically lacks a positive feedback loop, which results in it becoming easier for a person to put off their intended task and forget to return to the activity prior to deadline. Many online learners participate in their degree programs in the midst of highly involved personal schedules, which can lead to lapses in organization and reduced performance as a student. Many applications have promise for improving the levels of fun, engagement, motivation, and task completion in various areas of daily life. Online faculty, can integrate these applications with existing online curricula to help students bridge the gap between passive stagnation in a course and active engagement with the course material to increase their grades earned and course-wide satisfaction. **Kaufmann, Daniel A.**, (2018) *Reflection: Benefits of Gamification in Online Higher Education*, Journal of Instructional Research, v7 p125-132 2018 <https://eric.ed.gov/?id=EJ1188367>

finish this class. Your content doesn't have to be crazy long and your slides don't have to be overly designed as long as you are delivering quality content.

Here is a checklist that may help you:

- ✓ *Create a user-centric learning experience:* every design decision you make must be what's best, not for your content, but for your learner. You can incorporate a user-centric learning experience by empathizing with your learner's needs, challenges, pain points, by tailoring content to various learners needs and methodological approaches and using different kinds of digital tools.
- ✓ *Creating an inclusive learning experience.* Do this by recognizing that each of your learners are unique and comes with their own experiences and preferred style of learning.
- ✓ *Encouraging social engagement.* Do this by creating a learning community to complement your online course. This enables social learning opportunities for your learners to share their knowledge and expertise with you and each other. Sometimes the best learning experience you can create is when you let your learners collectively solve their own problems.
- ✓ *Create a media-rich learning experience.* Your online course is an opportunity to incorporate multiple forms of multimedia, which can help your learners better engage and connect with the concepts you're trying to teach. Showing your learners what you're trying to say. Do this by incorporating images, graphics, and explainer videos that illustrate the concepts you're trying to explain. This can help engage your learner and make your content memorable.
- ✓ *Letting the content drive the delivery method.* Do this by pairing the right multimedia for the concept you're teaching. For example, if something is best understood when it's demonstrated, then use an image or video to demonstrate it. Creating a blended learning experience. Do this by delivering your content in multiple formats and forms of multimedia.

- ✓ *Create a hands-on learning experience.* If walking away with some extra knowledge is all your learners do after completing your course, then it wouldn't be effective. Your goal should be to create a transformative experience where your learners walk away with new skills they can immediately apply in their lives. Designing activities that put skills into practice. Do this by creating tutorials, challenges, and practice assignments. For every concept you're trying to teach, think about how you can create opportunities for your learners to apply those concepts.
- ✓ *Putting skills into the context of the real world.* Do this by incorporating case studies and scenarios into your learning content. This will help your learners understand how they can apply their newly-acquired skills in their own lives.

Challenges in the online teaching

Several challenges are happening in online teaching. Some of these challenges facing educators include:

- *Work organization and time management*

Most teachers are required to move to online teaching almost immediately with no training and tools. Most of them have to use numerous e-learning tools making the whole process overwhelming. They are supposed to attend to students virtually, handle bulk information, and prepare for their teaching strategy. Many teachers find it difficult to adapt to the online learning environment immediately after the traditional classroom learning environment. Teachers who have always been teaching in the traditional classroom mindset are often not able to transfer easily on the online platform.

- *Technology gap*

Not all students and teachers have gadgets to enable them to learn and teach online, respectively. Some are sharing laptops, while other students lag for totally missing these gadgets. Such is giving teachers a hard time keeping all students at the same pace. Very often the causes are economical status of the students and it is important to keep that in mind and try to solve these problems in sensitive and non-offensive way.

• *Connectivity*

Currently, around the world, there is massive use of internet and streaming services. There is an increased use of video streaming software, online learning systems, and digital tools. Many users and potentially your students can have internet problems, poor quality video and audio, downtime, and connection losses between teachers and students. The connection issues may affect the learning process. Many students are not well equipped with the high internet connection that is required for online learning. Due to this, they face problems in going live for virtual learning and other platforms that require an internet connection and the effect of online classes on students. They face technical issues in online classes as they are not much aware of technology and computer applications. A slow and high internet connection can play an important role in how quickly you can attend the class and not miss any live sessions. There is a possibility of poor connectivity if you find difficulty in downloading some information related to the subject, blurred videos, etc.

• *Digital literacy*

Lack of computer education is a major concern in today's world. There are many students who still cannot operate basic computers with MS word and PowerPoint. And whenever some technical issues emerge, they find it difficult to solve the problem in such a scenario. They face difficulties with live classes, usage of appropriate icons, MS office, communication-related apps and websites, browsing study materials, etc. Sometimes they do not know technology proficiency like login, live classes, creating and submitting work, and communicating with teachers and friends. It is very important that online educators present to their students all the digital tools that would be used with clear instructions in order to ensure adequate participation and to bridge this digital gap.

