

GUIDELINES FOR DISTANCE TEACHING

- Stiftelsen Mangfold i arbeidslivet (MiA)
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THE FUTURE OF LEARNING – changing perspective in digital education for VET trainers.

Institutional cooperation for the improvement of quality and relevance of Vocational Education and Training (VET) and vocational continuing education EOG/21/K3/W/0043

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INTRODUCTION



The target group for this intellectual output is the VET teachers and trainers working with students in different field of professions. And the indirect target group will also be the VET learners who can benefit from the trainings developed. The objective is to help VET teachers to enforce digital, distance and inclusive learning. The impact is that VET teachers/trainers will gain a comprehensive knowledge and they will be able to facilitate, plan, design and facilitate the distance, digital and inclusive learning. They basically cover three main subjects and concepts: digital education, remote education and inclusive education. They investigate the state of art within these tree domains and provide teachers and trainers with useful materials and tips on improving their teaching performance, enhancing the learning process and equalizing the chances of learners and teachers. The various types of learning styles and pedagogy will be presented, those for digital and distance teaching as well as inclusive education.

The content for the guidelines was elaborated from the research made in the project in Norway and in Poland and the subjects presented are the results of the needs for deeper exploration. The teachers and trainers in VET sector reported many gaps and areas that need more attention especially in time of unexpected changes in education related to digitalization, technology, isolation, worries, insecurity and exclusion. Based on the research finding in the project in Norway and in Poland it became imperative that the focus area should be the VET teachers' level of digital competency. Therefore, the reader will also become familiar with the subjects of enhancing relationships, engagement and maintaining motivation among VET students while teaching as well as cybersecurity and the ways of improvisation while teaching.

After the outbreak of Covid-19, there has been a fast growth in digital and distance teaching in vocational education. It has been observed that there has been a decline in face-to-face learning or in class learning and this has made the Norwegian and Polish government decide to apply measures that will aid in raising the quality of online education with focus on competency improvement for teachers. Moreover, the tertiary vocational colleges in Norway have seen an increase of 53% in the number of students the past five years. "Vocational education programmes are developed in close collaboration with the labour market, allowing rapid response to changing skills needs by establishing new programmes."



1

Pedagogical skills with useful methodology to teach remotely using online learning

- Synchronous vs asynchronous distance learning
- The tools available online to create distance learning, e-learning and blended learning



2

Digital and distance learning

- Teaching methods and strategies for digital learning
- Teaching methods and strategies for distance/remote learning
- Synchronous vs asynchronous distance learning
- Online creative methods and strategies
- How to be an effective online facilitator



3

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- How to make the online learning inclusive/ accessible - people with disabilities
 - Source evaluation, how to use information from Internet, credibility of sources
 - Learning styles and strategies



4

Learners empowerment

- Factors that encourage and motivate VET learners?
- How to build relationships
- How to reinforce engagement
- How to make your learners strong
- Improvisation skills



5

Cybersecurity



CONTENTS

WHAT IS PEDAGOGICAL SKILLS?

PEDAGOGICAL SKILLS ARE TRAINING-RELATED COMPETENCES THAT IS REQUIRED TO ENABLE THE TRAINER PLAN, DESIGN AND FACILITATE TRAINING.

The VET teachers are in most cases expected to have a good knowledge of pedagogy which may include sometimes, proof of competence in relevant fields, a good understanding of teaching and learning approaches and the theory of learning. Some of the responsibilities of the VET teachers ranges from designing the training programs, courses and carrying out training analysis, thereby being able to independently give critical assessment of the training program. With the continuous rapid change in the educational systems and growth in technology, it is imperative for the teachers to acquire skills, be aware and apply it in their work.

The practical implementation of the VET training requires:

- time planning
 - creating a positive and inclusive learning atmosphere
 - choosing necessary methods that meet the learners' abilities, needs and distributing the content of the training.
 - observing and understanding group dynamics, be able to manage the group, especially taking into consideration special education students.
 - assessment methods like the summative and formative, could be used to monitor learners progress and the learning outcome.
- The VET teacher should be able to choose the appropriate method that will aid in delivering the learning objectives and the learners will in turn have the opportunity of getting feedbacks on their learning progress and development of further tools. Like the traditional classroom, VET teachers teaching online, need to have the transversal competences in other to be able to give support and cut across various exercises and activities for effective learning process. This includes for example: multicultural awareness, social and interpersonal competences, communication and critical thinking skills.

THOUGH THESE CATEGORIES OF COMPETENCIES ARE NOT PARTICULARLY SPECIFIC TO THE TRAINING ROLES OF THE TEACHER, THE EUROPEAN COMMISSION; INSTITUTE OF TECHNOLOGY AND EDUCATION HAS IDENTIFIED SOCIAL COMPETENCIES AS THE MOST IMPORTANT. AS TECHNOLOGY IS GROWING IN A VERY FAST PACE, SO ARE PEOPLE MIGRATING FROM THEIR HOME COUNTRY TO WORK AND LIVE IN OTHER PARTS OF THE WORLD AND THEREBY CREATES DIVERSITY IN THE CLASSROOM. TO EFFECTIVELY TEACH DIVERSE GROUPS OF LEARNERS, VET TEACHERS NEED TO HAVE SOCIAL AND INTERPERSONAL COMPETENCES, BE ABLE TO MANAGE CONFLICT, UNDERSTAND MULTICULTURALISM, CRITICAL REFLECTION, AND DEVELOP GOOD COMMUNICATION SKILLS.

TEACHERS ARE GENERALLY SEEN AS AGENTS OF LIFELONG LEARNERS, MEANING THAT SELF-REFLECTION AND IDENTIFICATION OF WEAKNESSES AND STRENGTHS ARE NECESSARY TO BE ABLE TO ACCESS ONE TEACHING STYLE. FURTHERMORE, ASPIRATION TO CONTINUE UPGRADING PROFESSIONAL CARRIER, WORK IN TEAMS AND COOPERATE WITH DIFFERENT PROFESSIONAL PERSONNEL. THERE IS NO CLEAR-CUT LEVEL OF COMPETENCE FOR EVERY TEACHER, IT DIFFERS FOR EXAMPLE SOME ORGANIZATION CAN BE MORE FOCUSED ON MULTICULTURAL AWARENESS, WHILE TO OTHERS, INTERPERSONAL COMPETENCE AND TEAMWORK IS MORE IMPORTANT.



USEFUL METHODOLOGY TO TEACH REMOTELY USING ONLINE LEARNING

According to the Office of educational technology, online or distance learning can be described as “Any instructional practice that effectively uses technology to strengthen a student’s learning experience and encompasses a wide range of tools and practices”

For teachers and students engaged in the online or distance learning process in vocational education, there is emphasis that the teacher acquires good pedagogic skills and the learners will obtain skills and competence through evolution of the industrialized world. In vocational education, there is need for the scope of the learning process to include, sound learning principles, objectives of the school, cognitive, psychomotor and affective or interesting.

The anticipations and visions of change in the educational system and practice in general have been enormous, especially since the emergence of Covid-19. The perspectives on media and technology development to help provide more educational opportunities. The optimist and sceptics have characterized educational opportunities and perspectives on media and technology as a big shift in educational growth. Below are useful teaching methodology for online learning in vocational education with focus on both teacher centered pedagogy and student centered pedagogy which is a “balance between teacher- and student-directed learning”

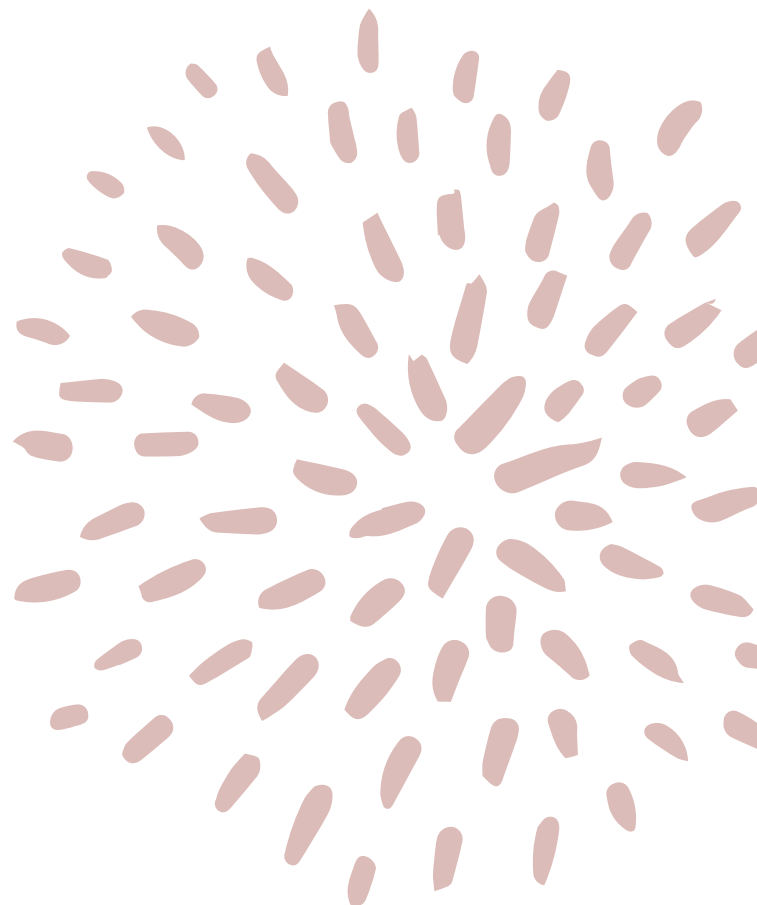
- LMS- is a digital interspersed application used by teachers for the purpose of creating, sending, monitoring, reporting educational programs and outcomes. What differentiates teacher centered from student centered pedagogy is dependent on how the teachers use the Learning management system tools. In a teacher-centered pedagogy online, this system provides structured learning materials that enables the students to engage in independent study. While the student-centered online pedagogy, the students have communication platforms and opportunities to build knowledge, the teacher facilitates through collaboration between students for the purpose of knowledge acquisition and creation.
- Podbean -www.podbean.com, Podbean is a free tool made available for educators to start podcasting. This is an easy and efficient tool that grants users access to create professional podcasts within a few minutes, without any requirement for programming knowledge. Podbean is a user-friendly interface, with just a few steps, one can upload, publish, manage and promote their podcasts. Podbean is a collection of podcasts from different thinkers around the globe, this tool also assists in broadening students understanding. It is supported in devices like, Desktop Windows, Mac OSX, Linux, IOS and Android making it a tool that is widely applicable to users on different platforms. Online Vocational Educators can create their podcasts and share them with students and coworkers. Creation of classroom sites with easy access to the podcast that teachers make available in relation to themes that are useful for students. This provides greater access to learning content for students with varied learning styles.



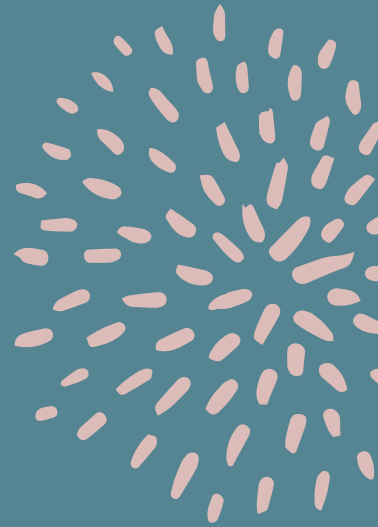
TEACHING METHODS AND STRATEGIES FOR DIGITAL LEARNING

What is digital learning?

This chapter introduces the subject of digital learning with a variety of basic definitions of digital learning and it serves as an introduction to one of the main ideas of these guidelines that is digitalization of education. As technology grows, there are many applications into the educational arena. Our world is digitalized and nobody can stop the process of digitalization of education. Educators are constantly challenged with incorporating technology in teaching and learners are challenged with new technology and new software.



WHAT IS DIGITAL LEARNING?



The acquisition of knowledge or skills of a particular subject using technology.



Digital learning involves information communication technologies to support the learner interaction with digital materials designed to help learners reach specific learning outcomes.



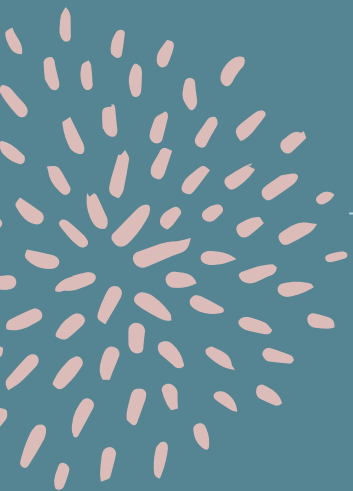
Digital learning refers to learning that is facilitated by technology and gives learners some control over time, place, path and/or pace.



Digital learning is a practice of learning using technologies in an effective way, combining different elements such as blended or virtual learning using e.g. mobile technologies or e-learning. It requires a combination of technology, digital content, and instruction.



Any type of learning which utilizes the technology to enhance the knowledge.





WHAT IS DIGITAL LEARNING?



An educational method that uses digital devices with a system in which students learn using online resources to adapt technology in the class.



Learning that is accompanied by and makes use of technology. Examples include online courses, video tutorials, and e-textbooks. Importantly, it can be accomplished anywhere and at any time.



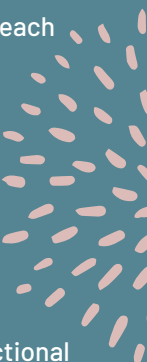
Digital learning involves information communication technologies to support the learner interaction with digital materials designed to help learners reach specific learning outcomes.



A learning facilitated by technology and based on the use of new digital tools enables one to learn differently – whether physical or distance learning.

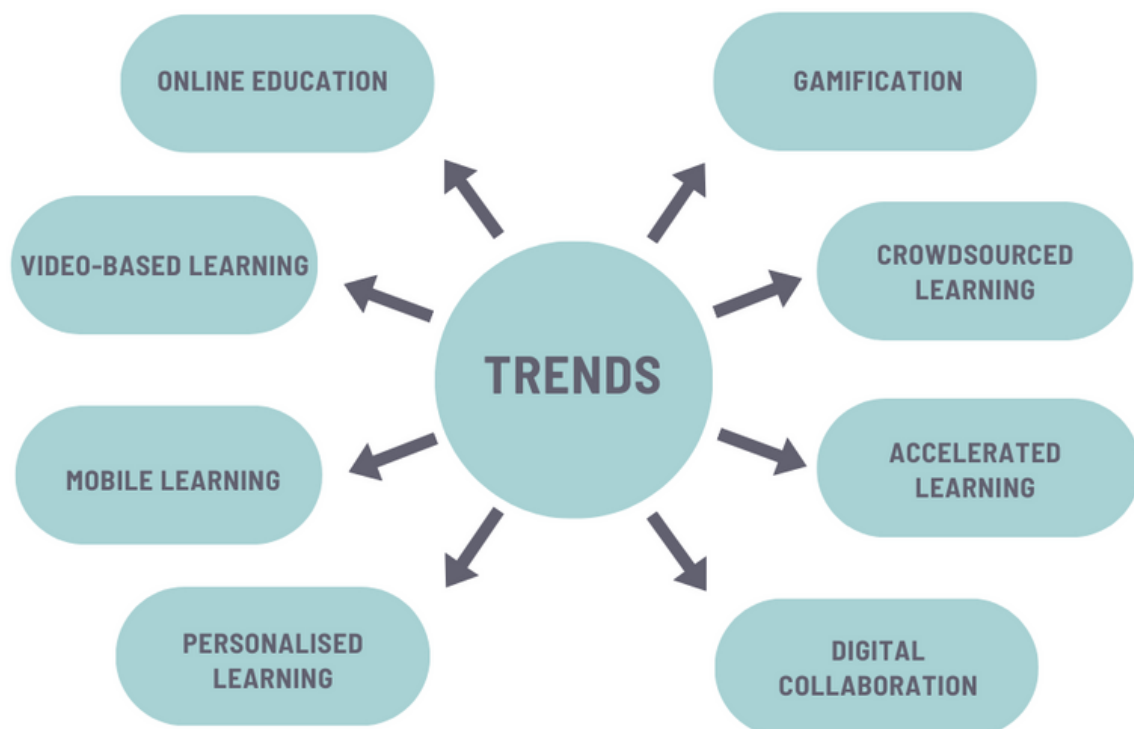


Digital learning encompasses instructional practices that use digital technology to strengthen or augment a student's learning experience. Use of the term here is broad and not limited to online and blended; it is inclusive of instructional content, data and assessment systems, learning platforms, online courses, adaptive software, and personal learning technologies.



THE USE OF TECHNOLOGY HAVE MANY FORMS FROM SIMPLE AND SOPHISTICATED DIGITAL PRESENTATIONS TO THE USE OF MOBILE DEVICES IN THE CLASSROOM. DIGITALIZATION IS TRANSFORMING EDUCATION AND INFLUENCE THE WAY WE STUDY AND TEACH. NOBODY CAN STOP THE PROCESS AND INCREASING ROLE OF DIGITAL TECHNOLOGIES. TODAY'S EDUCATION IS IN A POINT THAT IT WAS NEVER BEFORE WITH A MAJORITY OF CHANGES IN DIGITAL TECHNOLOGIES.

BELOW WE TRY TO PROVIDE AND EXPLAIN SOME TRENDS IN DIGITAL EDUCATION THAT CONTRIBUTE TO METHODS IN DIGITAL TEACHING AND SHOW SOME POSSIBILITIES THAT THE TEACHERS HAVE. THESE TRENDS ARE:



1. Online education – the teaching moved online where the student-led model is used and the limits are break such as place and even time. Online education allows personalized learning and teaching, the online platform are individually oriented.

2.Video-based learning that is one of the most appreciated by learners and most demanding for teachers but it suit learners with any learning style preferences and includes audio materials (listening), texts (reading), images (watching), and even kinaesthetic elements (practical exercises and video pause/repeat). Video production requires only a camera or a smartphone, the video production is cheap and widely available.

3.Mobile learning is gaining on popularity as almost everybody posses a mobile phone and use it for a variety of purposes so why not for learning and teaching. Teachers can use a plethora of applications to teach almost every subject or they can create they own applications using simple and easy to use software. Mobile learning relates to microlearning, the small pieces of knowledge or information sent by a teacher to learners.

4.Personalised learning is another visible trend in digital education. Teachers are available online with different skills and backgrounds for different students with a variety of needs and expectations.

5.Gamification is an approach that was used to reinforce the students motivation and engagement by introducing the game based elements to non game environment like education. Online learning platform use gamification elements like rankings, badges, levels and avatars to motivate learners and to make the learning process more interesting. Teachers can use available platform with gamified elements or mobile application. It gives the impression of a play and learners play while learning. With gamification the learning process is more smooth, rewarding, and efficacious.

6. Crowdsourced Learning – the Internet gives the teachers or anybody wishing to share the knowledge the opportunity to be a teacher. Anybody can share knowledge, make a video and upload it on YouTube or use a question and answer portals like Quora, Answerbag, Yahoo! Answers, write a blog.

7.Accelerated learning is another trend. Everything is easily available on the Internet, one can have the access to any information just by searching in the Google, learning is fast and accessible.

8.Digital collaboration is a common practice because of the pandemic. Many people started to use it and many tools and software are available for free to implement a project online, to manage a project, to collaborate, such as Trello or Asana.