Learning objectives and learning outcomes

Don't underestimate the importance of learning outcomes. Online courses are a vehicle for transformation for your students— from their current reality to their desired future. Just because you know what your course will give your students, it does not mean that they will know. Learning outcomes clearly explain, with measurable verbs, what the learner will be able to do, know and feel by the end of your course.

- What skills will they be able to demonstrate?
- What new knowledge will they have obtained?
- What feelings will they have moved away from or to?

As an example, to write a learning outcome, complete this statement “By the end of this course you will be able to... ”

- _____
- _____
- _____

For example: “By the end of this course, you will be able to demonstrate the 6 steps for making a pina colada cocktail.”

Let's say the goal of your class is to teach people to master the mixology arts, you might have a bundle of classes on how to become a bartender. A course outline is like the roadmap of how your online course will bring your students from A to B. It will help you deliver content to your students in a structured, ordered way, layering skill upon skill until they finish your course feeling like an expert. Your course is the way learners will get from Point A to Point B. So the first step is to define what point A is for them.

But wait...what do we mean by “THEM”? Who is your target audience for the course you're creating? What relevant prior knowledge do they already have about the topic, and what (if anything) are you going to have to teach them before they are ready for the main

topics you want them to learn? Your course outline will help your learners achieve the desired knowledge, skills and behaviors you want to teach them. So, make sure you define your course prerequisites thoroughly. Because teaching advanced learners is totally different from teaching beginners, the students' level must be reflected in your course outline. Understanding your audience's level and learning style (and communicating that level in your lesson outline) is absolutely critical as it will guide which training methods you'll need to use when teaching your class.

It turns out that there are a lot of pre-requisite skills that you, as a lesson creator, need to use, before you start actually planning your lesson. These pre-requisite skills include:

- Having a well-defined learning goal for your course as a whole (Point B, your student's desired future)
- Having a well-defined starting point for your course (Point A, your student's current reality today)
- Understanding what your target audience already knows (what skills and behaviors they already have) relative to what you're about to teach them

Many course creators start out thinking they can teach all the skills needed to achieve their top-level learning goal, all in one course. This soon starts to feel overwhelming to the class creator, and far more so to any potential students. It important to plan each individual lesson and see the course as a great puzzle that needs to be filled with all the small pieces in order to make a clear big picture.

In formal education institutions, lecturers and teachers refer to the course outline as their course syllabus. You can find terms such as "course outline" or "lesson plan" or "lesson outline". We treat lesson plans as the individual pieces that make up the entire class outline puzzle. However, it's no use having all the best lessons and digital assets available for teaching a topic if you don't know what order to teach them in. And often, organizing your lessons and teaching materials in a way that makes sense to you isn't necessarily what works best for others. That's why it's always important to align your education materials in a way that optimizes learning outcomes for your students. Your learners

should easily understand the lessons you teach. To do this, you'll need an effective and efficient class structure that works.

Potential structure for your course can be:

WELCOME	INSTRUCTIONS	OBJECTIVES
MODULE CONTENT	MODULE KNOWLEDGE CHECK	MODULE SUMMARY
PRACTICE ACTIVITIES	ASSESSMENT	SUMMARY
NEXT STEPS	EXIT INSTRUCTIONS	SUPPORTING RESOURCES

Planning individual lessons

When it comes to creating a lesson plan, it's helpful to start with a few questions to determine the goal of your lesson.

- What do your students already know?
- What do they need to learn?
- What's the best way to lock it in place?

A class outline is important for two reasons:

Know the destination. If you know where you're going, it helps you think about what steps your students need to reach that point. What skills do they need to develop along the way? What foundations do you need to establish at the outset? Much like a cross-country road trip, if you start out the journey without a clear sense of where you're going and how

you intend to get there, the likelihood is that you'll get lost along the way. You wouldn't teach a child to tell the time before they learn to count; likewise, you can't teach someone to be a great cocktail master before you teach them about ingredients, measures, and how to mix.

Set expectations. Laying out a roadmap sets expectations for your students. Where you're about to serve up puzzle pieces of brand new facts and skills, your course outline is their picture on the box. It helps them know where they're going, which important pieces to pay close attention to, and how to place them in context with one another. Giving your students a sense of their destination helps them invest in the educational journey with you.

For each class, back up your learning content with two things:

Learning resources. Provide extra readings, infographics, videos, and other educational content across a variety of formats. These create opportunities for your students to absorb information in multiple formats to help them retain knowledge and build context between topics. This also ensures you cater for students who learn differently – some learn through reading, others by listening, others through pictures or infographics. By providing a range of learning resources to back up your content, you ensure a diverse learning experience for every student who takes your course.