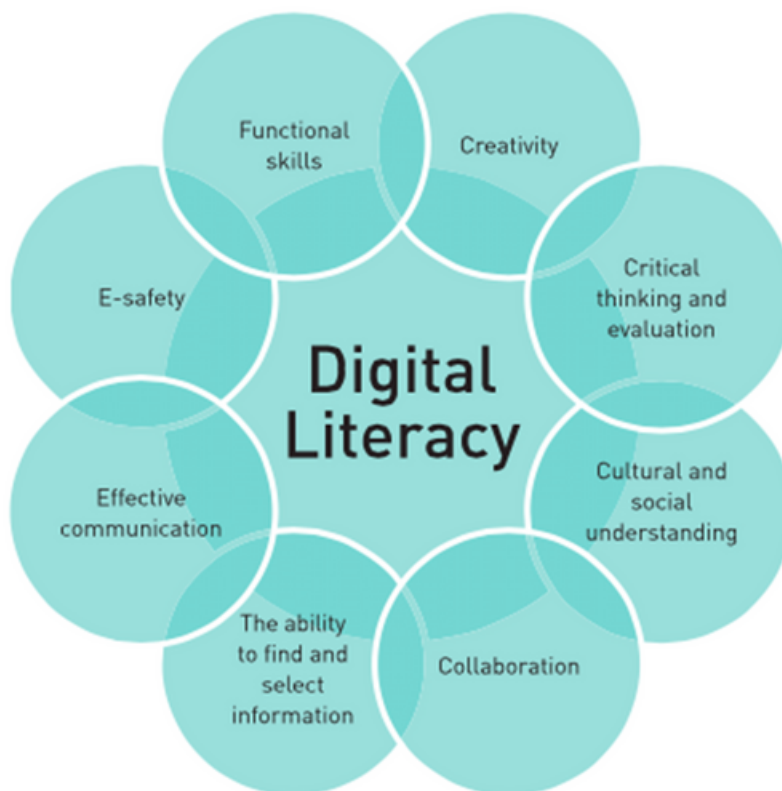


What is digital literacy?

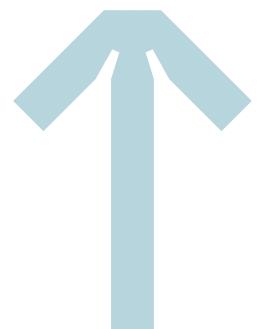
With the current ubiquity of technological tools and digital media, having the skills and knowledge on how to use and understand digital media is essential. Integrating media literacy into education can cultivate a stronger relationship between technology, educators and students can boost students engagement and self discipline.

Digital literacy is a must in today's schools, it means that teachers and students understand the digital tools that can unlock their deeper potential.

Digital literacy is the ability to use information and communication technologies to find, evaluate, create, and communicate information, requiring both cognitive and technical skills (According to the ALA (American Library Association). To be deemed digitally literate, you must encompass specific skills - components of Digital Literacy. The eight components include creativity, critical thinking and evaluation, cultural and social understanding, collaboration, find and select information, effective communication, e-safety, and functional skills (Hague & Payton, 2010, p. 19).



SOURCE: REFLECTIONS FROM THE FIELD: CREATING AN ELEMENTARY LIVING LEARNING MAKERSPACE





The European Framework for Digital Literacy (EFDL), a product of the DigEuLit project and initiated to recognize the significance of digital literacy, defines digital literacy as follows: Digital literacy is the awareness, attitude, and ability of individuals to appropriately use digital tools and facilities to identify, access, manage, integrate, evaluate, analyze and synthesize digital resources, construct new knowledge, create media expressions, and communicate with others in the context of specific life situations, to enable constructive social action; and to reflect upon this process. (Martin, 2006, p.155)
Shipra Awasthi (Jawaharlal Nehru University, India)

METHODS OF DIGITAL LEARNING

These guidelines explore different methods of digital learning that can be implemented by teachers. New technologies allow to teach from everywhere, any time and they have personalized the learning. Digital learning is the digitalisation of the entire learning experience: social learning, virtual meetings, online exams, networking, workshops. Methods that have been explored here include:

- The virtual classroom A virtual classroom is a video conferencing tool where instructors and participants engage with each other and with the learning material. It possess almost all features of a real classroom. Virtual classroom software enables teachers to:
 - be a moderator of students participation
 - display learning materials in the form of slides, video
 - screen-sharing and virtual whiteboard
 - divide the participants into breakout rooms, with or without the instructor
 - make polls and quizzes
 - record the sessions
- Serious games - serious games combine learning strategies, knowledge and structures, and game elements to teach specific skills, knowledge and attitudes. Their aim is often solving problems in several areas. They make use of challenges and rewards, use the entertainment and engagement components provided when the user is playing games. Games are used to teach through gamified exercises and simulations.
- The MOOC (Massive Open Online Course) (MOOC) is a free web-based distance learning program that is designed for large numbers of dispersed students all over the world. It is based on the use of a platform for training through videos, downloadable documents, quizzes, etc. MOOC is a course that consists of class materials made accessible online, which may include the following:
 1. filmed or recorded video lectures;
 2. readings;
 3. problem sets;
 4. online quizzes and examinations;
 5. interactive learning modules;
 6. interaction with other students via forums.
- The platform -- such as EdX, Canvas, Coursera or Udacity are best known for MOOCs.
- SPOC (Small Private Online Course) It is like MOOC but smaller, designed for a smaller group of learners, which encourages interactivity with the trainer and ensures that learners are followed up. They are online classes with limited enrollment, often offered by universities to individual learners or employees within organizations.
- Mobile Learning It is a way of accessing learning content through mobile devices. It is best suited for learning needs as this method enable users to access content whenever and wherever suits them. It is engaging, cost efficient, improves retention and young people really love it.
- Social Learning (social and collaborative learning) Collaborative learning is an e-learning approach where students are able to socially interact with other students, as well as instructors. Collaborative learning method is also used in a complementary way in the context of hybrid or face-to-face training. It allows students to learn from the ideas, skill sets, and experience of others in the course. They are engaged in a shared task and gain the opportunity to learn a variety of skills, such as group analysis and teamwork.
- Adaptive learning It is the delivery of customized learning experiences that address the unique needs of an individual through just-in-time feedback and resources (rather than providing a one-size-fits-all learning experience).



Teaching methods and strategies for distance/remote learning

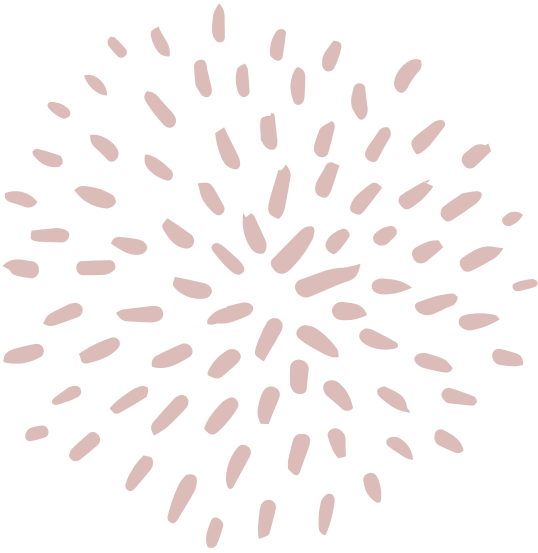
WHAT IS REMOTE TEACHING?

Remote teaching happens out of a physical classroom when instructors are separated from their learners in time and distance. Remote teaching is facilitated through technology, such as video conferencing software, discussion boards or learning management systems.

The process of teaching in a non-traditional way because the students and the instructors are not in the same physical space. Remote teaching can be synchronous or asynchronous and will typically include the use of technology to facilitate the exchange of information.

Remote teaching and learning has increased access to learning opportunities to individuals who cannot attend conventional classes on a daily basis as well as to those with financial limitations.

Types of distance learning: <https://www.epravesh.com/blog/effective-online-teaching-methods/>



1. Synchronous distance learning

Synchronous' means 'at the same time'. It is one of the most popular ways of learning involving live communication. It will be explored more in the next section.

2. Asynchronous distance learning means 'not at the same time'. This type of learning uses strict deadlines and a time limit (like a week or a month). Learners learn on their own pace, their choice of time of learning and they respect deadlines. It offers also a type of communication between students like forums or blogs.

3. Hybrid distance learning - it combines both asynchronous and synchronous learning. Learners follow a real-time communication learning, they meet online and they follow the course on their own with keeping the deadlines.

4. Electronic learning

Electronic learning is one of the most popular distance learning types, often known as e-learning, which enables learners to access course material(s) on a computer.

5. Fixed time online courses

These are the courses available at the fixed time online, they are neither asynchronous or synchronous learning or they can be both. Students access the course and they have to follow a piece of learning on a specific time but very often there are no online communications.

Synchronous vs asynchronous distance learning

Recently, remote learning has become the primary teacher and student learning style compared over the traditional classroom format. These days, numerous methods are used to teach and learn, however in these days remote and online learning has gained traction within modern teaching methods in so much that they surpass traditional classroom settings. With increased flexibility, industries and companies have rapidly adopted remote practices and learner demographics have changed to include more people. As this trend continues, e-learning is constantly evolving and being updated to enhance performance. However, in the world of "in-person" teaching, it is easy to wonder how listening to pre-recorded classes, podcasts and other lecture material may alter learning outcomes and lecture structures. In this case, we can look at advantages and disadvantages, problems and solutions of conducting asynchronous and synchronous classes using e-learning.



WHAT IS SYNCHRONOUS DISTANCE LEARNING?

Synchronous distance learning can be defined as a forum where the teacher and students are at different places, but learning takes place at a fixed or appointed time. Students registered in synchronous courses are normally required to log on to their computer during a scheduled time, for example once a week or one week each semester. Synchronous distance learning could be carried out through multimedia components such as group chats, web seminars, video conferencing and zoom, google meet or teams. Individuals that prefer structured courses and participate actively in class, like Synchronous learning. People who like structured courses heavy on student interaction often prefer synchronous learning.

WHAT IS ASYNCHRONOUS LEARNING?

Asynchronous learning is a teaching technique that brings students out of the classroom, and the traditional classroom into a room of their convenience. It allows students to be flexible, and teachers to facilitate lectures based on students' preferences. While solely conducted online, asynchronous learning allows students to follow lecture and class material at their own pace whereby course material is released on a scheduled basis based on prospective class progress. Whether the e-learning module follows weekly readings with either podcasts or pre-recorded uploaded videos, lecture material is accessible throughout the course duration at any time.

To ensure that the classroom's social environment is maintained beyond all corners of the internet, asynchronous groups actively use communication groups to connect students and teachers. Communication groups rely on sending emails and using integrated platforms with conference and chat rooms to connect over broad distances.