Practice activities. We all know practice makes perfect, right? Give your students the opportunity to put their newly-honed skills to the test before you move on to the next batch of new information. Practice activities promote knowledge retention and help students lock skills into place before you teach them something new. You could create a quiz on the course builder, or assign a group conversation exercise on your community site or other online group. It's important to keep in mind that practice activities are not a test. They're just a safe space for your students to get their hands dirty and master a particular skill before they face a situation where they have to wield these skills independently! You can go old-school with a multiple-choice quiz, or get creative with something out of the

box. The sky's the limit – just give students an opportunity to practice what you taught them!

Don't forget gamification! Gamification can help to make learning more enjoyable, immersive and accessible, resulting in higher uptake and ongoing participation. When we talk about gamification, we don't just mean quizzes or polls. It can be as simple or as complex as you like, from quick fire question rounds to gamified scenario-based simulations. Ultimately the key aim is to grab (and keep!) the attention of your learners and motivate them to get involved. When it comes to gamified online learning, it's not usually about designing a full-blown video game. It's about taking elements that make games engaging, motivating or educational and incorporating those into the learning experiences you design.

To use gamification in online learning, it's best practice to incorporate elements such as:

- *Stories*

Create a compelling storyline to captivate your users and take them on a journey. Create a story that embeds users in the plot as they tackle each section of the content. This is a great way to create immersive content and keep learners engaged throughout. (We already talked a lot about storytelling in this booklet!)

- *Visual design*

Eye-catching visuals and aesthetically pleasing designs can make your online learning more appealing and draw your students in. Combine bright colors and graphics for a visually-stimulating learning experience.

- *Competitions*

Who doesn't love a bit of healthy competition? Allow students to compete against others in their team or anonymous players, or even against themselves to keep motivation levels high. Consider including leaderboards so learners can see how they're performing against their peers.

- *Challenges*

Reward your learners with smaller, more frequent tasks and then ramp up the difficulty level as the session progresses. This will not only help them get into the swing of things, but leave them primed and ready for more difficult, rewarding challenges using what they have learnt along the way.

- *Rewards*

Incentivizing your students in the way of rewards such as badges, medals or unlocking new levels can help to boost their motivation and keep them engaged for longer periods of time.

- *Feedback*

Providing instant feedback when a learner completes a task or quiz is a great way to keep them focused and engaged as it allows them to track their progress as they move through the different stages of the game.

When you write your lesson outlines, you are bound to have that lightbulb moment. Like when you remember that great quote from that book you were just reading, or a meme, or video that your students would like. Don't let these elements slip through the cracks, and by the time you are uploading your final materials you forget to include them. So make sure for every lesson to have a reference section. There you need to go ahead and track down the necessary links, awesome quotes or perhaps one of the following: interesting TED talk or a podcast, or a relevant guest expert, useful links or anything you referenced or promised inside your video lessons.

Here is a template for the lesson outline that you may use when planning your online class:

TITLE:	
DATE AND TIME:	
SPACE/DIGITAL REQUIREMENTS:	
OBJECTIVES:	
COMPETENCES ADDRESSED	
DESCRIPTION (STEP-BY-STEP):	
MATERIALS REQUIRED:	
APPENDICES (I.E. HAND OUTS)	
FOLLOW-UP & EVALUATION	

The most engaging and effective delivery methods

Choosing the right delivery methods, depends upon the proper need analysis of your group of students and their collaboration methods. Knowing all of the benefits of choosing the right methods for your needs, you may want to think about implementing it when designing your next class. It can not only make the development process more streamlined and productive, but it will also provide a better experience for your students.

Now it's time to decide on the best way to deliver your content. You need to be aware of the different principles of adult learning, learning preferences, and all of the different ways that you can deliver your training to really make sure that your training is as engaging as possible.

- Will you have videos, reading content, activities, audio content?
- What type of visuals will you have?
- Will you have community learning areas?
- How will you make your course fun and engaging?
- How will you help students with different learning styles?

You need to make sure that you have a balance of visual, audio, and practical methodologies so that everyone is engaged and provided with the optimum learning experience. Here are a few tips to help you design effective learning content:

Designing course content that is engaging. Traditional classroom experiences don't always translate nicely as an engaging online learning experiences. So it's important to find ways to make your online course a delight to take.