The development of Information and communication technologies have grown beyond expectations. In some countries, it can be observed that, not only older people have access to or own smart phones, but many children under the age of ten have them and internet is relatively cheap and easy to access. These changes have resulted to opportunities for educators to use different teaching methods in their teaching process. Understanding that online learning can be challenging, there could be limited space, noise, loneliness studying alone, engaging students with a variety of teaching and learning methods need to be adopted, such as videos, readings, online discussions, and collaborative learning with peers. The use of social media such as Facebook, Twitter, instagram, TikTok etc has also become prevalent among students.





The tools available online to create distance learning, e-learning and blended learning

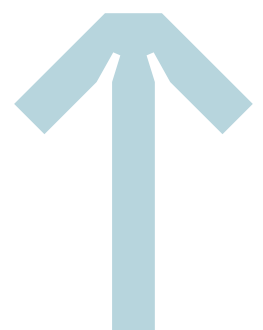
Asynchronous discussion groups

To further enhance the teaching process, the teacher can engage the students to use their mobile phones as an educational tool, by creating educational blog websites, asynchronous discussion forums or Facebook groups and google groups.

Based on the sociocognitive and constructivist theories of learning, it is assumed that the online asynchronous discussions groups have proven to be effective and has changed the collaborative learning in both in and outside of the classroom. This is very important, because most students or people in general have grown to be very attached to their mobile phones for social connections, shopping, bank transactions, news and general information and face to face communication and interaction has been on the decrease.

Online asynchronous discussion platforms give students the opportunity to study and reflect on their learning, students are able to communicate and collaborate with each other online. Here, we will talk about the use of blogs and google groups in online asynchronous discussion groups.

- Blogs - Blog pundit John Hiler has defined the blog as 'the latest disruptive technology', the 'killer app' that has the capacity to engage people in collaborative activity, knowledge sharing, reflection and debate, where complex and expensive technology has failed (Hiler, 2003)". In fact, the great beauty and interesting feature of blogs is their versatility, They cover a wide multiplicity of interests and values and there is no set rules that says, a blog has to be possessed and operated only by an individual. There are different kind of blogs, for example; group blogs, family blogs, community blogs, and corporate blogs, and then there are blogs defined by their content; eg. 'WarBlogs' (a product of the Iraq War), 'LibLogs' (library bogs), and 'EduBlogs', a new type of blog that has begun to emerge in educational arena.
file:///C:/Users/mia04/Dropbox/PC/Downloads/admin,+williams.pdf
- Just as Blogging has attracted the business community through its simplicity and serves as a public space for spreading information, ideas and receiving feedbacks, this also applies to using the blog in online learning (Bausch, Haughey & Hourihan, 2002).
- Participation of the students is very essential, as it verifies the theories or ideas that are being taught.
- Teachers has the responsibility of moderating or approve posts and comments, send private comment and feedback, the class activity reports, and organization of students into groups and classes are easily run on this platform.





Google discussion groups

<https://groups.google.com/>

The google groups is a web application created by Google. To use google group website, the educator can create four different types of groups such as;

- 1.The e-mail list group where the teacher and students can send e-mails from groups and from email to the group members.
- 2.A web forum can be created for an interactive discussion on the website and members participate by replying to the discussions with this website. While the updates is done via their emails.
- 3.The third google group type is the question-answer forum where questions can be asked and members can vote it, questions can be marked as answered. The postings are sent by webpage, and not by e-mail while updates are received by e-mail.
- 4.Collaborative work is the last type of google group, where the teacher can allocate some topics to students and allocation settings can be changed.

However, Google groups is a very good option, because it supports many languages, bearing in mind diversity in the classroom.

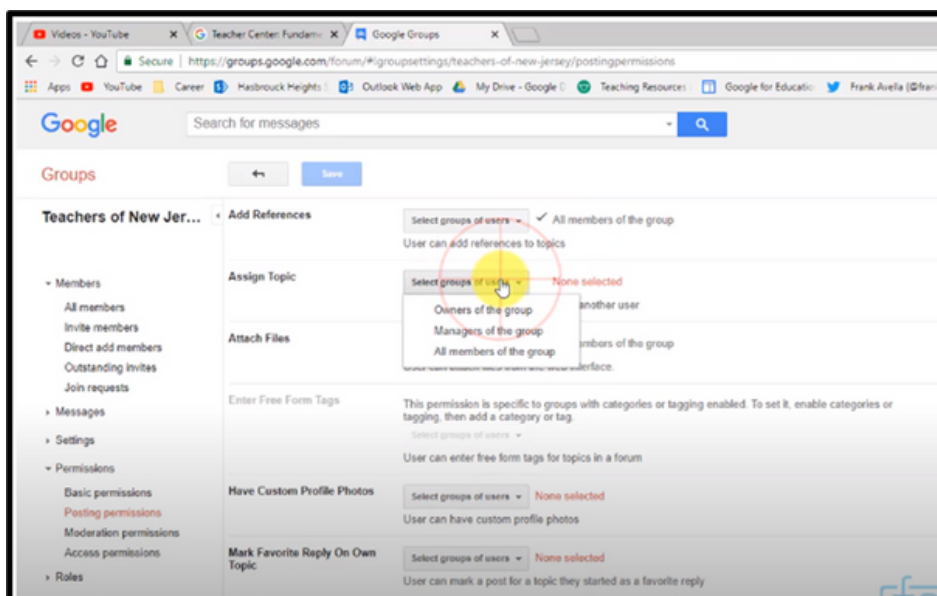


FIGURE 1: SCREENSHOT OF GOOGLE DISCUSSION GROUPS

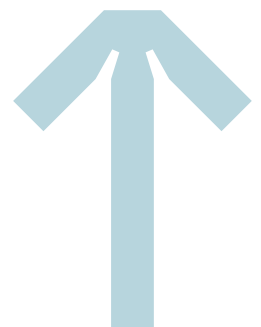
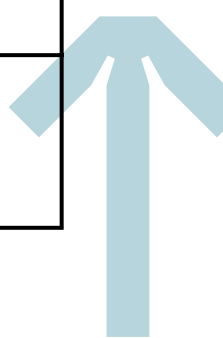




TABLE 1: ADVANTAGES, DISADVANTAGES AND SOLUTIONS TO PROBLEMS EXPERIENCED IN ASYNCHRONOUS AND SYNCHRONOUS LEARNING

Designing an eLearning platform	Encountered Problems and Questions	Solutions
Starting the platform	Where to start?	Analyze previous iterations of the project and determine implementation that works based on teaching goals
Establish the learning content for the module	<p>What should be included in the lecture modules?</p> <p>How detailed should the material be based on the broad learning demographic within the course?</p> <p>Should elements of the course distribution be simplified based on professional language used to deliver content?</p>	Specify and structure course content accordingly. Since the class may not have extensive background knowledge on the presented course material, ensure that the taught material is simplified, concise and subject focused.
Structure the module and its timing	<p>How should the module be structured? It can either be structured according to internet design principles, or the teaching schedule.</p> <p>What is the optimal duration of an online session?</p> <p>How should lecture material be presented?</p>	<p>Module framework should be consistent and neat. Content designers can choose their preferred format for lectures based on what is required for the class.</p> <p>Allocate 10 minutes for each topic to keep the audience captivated.</p> <p>Presentation depends on the goals and targets of the lecture.</p>
Teaching methods	<p>Should pre-tests be conducted in the module?</p> <p>How should class topics be followed up?</p> <p>What teaching methods should be used to disclose lecture topics?</p>	<p>Pre-tests should be conducted to understand learners' background knowledge and observe learner's ideas on subject matter and forum discussions.</p> <p>Topics can be followed up with creative problem-solving assignments and multiple-choice quizzes. These will give learners practical application of taught theories.</p> <p>Conversations, storytelling, recorded discussions, analogies and attention catching case-studies should be used to amplify the lecture material in order to engage students and aid video lectures.</p>
Use ICT tools to construct teaching material	<p>Which applications should be used to establish communication in the synchronous and asynchronous classroom?</p> <p>What ICT tools should be used to construct the content?</p>	<p>Could establish LMS platforms with forum options available so that participants can choose their optimal mode of communication. This can be done either via email or various social media platforms depending on what is suitable for the course and the participants.</p> <p>Mainly video and presentation formats as these dominate the field.</p>
Coordinate teamwork online	What methods should be used to establish and coordinate teamwork online to ensure that a project is completed?	Developing synchronous and asynchronous interdisciplinary skills



ENGAGING TEACHING STRATEGIES

Below you find the teaching strategies that will help teachers engage learners in the remote classroom. <https://www.wgu.edu/heyteach/article/teaching-strategies-remote-classroom1906.html>

1. Present yourself and your teaching method, explain the goal, welcome your learners. Tell your learners something about yourself— background, interests, your favourite book or a holidays destination. Describe what the course is about and what you hope students will learn.
2. Be available. It may be sometimes difficult for a teacher work – life balance but try to be more available for your learners online. You can tell your learners when you'll be visible and available. You can also establish a way students can contact you outside of those hours. Another way of being available can be a blog or forum where you participate with your learners or social media.
3. Use online resources and help your learners to assess which materials are valid and trustworthy—and which aren't.
4. Don't make a lecture, instead play with your learners, use videos, online collaboration tools or icebreaking activities and interactive materials. Make graphical presentations
5. Use virtual tools like whiteboards (Miro)
6. Try online methods like flipped learning or microlearning
7. Organize group discussions to reduce the negative aspects of isolation
8. Record the live teaching session or create a response video to the queries asked by students. Search for tools available online to capture videos, add captions, add images or comments and trim them as well and make those videos available for all, upload them on the shared platform.
9. Make your assignments clear. Studying online for your learners might be very difficult so try to make your assignments clear and accessible for all.
10. Provide ongoing feedback. Learners always need a feedback but when you're teaching online, it's another way to establish that personal connection with your students



ONLINE CREATIVE METHODS AND STRATEGIES

(<https://bethaniehansen.com/23-online-discussion-forums/> by Dr. Bethanie Hansen | Jan 6, 2021 | Best practices, Higher Education, Online Education Trends, Podcast, Teaching Online, Technology Tools, Video)

Teaching online using digital tool is one of the most challenging tasks for almost all teachers nowadays. Teachers are constantly looking for new, engaging methods to facilitate the teaching and learning. Therefore, there is a lot of space for creativity. How to be creative as a teacher, how to use different tools and techniques to boost creativity of the learners is a challenge for teachers all over the world. There are lot of creative techniques that can be used by teachers:

- online discussion forums where students can exchange their knowledge and ideas and their can share their opinions and socialize. It can be a peer discussion used for peer review, post for blogs. Teachers can ask students to post their assignments before they are graded or after or they can use online space to teach each others. Discussion forum should be managed by teachers and teacher's role is to create a safety environment of exchanging ideas and encourage interaction and it is a good idea to start with some questions when they can introduce themselves like: Introduce yourself: Where you are from, your profession, your family, where are living now generally, and so forth. Or:

- online Group Work is another creative technique that can be used online. It is difficult to work in groups while learning online but working in groups boost social aspect and cooperation of students. They get to know each others and ther learn to collaborate and deliver project together. There are a variety of tool for online group work available on Internet.