Let's remind you again how you make your online course more engaging:

- ✓Bring more **storytelling**⁵ into your teaching
- ✓Create a learning community
- ✓Host live lessons
- ✓Use both synchronous (real-time) and asynchronous (self-paced) learning

⁵ **Storytelling** is a tool that helps students better understand the world around them. It also helps them visualize themselves in similar situations with the storyteller. A common educational standard, that students need to know, is the ability to be able to recount events in chronological order. Stories make learning more fun while at the same time helping students better understand relevant information. Storytelling can help engage your unmotivated learners as long as you do it in a creative way like through the use of a game or fun activity.

Retaining hard facts does not come easy for everyone. That's where storytelling can come into save the day. In today's world of videos, tablets, and podcasts, **digital storytelling** can be an effective way to illustrate a difficult concept. You can use digital storytelling through the use of videos, pictures, apps, and audio to help students retain information in a more creative and memorable way.

- ✓Use gamification to motivate your students and reward smaller milestones
- ✓Design your course with different learning styles and abilities in mind

Using video for your online class



You have plenty of online teaching methods to choose from, some of the most common options are:

- A video of yourself talking to the camera paired with a screen recording of your presentation slides
- A screen recording of your presentation slides synced with a high-quality audio recording
- A screen recording showing how to achieve something with either software or a step-by-step demonstration (also paired with a high-quality audio recording)

Studies show the human brain processes visual information 60,000 times faster than plain text. Your audience has a much better chance of understanding and retaining information if it's shared with them through a visual medium like a video. The study also says that students are more likely to watch videos as opposed to reading a text. Images and videos are an even better way to improve the levels of interaction in class. Students tend to be more involved and influenced by the lesson and also tend to be more open to discussion when classes are interactive. With an increase in access to electronic devices, students can now just swipe their smart phone or laptop and watch lectures. Using digital technologies like videos inside the classroom amplifies student learning abilities and augments memory retention.

Teachers used to record lectures and share them in the past. It was hard for the teachers to record lectures. It was equally hard for the students to study in this way. Teachers tend to record boring lectures, which make it difficult to study and concentrate. For many teachers, flipping the classroom begins with live recording their lectures. Sending recorded lectures to students allows them to pause and re-watch if they didn't understand

it the first time. With recorded lectures, students will be able to pause the video, re-watch the lesson multiples times according to their learning pace and needs. You don't have to record teaching videos inside the classroom alone. You can record your lectures and share them with your students anytime and from anywhere. With pre-recorded lectures, you can keep the class running even in your absence.

Creating an educational video is not enough. There are a few elements that should be kept in mind. Your content should be good enough. Another thing that needs attention is your viewers' interest. Your educational video is of no use if it cannot sustain the students' interest.

How to make an interesting educational video?

✓ *Digital Storytelling*⁶

How can digital storytelling help in educational videos? Well, it's simple. You need to attract and motivate students to study. For this purpose, digital storytelling is the best choice. You can merge different images and videos. Add cute or funny images and memes. Insert videos of students working together. All these will attract the student to study.

⁶ **Digital storytelling** at its most basic core is the practice of using computer-based tools to tell stories. There are a wealth of other terms used to describe this practice, such as digital documentaries, computer-based narratives, digital essays, electronic memoirs, interactive storytelling, etc.; but in general, they all revolve around the idea of combining the art of telling stories with a variety of multimedia, including graphics, audio, video, and web publishing.

As with traditional storytelling, most digital stories focus on a specific topic and contain a particular point of view. However, as the name implies, digital stories usually contain some mixture of computer-based images, text, recorded audio narration, video clips, and/or music. Digital stories can vary in length, but most of the stories used in education typically last between 2 and 10 minutes. The topics used in digital storytelling range from personal tales to the recounting of historical events, from exploring life in one's own community to the search for life in other corners of the universe, and literally, everything in between.

✓ *Get Dressed*

Do you think someone will listen to you with interest if you don't have a personality? What we wear, how we present ourselves show our personality. If you want to create interesting educational videos, then work a little on yourself first. Before you start recording, make sure you are well dressed. The more formally or uniquely you present yourself, the more your students will be attracted and attentive.

✓ *Plan Everything*

A good tip for creating good educational videos is your planning. Before properly planning everything, you should never start making a video. You need to gather everything you might need during the video. You should properly compose yourself before you start speaking and teaching. Have your lesson outline ready!