- games and simulations are perfect techniques that stimulate the student engagement. Teachers can use gamification elements or use a e-learning platforms with incorporated gamification to trigger the motivation and engagement of learners. Students love the rankings, badges, levels and the fact that they are hidden behind avatars. Teachers can also create a game or a simulation game which is not easy and requires a lot of work but the results are undeniable. Competition created by gamification and simulation actually makes the learning process more fun and learners appreciate that. Teachers can also use the decision tree or a simple quiz. With a decision tree, when they click on one choice, it will go to one choice, and when they click on a different choice, it will take them someplace else.

- guided Exploration can be a video made by a teacher with some instructions or guidelines on the subject. A video can contain a narrated explanation or the steps to follow the subject. It is the teacher that explain the topic recorded.

- use of Learning Management System that already gives a lot of possibilities like forums, blogs, exchanging messages, gamification, sharing rooms or video conferencing.



HOW TO BE AN EFFECTIVE ONLINE FACILITATOR

Online teaching can be challenging and requires a lot of preparation, but it can also be rewarding, engaging, and fun. Being an online teacher is changing perspective and learning new skills. Being a good online teacher means focusing on communication which is not easy online. Teachers should think ahead about some crucial aspects of online class such as welcoming message for the students, greetings before the start of the course, information about the course and the way of teaching online, the e-learning platform used or any other software. This information can help in building relationship between teacher and learners and can reinforce engagement and encourage learners to participate actively. Teachers may encounter technology problems during the course. Trying to solve the problems before the course starts and making rehearsals may help. Before the course starts it is good and advisable to get to know your learners and remember their names. It helps in building relations and reinforces engagement. A way to get to know students is to think about what you really want to know, and then ask. And be sure to share it about yourself, too.

TIPS ON HOW TO BE A SUCCESSFUL ONLINE TEACHER

- Be authentic- be yourself and do not pretend to be anyone else, your learners always appreciate this approach and it gives them power to be also themselves and it motivates them
- Be interesting for your learners, it may sound bizarre but teachers are people who facilitate the transfer of knowledge and have the power to discourage learners just at the beginning of their educational way, therefore do your best and be inspiring for learners.
- Be flexible – it is crucial not to be very strict regarding delivering the tasks by students. Give them a little bit of freedom to choose means to deliver the tasks. It boosts their creativity and contributes to their safety in the group.
- Be concise – keep your instruction clear for your learners as being and teaching online requires even more clear instructions .
- Be well organized and well prepared. Online teaching requires a lot of preparation for teachers, prepare your presentations, materials to download, references, materials for further readings and links. It will give you the feeling of self-confidence and your learners the feeling of safety.
- Be simple – simplicity is a key to remote learning and teaching, instructions and tasks should be easy to understand and accessible for all learners
- Try not to be overwhelming with materials and online tools for your students. It may be too much for them. Be selective and try to choose the best options, there are different students in the group, some of them may manage with a variety of options and some not.



A brief introduction

Findings from interviewing two people who have very good experience as a student with hearing impairment and as an instructor working with people hearing loss. One of them is educated as a sociologist and has a master's degree in psychology. Now she's working on rehabilitation - a rehabilitation center - the field is hearing challenges. They run courses that is financed by the Norwegian Labour and Welfare Administration (NAV). They also provide services to high schools for students with hearing disabilities. Does not work directly with users for a long time but has worked a lot with hearing challenges and digital teaching before now.

Before the corona, they had no digital education. They had courses every single day also when corona came then it was impossible to have the traditional in class learning, left with no choice other than to make digital course.

Since the corona came, they have done everything digitally - it has been a huge challenge, for both the instructors and the students. The teachers had to learn and adapt to the new learning method, because what is important with hearing is that one must see the mouth. In addition, you need to have no sound in the background. Subtitling is very important - they did not have subtitles in the beginning. Auto-caption is not an automatic function in zoom / teams etc.

The use of broadcasting system is very good, because it has a writing interpreter who writes everything the teacher says and everything the participants say.

Auto-text programs do not work well enough.

HOW TO MAKE THE ONLINE LEARNING INCLUSIVE/ ACCESSIBLE - PEOPLE WITH DISABILITIES

The use of interpreters

According to National Association of Interpreters in Education, the organization who are engaged in providing services to support the communication needs of deaf, the hearing impaired and deaf dumb students in educational settings. There is emphasis that educational interpreters provide essential, legally-designated services and it is essential for this kind of service to be available, as well as paid for, during the period of online instruction.

- .There is need for the continuation service of educational interpreters for students with learning disabilities such as D/HH/DB, as using auto-generated speech-to-text tools or other alternatives can be quite challenging for effective communication.
- .Research advices on consistent use of same interpreters, as changing interpreters too frequently can be difficult and risk the impact of consistency of language and content being represented.
- .Individualized education programs (IEP)
- There is need for educational interpreters who will provide access, including access to virtual classrooms, in order to maintain individualized education programs (IEP) strategies that outlines the goals set for a student for the academic year, and any special and needed assistance to help reach those goals. <https://naiedu.org/preparing-educational-interpreters-for-distance-learning/> have put in place an entire system - have used aids. Here are some pictures and examples of aids:



FIGURE 2: CLASSROOM INTERPRETATION AIDS



PHONAK™ ROGER TOUCHSCREEN MIC

HOW TO MAKE THE ONLINE LEARNING INCLUSIVE/ ACCESSIBLE - PEOPLE WITH DISABILITIES



The device shown in the photo is: Phonak™ Roger touchscreen mic. **Roger Touchscreen Mic** is a simple and intuitive microphone for use in the classroom. It allows both teachers and students to easily know when the microphone is turned on and transmitting sound. To be able to fully participate in classes, a child must hear not only the teacher's voice, but also other students' voices, as well as sounds from multimedia devices in the classroom. Products from the Roger portfolio in education are perfect solutions for every situation. Additionally, it allows you to simultaneously mix the signal from the Roger microphone with any multimedia device used in the classroom or use it as an independent audio signal transmitter from a multimedia device allowing the student to listen to an audiobook (Phonak.com).

How to use it?

To turn it on, press the power button on the side of the housing for 3 seconds. During startup, the indicator will glow green.

- Hang Roger Touchscreen Mic around your interlocutor's neck and adjust the height so that the top of the microphone was at a distance of 20 cm from the mouth.
- If it is necessary to connect a student, place Roger Touchscreen Mic at a distance of 10 cm from the receiver and select Connect. Repeat the same for the receiver on the opposite ear.
- Roger Touchscreen Mic can be muted by selecting the Mute button. Indicator the light around the button will then glow red.
- At the end of the day, turn off the Roger Touchscreen Mic by pressing the power button for 3 seconds. On the microphone will ask you to confirm deactivation. Check the green yes sign. Charge your device daily using an appropriate USB charger or Charging Rack.

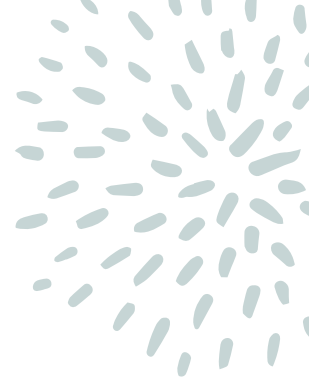
Roger Touchscreen Mic is:

- Fully automatic
- Depending on its position, the new Roger Touchscreen Mic automatically switches from talking to one person to talking to a small group of people.
- Peace of mind
- The intuitive indicators and easy-to-use interface of the Roger Touchscreen Mic enable teachers and students to actively participate in classes in modern classrooms.
- Perfect match
- Compatible with virtually every hearing aid, cochlear implant and sound system (Phonak.com)

TIPS FOR TEACHING INCLUSIVELY AND MAKING THE TEACHING ACCESSIBLE FOR ALL STUDENTS

(based on 20 Tips for Teaching an Accessible Online Course <https://www.washington.edu/doi/20-tips-teaching-accessible-online-course>)

1. While teaching ensure that all your students have access to the digital technologies that you use while teaching and communicating with them.
2. Remember to use special digital technologies and strategies, e.g. assistive technologies, designed for learners who need a special support (e.g. learners with physical or mental constraints; learners with learning disorders visual or hearing impairments)
3. Take into account and respond to potential accessibility issues when selecting, modifying or creating digital resources. Try to and to consider and provide alternative tools for learners with special needs.
4. Take into account the individual learner and his or her special needs and use digital technologies to address these special needs (e.g. dyslexia, ADHD, overachievers).
5. Make teaching more individual, allow for different learning paths, levels and speeds
6. Use clear layouts and organization schemes to present content.
7. Use descriptive wording for hyperlink text
8. PDF documents are not recommended, link to PDF if you really need it
9. When an image or photo is needed for your teaching content presentation, use text descriptions of content presented in the image
10. Use large, bold, fonts with plain backgrounds, provide a contrast, use contrast colours for those who are colour blind (check the colour contrast analyser).
11. Put captions and subtitles when presenting videos and always transcribe audio content.
12. Remember that some students work slower and cannot deal with multitasking, especially using the technology, therefore, introduce technology slowly and always monitor and check if everybody is following the teaching.
13. Provide multiple ways for students – Universal Design for Learning
 - to learn- text, videos, recorded lessons, audio recordings, image -to communicate and collaborate that are accessible to individuals with a variety of disabilities
 - to demonstrate what they have learned (portfolios, presentations, single-topic discussions)
 - To assess their progress
14. Avoid using acronyms or provide a spelling for acronyms
15. Use correct language not a familiar one or provide guidelines for language
16. Keep your instructions clear and simple
17. Try to adjust the content and examples to your group of learners, take cultural and background differences into consideration
18. Think about a correct timing for task for your learners, allow an adequate time for activities
19. Take into account different needs of your students and availabilities and provide adequate opportunities to practice.
20. Think about different types of feedback for your students



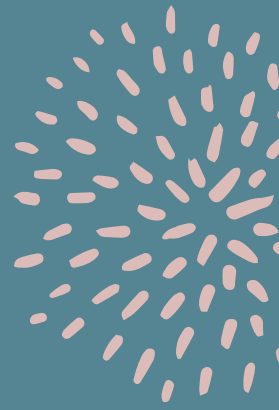
SOURCE EVALUATION, HOW TO USE INFORMATION FROM INTERNET - CREDIBILITY OF SOURCES

When running a distance or online learning, it is imperative to have overview and check the existing digital tools and resources to make sure that they meet needs and goals of you the teachers and empowering the students. The Quality of the materials, accessibility to students, and privacy are primary issues for consideration not withstanding or regardless of the amount of technology changes that are implemented.

- Schoology is a learning management system tool that can be used to support or help in organizing resources for the teacher and students. It is good for digital and distance learning, aids in effective communication and collaboration.
- Choose devices, tools and resources that have in built strong accessible technologies.
- Need to ensure that students have what they need – including access to devices, logins, scaffolds, and appropriate curriculum – to engage with digital learning?
- The vocational education and training database for countries like Australia, the Cedefop of Europe which is placed at the heart of EU cooperation. Its main objective is to improve VET through effective policy making. On this website, readers can find publications, reports and relevant tools that will aid in being current.
- Auditing the curricular resources and existing digital tools in order to select resources that effectively support learning goals which can be transferred to a digital learning environment.
- Individualized Education Program (IEP) requires to be thoroughly equipped and secured.
- The right security practices need to be put in place, taking special consideration to special needs students. Technology used to deliver services for students with disabilities, discuss student health, and/or share information.



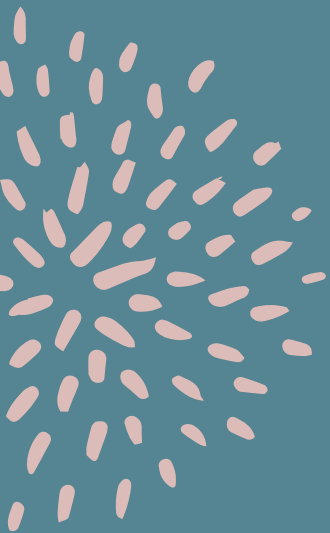
NETIQUETTE



What is netiquette?

Knowing and respecting basic rules while teaching and communicating online can help avoid misunderstandings, confusions and save from making social mistakes. Netiquette is the correct way of conducting yourself while communicating online. The word netiquette was derived by combining “net” and “etiquette.” This rules will help teachers and learners in their way on digital education. The rules come from the book Virginia Shea’s The Core Rules of Netiquette. It is advisable for teachers to introduce the Netiquette to learners at the beginning of the course or a school year and to remind sometimes that Netiquette exists.

The internet doesn't forget anything! A screenshot or a copy of your messages is quickly made and still exists even if you delete your messages afterward.



NETIQUETTE RULES

Rule 1: Remember the Human

You should always remember that you communicate with a human. There is always a person behind the words, email that you receive and read. People are very easily irritated and express their anger, response in a negative way as they forget that there is somebody, a human who wrote that or is hidden behind the switched off screen. Unfortunately, it's also easy to misread the context of someone's words when you can't see their facial expressions, gestures or body language. We should always remember that there is a person with feelings on the other side.

Rule 2: Adhere to the same standards of behavior online that you follow in real life

Nothing is anonymous in the Internet and everything belongs to somebody. It is impossible to copy and paste the materials from internet and treating them as yours. People feel more free and more courageous when nobody see their faces and they often write a comment or a blog that they very quickly regret.

Rule 3: Know where you are in cyberspace

It is important to check where you are placing your posts and comments as it can be an inappropriate group with completely different hobbies, interests or worldview.

Rule 4: Respect other people's time and bandwidth

Communications like emails or online posts, take up space in storage systems, increase the carbon footprint. Bombarding mailing lists with large files or unnecessary data is not a good approach. Keep your emails short and respect people's time as they have to read it.

Rule 5: Make yourself look good online

Avoid typing in ALL UPPER CASE which is considered shouting, which is not good netiquette. Always checking for spelling and grammar errors and knowing what you're talking about and stating it clearly is another important rule and being polite and pleasant.

Rule 6: Share expert knowledge

Internet was made with a goal to share information and knowledge. Therefore try to share what you know. If you are an expert, post resources and links, references.

Rule 7: Help keep flame wars under control

Flame wars are messages that contain aggressive personal criticism or attacks on a person. Stay out of it. It is an important rule to treat others as you would like to be treated. Unfortunately, insults and threats on the internet can have legal consequences. For this reason, do not be tempted to make such comments.

Rule 8: Respect other people's privacy

This is one of the main rules, not only in the Internet but it should also be respected in a real life. Messages, emails cannot be forwarded without a permission of a sender. When sending private emails to multiple recipients, use BCC (blind carbon copy) instead of CC (carbon copy). Do not circulate the private files of other people like videos or photos. Do not other people email address while subscribing to a newsletter.

Rule 9: Don't abuse your power

People have the tendency to be more powerful in the Internet than in a real life. Online meeting moderators or networks administrator misuse their power and check the emails of others or other private information. If you have more power than others, you do not have the right to exploit this power.

Rule 10: Be forgiving of other people's mistakes

Be objective and do not point out the mistakes of others. The Internet beginners may commit a lot of mistakes, errors, typos in the written messages. Everyone was beginner once. It is important to forgive your counterparts' mistakes. If you want to express sarcasm among friends or close colleagues, use emojis such as smileys or GIFs which can reinforce your message.

LEARNING STYLES AND STRATEGIES

Teachers and trainers generally know what are the learning styles as they learn about them during their educational process. Not too much attention is given to the efficacy and use of the learning styles and techniques for particular students and the use of these techniques. The definition of learning style is a different method of learning or understanding new information. Learning styles are different for learners and it is a way in which learners understand, expresses and remembers information.

Generally, there are four basic learning styles: Visual, Auditory, Read/Write, and Kinaesthetic. Read/write learners learn through reading and writing. They pay attention to text book glossaries or make their own. They return to their notes for review and read them over. Kinaesthetic Learners learn through doing. Their best way of learning is the use of labs and tutorials and they should try to fill their notes with several examples for each concept.

Visual and auditory styles – although successful learners are able to combine both these styles, teachers should take into consideration that learners may be divided into those who prefer visual aids such as charts, graphic examples, drawings while auditory learners prefer listen to the word, to the recording.

Learning strategies play a crucial role in VET and inclusive learning. Strategies are “those specific ways of approaching the problem. They are the moment-by-moment techniques that we employ to solve “problems” posed by second language input and output”(Brown 2000: 122). We can divide learning strategies into three categories:

- Metacognitive strategies contain planning learning, evaluating, monitoring and thinking of learning when it is taking place, self-evaluation after the task
- Cognitive strategies “are more limited to specific learning tasks and involve more direct manipulation of the learning material itself”(Brown 2000:124) consist of imitating the language model, repetitions, using target language materials, note taking.
- Socioaffective strategies are based on social-mediating activity and interacting with others, cooperation, question for clarification (O'Malley and Chamot 1990, as cited in Brown 2000:124).

Learner strategies are crucial when it comes to learner autonomy. Moreover, teacher should help learners to become autonomous. Apart from teaching, the teacher's role is to teach students how to learn. Generally, the majority of learners are unconscious that there are learning strategies, therefore they cannot make use of them and they cannot succeed, or their success is weaker. Getting to know his or her learners, the teacher should use different activities in the classroom aimed specifically at teaching the learners how to build their own strategies. Then, students would have an opportunity to check which strategies are tailored for them and from which they can benefit more. All the aforementioned strategies complement one another in the process of learning. Successful learners incorporate all these strategies; they know how to learn to be successful.

Apart from the beforementioned learning styles and strategies for learning these guidelines will try to approach most effective learning styles that were examined, explored and assessed in the research managed by prof John Dunlosky. The research team assessed and tested the variety of learning styles, from those mostly used to those used in moderation. The reason behind the lack of popularity of some techniques is that students are not used to them or were not familiar with them. It is a pity as for some students with some learning problems they may help in gaining their learning goals but they do not know that these techniques exist or they do not know how to use them to enhance their learning.

The problem is also that many teachers do not know that the techniques exist and they do not study the use of these techniques during their academic study. The techniques can be used for self-paced learning for students and by teachers during the teaching process. The advantage for the learning is also to teach learners how to learn, to devote a lesson for presentation and practice of learning techniques as this may influence and enhance the whole learning process.





LEARNING STYLES AND STRATEGIES

The paper/research enumerated the 10 learning techniques and gave the recommendations about their utility. The techniques include:

- elaborative interrogation,
- self-explanation,
- summarization,
- highlighting (or underlining),
- the keyword mnemonic,
- imagery use for text learning,
- rereading,
- practice testing,
- distributed practice,
- interleaved practice,

These guidelines will try to provide teachers and trainers with some basic informations, advantages and tips on how to use the techniques and it attempted to provide reviews for each technique.