Creating a video step-by-step

Video length

Normally teachers have a lot to say about the subjects they teach. When it comes to video creation, however, time is of the essence, and certain level of digital savvy is required. Research on instructional videos shows that learner engagement with videos begins to drop after the 6-minute mark—and it falls dramatically after 9⁷. So it's essential to be concise and clear and keep it short, so each video covers a single learning objective or task, and nothing more. *Multiple short videos are better than one long video.*

Studies⁸ also show that the best instructional videos are highly focused, use visual cues to highlight key information, and minimize the use of on-screen text. The slides that a teacher would use in a lecture may not work in a video—it's critical to build a slide deck

⁷ Miller, A.(2019). Student Engagement with Video Instruction—How to Engage 7th-Grade Social Studies Students and Diverse Academic Abilities with Video in the Classroom. (Doctoral dissertation). Retrieved from <https://scholarcommons.sc.edu/etd/5413>

⁸ Ibrahim, M. (2012), Effects of Segmenting, Signalling, and Weeding on Learning from Educational Video, Learning, Media and Technology, v37 n3 p220-235 2012 <https://eric.ed.gov/?id=EJ980817>

that is clear, simple, and visually compelling. Learning to create a high-quality instructional video doesn't happen overnight. It requires continual trial, error, and innovation. So start planning, grab some recording software, be yourself, and have fun!

Recording

There are many tools you can use to create a strong educational video. Here are a few that can really simplify the process and enhance the quality of the video.

Animoto

Animoto is a digital tool that allows you to create high-quality videos in a short time and from any mobile device, inspiring students and helping improve academic lessons. The Animoto interface is friendly and practical, allowing teachers to create audiovisual content that adapts to educational needs. The downside is you can't share or download the videos you created unless you upgrade. And the sad part is, it's pricey.

Biteable

No matter who you're trying to educate -small children, high school students, or professional colleagues, Biteable allows you to craft beautiful teaching videos that will truly engage them.

They have a huge library of animation, footage, and effects waiting to be used, and our in-house design team is constantly adding more. This platform is not cheap, but you can test it for free and get some ideas.

Powtoon

With PowToon, you can create animated presentations and videos. Using animated presentations in the classroom allows teachers and students to engage, explain and tell a story with impact.

Powtoon has ready-made templates designed to start creating animations by just dragging and dropping the ones you like. It also provides you the opportunity to customize the templates and design your own with images, music, and voice-overs. The drawback in using Powtoon is that you have to upgrade to use all of the templates, and

backgrounds. With the free version you have access to basic features and it comes with a watermark.

Flixtime

Flixtime is a free site where users can create custom, production-quality videos with images, videos, and text. With Flixtime, you can create, share and download a 60-second video for free.

Flixtime uses AudioMicro to provide users with a selection of award-winning tracks, sound effects, and stock music. All Flixtime video productions can be used for both personal or independent commercial use.

Recording device: Ideally, you have a touch-screen tablet or laptop with a high-quality stylus. This ensures that you can easily annotate visuals and show work. Handwriting also adds a nice personal touch. But if you have a non-touch-screen laptop, or a tablet but no stylus, you can still make your own videos.

Screen-casting programs⁹: Most of the programs allow educators to pause and re-record specific segments of their video easily, which removes the pressure of getting a perfect take. Look for a program that has a robust video editor and an embedded annotation tool.

There are many programs that you can use:

- Loom (Windows, Mac, Android, iPhone/iPad, Chrome)
- Screencast-O-Matic (Windows, Mac, Android, iPhone/iPad, Chrome)
- Camtasia (Windows, Mac)
- OBS Studio (Windows, Mac, Linux)
- Movavi Screen Recorder (Windows, Mac)
- Zappy (Mac)...etc.

⁹ Screencast is a digital video recording of your computer screen and usually includes audio narration. Screencasts are just one of many different types of instructional videos. Screencasting saves time answering the same questions over and over, but it has been proven that 80% of viewers can recall a video they have seen in the past 30 days. Not unlike a screenshot, screencasts can be called a screen capture video or screen recording and is a great way to teach or share ideas.

Microphone: This is often forgotten, but it's really helpful to have a pair of headphones with an external mic—these headphones help you improve the sound quality and ensure that your videos don't contain background noise.

Live video streaming

There are a few boxes you need to tick before you get started with your first live streaming classroom or online lecture.

- ✓ Collect the proper equipment.
- ✓ Choose an online video education platform.
- ✓ Check your internet connection.
- ✓ Prepare your content.
- ✓ Start your live stream class.

As long as you carefully follow each step, you're bound to create educational materials that make your student's virtual streaming experience feel like they are attending a live lecture. Creating video lessons is a process that requires little investment and can bring many advantages for both the teacher and the student. With the help of some simple equipment, anyone can produce videos without leaving home, using, most of the time, resources they already have. The great advantage of broadcasting live classes is that you don't have to worry about taking multiple shots and editing the final material. It is important to broadcast your live online classes on the right platform for you and your audience. Give preference to the channel most used by your target audience (if they like Zoom, let it be Zoom). But don't discard other platforms because of this, as you can alienate others who would like to see your content. You can use Vimeo, or YouTube and various other platforms for your video streaming.