- Elaborative interrogation is the searching for the answer for WHY and asking WHY to a stated facts. For teachers it is prompting learners to find explanation to facts. Elaborative learning involves thinking and searching explanations behind facts. It can be used by learners at each stage of education and in each environment and it can be also facilitated by a teacher or trainer. Prompting students to answer 'why' questions can facilitate learning, they should look for an explanation of the fact or problem. It is the process of learning by incorporating new information into existing knowledge so it is the creation of the larger knowledge structure.
 - Self-explanation, is about explaining by students some aspects of their processing while acquiring knowledge. Self explanation is also learning new content by supporting it by the content already acquired. For teachers it can be facilitated by using the questions related to the knowledge: Explain what does it means to you? What does new information provide for you? How does it relate to what you already know?". Teachers should be prepared with questions for students to trigger their self explanation. This technique can be used with different content materials and within a variety of tasks and domains and with different learners.
 - Summarization is a technique of summarizing and very often synthesizing the knowledge, content, text. It requires reading the whole content and then making a summary. Therefore, it give the opportunity to practice also the organizational and rephasing skills. The variety of summaries can influence learning and retention.
 - Highlighting (or underlining) is often used techniques by learners, requires reading the text and deciding what is important and should be underlined. It may be difficult to choose and sometimes too much material is marked.
 - The keyword mnemonic it is using the students imagination and to relate the new information with some pictures from your memory. The use of imagery can enhance learning and comprehension for a wide variety of materials and for various students. The role of teachers is to support and teach students how to develop interactive images and use them with new information and how to recall them. It requires also the development of keywords, whether by students, teachers, or textbook designers.
 - Imagery use for text learning is developing images to imagine the text materials. It enhance the mental organization of material and helps in integrating the information in the text. This technique can improve students' learning of text materials.
 - Rereading is a very popular technique among students and it is simply rereading the text. Students should take into consideration when to reread for the second time, the most effective is not rereading immediately but after a short delay. Students can use rereading during the self guided learning but it can be also used by teachers during a lesson. It increases the amount of information encoded and it is an efficient technique. Students require no training on how to implement rereading and it is an economical technique when considering time as we basically need less time for the second reading than for a first reading.
 - Practice testing is highly effective technique that can be used by teachers but also as a self guided learning. Student can use flash cards, tests in the course books, tests available online, tests at the end of the coursebook to self check their knowledge. Teachers can test students and ask them to self assess their test or assess without grading students. Testing improves learning. It helps in organizing information for learners.
 - Distributed practice is distribution of the learning over time so it is a kind of planning and scheduling the learning and using different techniques like rereading, reviewing the notes and testing. Some coursebook are prepared for distributed practice as they review the previously covered materials in subsequent units so they can be used for self study by learners or by teachers during their classes. It is a very effective method, enhancing the process of learning and it can be used with a variety of learners and it works also for complex materials. The distributed practice helps to root the materials in the knowledge structure.
- 



Learners empowerment

Factors that encourage and motivate VET learners:

In Norway, "The hearing aids are given by the government, they are free. This helps in motivating learning and feeling included and empowered". Structured resources, hearing aid helps students hear and understand better. High expectation from both teachers and learners.

Distraction and Lack of structure: With good lighting, students are able to observe the movement of the mouth and body language.

What are the factors that limit learners' opportunities to learn in the distance mode, factors that make VET education non inclusive?

Noise, Poor light, Under qualified teachers, not enough digital literacy and resources for people with learning disability. Shame of putting on the hearing aid in your ear. Often in denial and must find a smart way to get given important information.

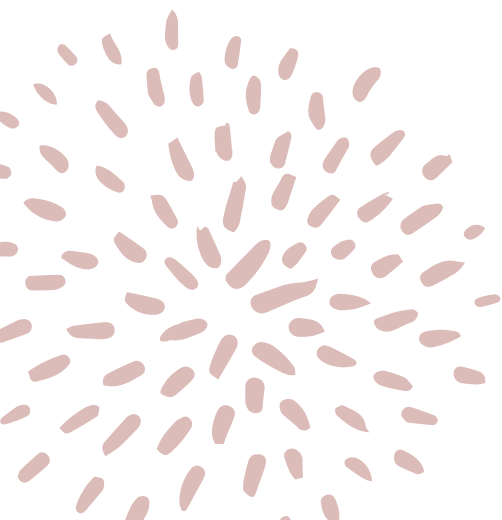
Difficulties faced by learners: Long hours sitting in front of the screen and very tiring to read text for many hours. Difficulty in communicating with others and getting the right aid.

Motivation:

Motivation is perceived as a central factor in the online learning and teaching process. As teachers and designers of virtual learning-learning environments, it is crucial to clarify the motivation factors in an online and long-distance learning program. It is known that motivation is a central aspect in the learning-teaching process. It can be emphasized that students tend to pay more attention, are engaged and learn more when their motivation level is high, In order to improve the online learning and teaching process, there is need to analyze factors of motivation. From results of research carried out by (KIYMET SELVÍ 2010) which shows that the external motivation factors such flexibility, deliverability, freedom and independence are considered as the most important benefits of use of distance learning environments. "Freedom of access" is another findings in relation with idea of increasing knowledge.

This result is also in accordance with the idea of increasing the students' motivation in an online learning environment. Thus, motivation factors that affect students' success in e-learning need to be investigated and understood better. The results of this research was aimed to also help educators, who plan, organize and deliver a qualified e-learning instruction, to improve students by:

- Making Video Lectures More Engaging,
- Promoting Deep Online Discussions
- Produce a Gallery of Student Work
- Secure and make sure that Class Content is Accessible





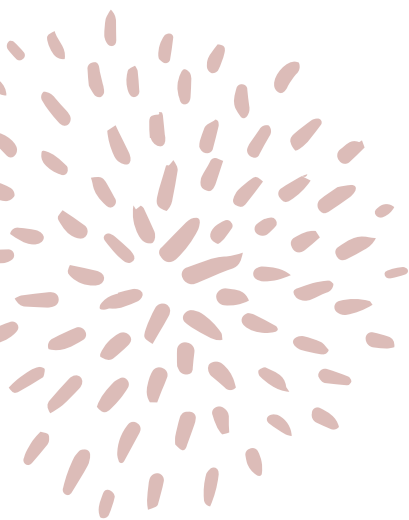
How to build relationships

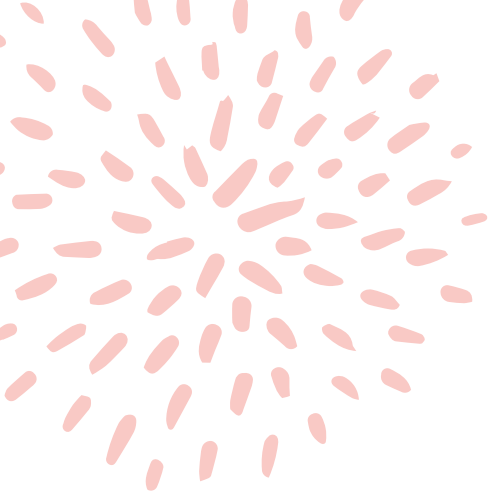
Some teachers may be surprised by the fact that relationship can reinforce the learning process and they are crucial while teaching a group of learners. They become even more important in remote learning as building them in isolation may become difficult but still very appreciated by the learners. These guidelines will presents some benefits of relationships that they bring to the learning process and the ways of enhancing the relationships in the class of learners.

Relationships are important at every stage and area of learners life. Friendships at school, which are the informal and voluntary relationships among learners, have been shown to positively impact performance, creativity, satisfaction, organizational commitment, involvement and team cohesion (Morrison & Cooper-Thomas, 2015). Relationships with students can help them develop academically and socially. The characteristics of a cohesive team are Trust, Conflict, Commitment, Accountability, and Results. Each behavior in the model builds upon the previous and supports the others. (Lencioni model).

Unfortunately, it is not easy to build relationships as somegroups are dysfunctional, even those that are perfectly managed with qualified teachers and perfect environment. This is because there is always a human factor and all learners are only human beings with all their drawbacks. According to team dysfunctions by Lencioni there are several areas that need elaboration to build a good relationship in the group of learners. Teachers may need to focus on the following aspects:

1. Trust is crucial while building relationships in the learning environment. Then there is the absence of trust every relationships becomes impossible. Trust gives the learners the permission to be vulnerable, to show their weaknesses to other learners, to admit that they need clarification or they do not understand something. When trust is not established, learners will hesitate to ask for or offer help, will shy away from constructive feedback. They will also fail to get a clear view on each other's intentions.
2. Fear of conflict - when there is no trust learners do not involve in a controversial discussion as they do not feel secure. Thanks to trust even conflicts can be constructive and learners feel safe. They are able to state controversial points of view and not to avoid them when trust is missing.
3. Lack of commitment - that learners will not make sacrifices to achieve results very often as a group. But when a trust and conflict are present then learners follow the chosen idea and support it.
4. Accountability - when there is no commitment it is impossible to reach accountability of learners. When they are committed, they are responsible and respect other members input.
5. Results - learners have their own personal goals connected with their education and they are always more important that the whole class goal. When there is accountability in the class then it is much more easier to follow the common goal by all learners, the common goal become more important than any individual's personal goal, and will everyone feel rewarded by being part of the results.



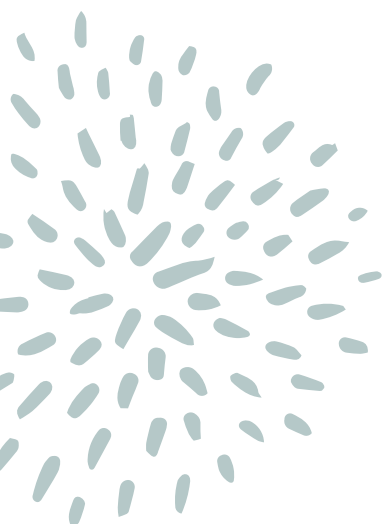


WHAT TEACHERS SHOULD DO TO BUILD RELATIONSHIP WITH THEIR LEARNERS?