Online classes taught through video have already proven their effectiveness and preference for the vast majority of viewers. Through recorded classes the student is able

to see and hear the teacher, facilitating the dynamics and connection that occurs in a classroom. Live streaming has several advantages:

Favors interaction

Live online classes allow interaction with students through chats and comments, which helps to make the class more dynamic, encourages debate and allows immediate answers to questions.

Using a simple messaging system, those watching can interact with the teacher and other viewers.

Promotes credibility

How a famous phrase used to say, “who knows, does it live”. A professional who transmits classes in real time gives confidence and credibility. This is also the teachers’s chance to show mastery over the subject at hand, proving that they feel safe enough to talk to the audience as if they were really in their presence.

Can be watched later

Despite being a real-time broadcast, all the content is recorded so that it can be watched later, which is of great help for those who were unable to follow the live online classes or want to review it. When the transmission is finished, the teacher can make the recorded material available for later viewing, with the bonus of buttons that allow pausing, fast forwarding and rewinding the video.

Easy to use

It may not seem like it, but as much as it involves technology, online transmission is not difficult to set up and use. All the teacher needs is a computer with internet and a connected camera.

All the viewer needs is a computer with Internet access and a browser like Google Chrome or Firefox.

Although live streaming is not a difficult task, there are some precautions that must be taken to ensure a good result:

✓ Secure your internet connection

A stable internet connection is vital for any live stream. Live education broadcasting is no exception. You want to ensure that all of your content reaches your students without any glitches or latency issues. Blank screens, lagging, and sudden interruptions to the stream can be a source of great distraction for both students and educators.

✓ Plan your streaming space

Live video is all about location. Give your viewers something interesting to see, be it a home studio with personal touches of decor or an attractive setting, such as a beautiful natural landscape. Although you can transmit from anywhere, it is important to consider the configuration of your space and the message it gives to those who watch. First impressions can be critical to retain new viewers. It is worth making some effort to design and create a pleasant environment.

✓ First impressions on the camera

When recording live online classes, you stop being just a teacher to become a host. While recording, you need to keep your energy high to keep viewers engaged.

✓ Be your best self on video

Plan well what you are going to wear, so that it represents your message. As well as the decoration of the scene, your appearance and behavior must correspond to the topic of conversation. When you broadcast live, it is crucial to maintain eye contact with your audience in the same way that you would in a normal face-to-face conversation. You also want to ensure that your facial expressions and posture convey authority, conviction and interest. If you smile while speaking, you convey enthusiasm and confidence to your online audience.

Engage students

Simply sitting and watching videos can lead students to lose focus. Research¹⁰ shows that when students take notes or answer guided questions while watching, they retain material better than students who watch passively. It is important to encourage interaction. Most viewers of live streaming want to be part of the action. Therefore, you need to give them chances and ways to interact and be engaged. Embedding questions in your instructional video using programs like [Edpuzzle](#) can improve student interaction and provide you with invaluable formative assessment data. Students should think of video-watching as a task they perform actively in order to learn.

You can also engage students by giving them video assignments. Recording video presentations can be a good choice. Effective presentation and communication skills that students develop in school are among the most valuable assets they take into the workplace. Instead of driving students to work on a quiz or exams, you could ask them to create a video presentation on what they've learned. Asking students to do their assignments in the form of video can help them immerse themselves in a topic deeply and naturally. Video assignments make students work collaboratively. It exhibits student knowledge and effective communication skills. And with the rate at which educational technology is growing, creating an excellent video presentation is faster than ever. Recording video presentation has the following benefits for your students:

- ✓Video presentation helps the student think creatively.
- ✓It helps the student express their opinion verbally and prepare bullet-point notes instead of keeping it writing focused.
- ✓It helps the student overcome the anxiety of public speaking in the long run.

What kind of video assignments can students create?

¹⁰ Buchner, J. (2018) How to create Educational Videos: From watching passively to learning actively, <https://www.researchgate.net/publication/327423659> [How to create Educational Videos From watching passively to learning actively](https://www.researchgate.net/publication/327423659)

Ask students to find web videos that talks about the same thing discussed in class. Then ask them to create their video version of what they learned. This makes students think out of the box and get a diverse knowledge on the subject. Instead of asking students to write assignments, ask them to create a video instead. This will help them learn how to use digital technologies and use them to present their original thoughts. Asking students to record a spoken essay instead of a written assignment can be useful as well. It helps a student become effective communicators and prepare them for the real world.

And finally - be yourself !

Perhaps the most important element of a strong video is authenticity. The most effective video isn't pretty—it's personal. Don't be afraid to make mistakes, and make sure your authentic personality shines through. It has be proven that videos in which the instructor speaks in a natural, conversational manner, with an enthusiastic tone, are the most engaging. Students really appreciate knowing that it's their actual teacher behind the video. In the Tik-Tok era, personalized videos are something that young people can really relate to well!

Good luck and enjoy exploring these tools and make the online learning fun!

Tools

A wealth of learning tools makes it easier for educators to address many challenges associated with virtual learning and help with bonding group of participants. Hundreds of digital education tools have been created with the purpose of giving autonomy to the student, improving the administration of academic processes, encouraging collaboration, and facilitating communication between teachers and learners. Each tool contains benefits and solutions for challenges faced by students and teachers, so you can make sure that learning is effective no matter where you are!

We will present some of the tools that you can use, and it is up to you to decide on what would be the most useful for the topic that you need to present.

Zoom

Zoom gained popularity during the pandemic for its versatility as a presentation tool and webinar platform while students learned online. Its security, live video class functionality and chat feature for social interaction make Zoom a useful distance learning tool. There are various Zoom options that you can use in your class (and many more):

- Polling: <https://support.zoom.us/hc/en-us/articles/213756303-Polling-for-Meetings>
- Breakout Rooms: <https://support.zoom.us/hc/en-us/articles/206476093-Getting-Started-with-Breakout-Rooms>
- Non-verbal Feedback: <https://support.zoom.us/hc/en-us/articles/115001286183-Nonverbal-Feedback-During-Meetings>
- Virtual Backgrounds: <https://support.zoom.us/hc/en-us/articles/210707503-Virtual-Background>
- Sharing a Screen: <https://support.zoom.us/hc/en-us/articles/201362153-How-Do-I-Share-My-Screen->
- Whiteboard: <https://support.zoom.us/hc/en-us/articles/205677665-Sharing-a-whiteboard>
- Annotation: <https://support.zoom.us/hc/en-us/articles/115005706806-Using-annotation-tools-on-a-shared-screen-or-whiteboard>
- Transcription of meetings: <https://support.zoom.us/hc/en-us/articles/115004794983-Automatically-Transcribe-Cloud-Recordings->
- Chat: <https://support.zoom.us/hc/en-us/articles/203650445-In-Meeting-Chat>

Google Classroom

Created for teaching and learning, Google Classroom is an all-in-one tool that makes learning flexible and accessible from anywhere in the world. Teachers save time when creating lesson plans, tracking student performance and using several creative tools to make course material more exciting. Currently, there is a free version of Google

Classroom. However, a paid version is on its way with add-ons and easy integration with other educational tools.

Pear Deck

Pear Deck is a Google Slides add-on that helps teachers create engaging slides and support student interaction. Teachers can create presentations from scratch or add interactive questions to existing presentations. For example teachers can pick from four question types:

- Draggable questions with agree/disagree or thumbs up/down.
 - Drawing questions with a free space or grid for students to draw in.
 - Free response questions with short text, long text, or number capabilities.
 - Multiple choice questions with response of yes/no, true/false, or A,B,C,D.
- Pear Deck has amazing features including a dashboard that's available on a phone or tablet, the ability to show or hide student responses, features that let you send personalized notes to individual students and fun audio files to add to presentations.

Flipgrid

Flipgrid is a fun way to get a conversation started. Simply post a topic and foster discussions within your learning community. It's a great way to get students interested in new ideas, excited to learn and engaging with their peers. This gives access to more students and opens possibilities for collaboration. A kindergarten student can count toys over video, and their friends can ask follow-up questions such as, "How many are pink?" and then upload a video response. English- and world-language learners can practice new speaking skills while previewing and editing their video responses as they master pronunciation. This tool gives students the ability to engage in rich peer-to-peer collaboration.

Edmodo

Edmodo's series of tools enables teachers to share course content, inspire collaboration and build an energetic and positive classroom. Parents can also receive updates about their kids' progress.

Edmodo has free accounts for teachers for quick and easy sign ups.

Canva

Canva's online graphic and publishing tool allows teachers to create stunning, professional-quality presentations, posters, infographics, social media banners, videos, Zoom virtual backgrounds, and more. Sign up for the free version or purchase one of their plans geared toward teachers and students. Canva easily integrates with your preferred learning management system, including [Google Classroom](#) and [Microsoft Teams](#).

Blackboard

Blackboard is an advanced LMS tool perfectly suited for kindergarten to high school. This platform works on any device and it's easily accessible to all students. Blackboard Learn also gives teachers access to several third-party tools.

Mentimeter

Mentimeter is a free-to-use, interactive presentation platform that allows real-time interaction between presenters and their audiences: making meetings enjoyable, engaging, and inclusive. Mentimeter enables leaders of lectures, corporate events, workshops, and other formal and informal meeting types, to truly engage with their audiences by providing them with easy-to-use tools to make presentations interactive.

Microsoft Teams

Microsoft Teams brings the best of several worlds together under one roof. You can share your screen or notes, conduct presentations, promote chatting and bring everyone together through video conferencing.

Nearpod

Nearpod is a fantastic add-on for Google Slides and PowerPoint presentations. Teachers may use their own presentations or select from lessons and videos in their impressive template library. Build polls, games and collaborative boards to keep your students interested to learn. Nearpod promotes healthy social interaction between students. Nearpod includes free accounts for teachers.

Buncee

Buncee makes it easy to create interactive course content that students love. Create presentations, lessons and many customizable [virtual school activities](#) from Buncee's Ideas Lab template library. Teachers can easily share links, downloadable files and group projects with students. The Buncee dashboard can be accessed from Microsoft Teams, which makes it easy to open discussions, share resources and communicate with kids and their parents.

Explain Everything Whiteboard

The Explain Everything Whiteboard app is one of the top digital whiteboards. It's a fabulous offline and online tool perfect for traditional and hybrid class environments. It also encourages collaboration between teachers and students.

Bloomz

Bloomz is a one-stop platform that eliminates the need for multiple apps and concerns surrounding security. Bloomz allows teachers to connect, organize, and stay in touch with students and parents. Parents and teachers won't have to open and close several apps, making it simple and stress-free for you to communicate and share information. Teachers have the option of selecting the free or premium upgraded classroom plan. The premium subscription comes with more features and benefits for \$7.99 per month.

Kahoot!

Kahoot!'s online game quizzes gained popularity with students and teachers during the pandemic. Students can access countless games from Kahoot!'s library or they can even make their own game. Teachers can also distribute Kahoot! challenges to students for learning outside of the classroom. Kahoot! challenges integrate with Google Classroom and make it easy to track missed questions and scores to help determine where students may need more help.

Slack

Slack puts organization and communication together into one platform. It's easy for teachers to file course content related to individual topics, connect with students one-on-one or in groups, and send out relevant class material. Slack helps students get involved and remain engaged during online learning.

Quizizz

Quizizz is a free online learning game site that is incredibly easy to use, has zillions of already-made games on just about every topic that are fun activities for reinforcement and formative assessment, and has recently added a simplified Nearpod-like feature (for those of you familiar with that popular tool) called student-paced “Lessons.” Unlike other game sites, students can see the question and the possible answers on the same screen and don't have to split them into two.

Baamboozle

Bamboozle is another free online game site. Its main advantage is that it's set up so that students can play online in teams, but they don't have to go into different breakout rooms. In other words, students can select a question to answer and talk among themselves in front of others to determine the correct answer (other students are waiting for their turn to choose another question). If that explanation is a bit confusing, it will be very clear once you go to the site itself.

Padlet

Padlet allows users to collaborate, create, and learn from each other. Padlet also allows the teacher to upload content and give feedback to the students, all on one platform. It can be used for vocabulary practice, reading, and listening. One of the features that the students like on Padlet is the image search option. It is a great tool to create a visual dictionary. During live sessions on Zoom, students can work on Padlet during breakout-room sessions.

Socrative

Designed by a group of entrepreneurs and engineers passionate about education, **Socrative** is a system that allows teachers to create exercises or educational games which students can solve using mobile devices, whether smartphones, laptops, or tablets. Teachers can see the results of the activities and, depending on these, modify the subsequent lessons in order to make them more personalized.

Thinglink

Thinglink allows educators to create interactive images with music, sounds, texts, and photographs. These can be shared on other websites or on social networks, such as Twitter and Facebook. Thinglink offers the possibility for teachers to create learning methodologies that awaken the curiosity of students through interactive content that can expand their knowledge.

TED-Ed

TED-Ed is an educational platform that allows creating educational lessons with the collaboration of teachers, students, animators—generally people who want to expand knowledge and good ideas. This website allows democratizing access to information, both for teachers and students. Here, people can have an active participation in the learning process of others.

Visme

Visme is an online design tool that anyone can use to create presentations, infographics, concept maps, schedules, reports and more. It's packed with tons of features, like free photos and graphics, customization options and an easy drag-and-drop editor that both non-designers and designers love to use. Many tools are directed either at the educator or the student. Visme offers teachers various options, such as: Interactive content as presentations and infographics, Visual posters and infographics, Webinar materials, Interactive schedules, Syllabus and lesson plans, Printable lists and worksheets, Embed third-party content like quizzes and forms, Share news about a class on social media or email, Personalized report cards, Personalized certificates.

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