1. Remember the names of learners.
2. Spend time with learners, get to know some information about students, their hobbies, families.
3. Be kind and greet learners, be open to cooperate and show empathy.
4. Organize class meetings if possible face to face or online.

Activities to do in the classroom to build relationships between learners:

1. Use icebreaking exercises to start a lesson.
2. Interviews made by learners with another learner on specific topic to get to know more about each others.
3. Game – learners write down a fact about themselves, then give it to the teacher and students have to guess who it is.
4. Learners write one or two statements that are true about themselves and one that is false. Students guess, which is false. This could be adapted and called True or False.





HOW TO REINFORCE ENGAGEMENT OF LEARNERS IN EDUCATION

Education has changed significantly over the years and the influence of technology has played a crucial role in that change. Technology has had a major influence on student engagement and the answer to the question on how to best use it to increase student engagement and success is one of the main issues.

Student engagement has been defined as “participation in educationally effective practices, both inside and outside the classroom, which leads to a range of measurable outcomes” (Kuh et al., 2007).

The majority of online learners feel difficulty maintaining self-discipline and being engaged. Their inability to keep engagement is a serious concern for decades for teachers and educators, as we know self-discipline/motivation/engagement is indispensable for personal and professional growth. Online learners can have more difficulties with keeping engagement as they have no social exposure, they are distant and may even have no social interaction. They also miss social interaction which deprives them of social learning opportunities. Social interaction is crucial and plays a key role in learning as we learn from society, people, and circumstances.

What is engagement?

“Engagement” is a behaviour or a mental-psychological mood and state of mind characterised by positive feelings and fulfilling sensations that make us feel fully involved, committed and enthusiastic.

If we focus on engagement within learning environments, “engaged learners” (teachers) are definitely committed, passionate and inspired as well as inspiring for others, more productive, more aware of their own strengths and with increased self-esteem.

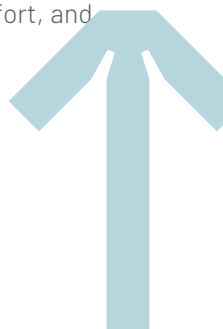
According to Martin Seligman's model, Engagement is related to the abilities to “perform better” to be “more intrinsically motivated” as it “reduces feelings of depression and increases feeling of wellbeing”.

Engagement helps us be “mindful” and therefore enjoy the activities that we are involved in and focused on. This feeling of living in the present is the so-called “flow”.

Mindfulness and the state of flow are the key features of engagement that we will explore and train through effective strategies, activities and tools.

When learners are engaged and concentrated on something that they enjoy, time flies, the activity itself seems less hard and more fulfilling, we are happier to go to work and do not feel burned out or stressed. More importantly we are happy to go back home and dedicate our personal time to the family or hobbies as we do feel rewarded by our educational achievements.

Engagement is crucial for the success in learning and teaching. Engaged teachers/learners perform better, boost the success and the outcomes of their learning process. If the learners are engaged, it's proven that the productivity levels will rise. Productive learners focus on the right things at the right times. There's very little wasted effort, and the learning/teaching they do creates the good quality results.





As stated by Dr Seligman who developed the PERMA model, "When we focus on doing the things we truly enjoy and care about, we can begin to engage completely with the present moment and enter the state of being known as "flow"" (Seligman, 2011 – Article "Health, stress, well-being and positive affectivity" page 12).

In Csikszentmihalyi's words, flow is "a state in which people are so involved in an activity that nothing else seems to matter; the experience is so enjoyable that people will continue to do it even at great cost, for the sheer sake of doing it" (1990). To achieve wellbeing, creativity, and productivity learners should practice flow.

Csikszentmihalyi describes eight characteristics of flow:

- Complete concentration on the task;
- Clarity of goals and reward in mind and immediate feedback;
- Transformation of time (speeding up/slowing down);
- The experience is intrinsically rewarding;
- Effortlessness and ease;
- There is a balance between challenge and skills;
- Actions and awareness are merged, losing self-conscious rumination;
- There is a feeling of control over the task.

When we are in the flow state we definitely feel like we are completely absorbed by a challenging, achievable and purposeful situation or task and any distractions (like for instance phone calls or noises around us) simply disappear and do not annoy us at all. We are completely involved in current activity, focused on the present and time passes quickly and feel intrinsic motivation so that flow becomes the reward as well as a sense of personal fulfilment, inner clarity on direction and progress and confidence to complete the task.

WHAT ARE THE BENEFITS OF ACHIEVING FLOW WHILE STUDYING OR TEACHING?

- Focusing attention on what's important and positive
- Feeling of fulfillment that lead to be more confident in the abilities to learn
- Improve the students performance, they can achieve better results
- Reducing stress levels
- Increasing enjoyment and creativity

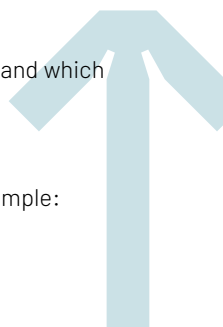
To achieve flow you should:

- turn off your smartphone when seeking flow.
- balance of perceived challenges and skills
- when a challenge is bigger than one's level of skills, one becomes anxious and stressed
- when the level of skill exceeds the size of the challenge, one becomes bored and distracted.

Practice flow with your students: Exercise for teachers and students Priority Matrix:

This exercise will help teachers and students in organizing their learning process. It will show how to focus on priorities and how to achieve goals.

1. Make a list of your tasks related to your learning or not.
2. Think of the consequences for not doing each of your tasks (deadlines at school, tests), this will help you understand which tasks cannot be postponed.
3. Make 2 lists out of the tasks: "high" and "low importance".
4. Create two new sub-categories: "high urgency" and "low urgency".
5. Assign numeric values to each of your options (from 1 to 4), where a lower number means a higher priority. For example:
 - High importance and high urgency: 1
 - High importance and low urgency: 2
 - Low importance and high urgency: 3
 - Low importance and low urgency: 4





STEPS:

- To get started, jot down all the tasks and projects you want or need to get done.
- Rate the activities based on their importance and urgency. You can rate them on a scale from 1-4 or use a scale of your choice, e.g. school grades or a 1-10 scale.
- Now it is time to add the items to the matrix. Try to limit each quadrant to eight items, to keep it achievable. Remember the goal here is accomplishment!
- When you add tasks to DO IT LATER, make sure you schedule a time for them 😊.
- Always try and make Action Plan to accomplish all tasks with some details on “what”, “who” and “when” a task shall be accomplished.

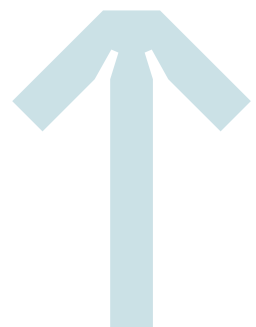
BUILD YOUR PRIORITY MATRIX:

Brief insight into the four quadrants are:

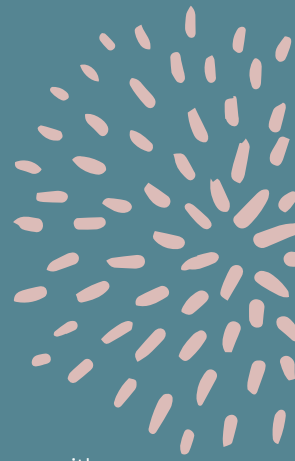
- **DO FIRST:** start by analysing your priorities, and then establish if it falls within the ‘do it now’ criteria. These are tasks and projects that are essential to your work or personal life, urgent. These are things that need to be done today or at latest tomorrow.
- **DO LATER:** tasks in this category as important but not that urgent. They are long-term objectives and tasks with no immediate deadline.
- **DELEGATE:** It may be difficult but you may find some tasks that are possible to delegate like the tasks that are not important to you but are quite urgent for others. This is where teamwork comes into play. Remember about monitoring the tasks that are delegated.
- **ELIMINATE:** Think about tasks that consume your time and give you nothing valuable like spending hours on social media. In the ELIMINATE section are tasks that are not to your goals and not urgent. The only way to boost your productivity is to eliminate them. They could also be bad habits that you need to identify and delete from your daily and weekly schedule.



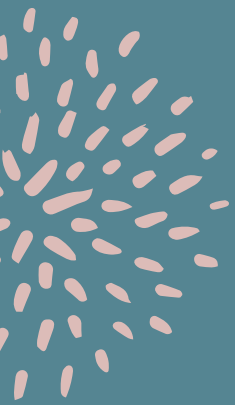
SOURCE: [HTTPS://CONCEPTBOARD.COM/BLOG/MANAGE-YOUR-TIME-WITH-THE-PRIORITY-MATRIX-TEMPLATE/](https://conceptboard.com/blog/manage-your-time-with-the-priority-matrix-template/)



TIPS FOR TEACHERS HOW TO IMPROVE THE ENGAGEMENT OF THEIR STUDENTS



- Improve communication that determines how effectively we fulfil our daily tasks and how we engage with colleagues.
- Give recognition that is making your learners feel valued and increasing their productivity that little bit more. This creates a positive environment, which will in turn, boost morale, improve wellbeing and increase engagement and productivity.
- Encourage Interaction. By creating events or communities within your learners, create relationships that may not have otherwise existed.
- Try to focus on your learners wellbeing
- Encourage feedback, learners always need feedback, teachers can establish regular review sessions with their learners as an ongoing initiative to improve engagement.
- Give your learners a little flexibility. Flexible schedules and remote teaching opportunities are almost the ways of increasing learners engagement.



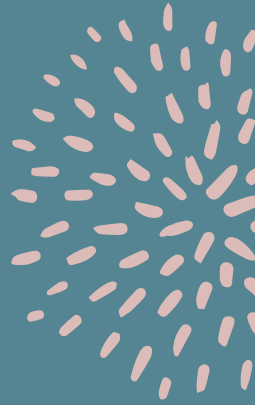
HOW TO MAKE YOUR LEARNERS STRONG

Below you will find, as a teacher some useful tips to help your learners with their learning process. The tips will make the learners stronger and more able to manage their learning and be their own learning managers. Sometimes a lot of mutual understanding is needed to proceed with an educational challenge. Teachers can use these tips and print them and hang on the wall in the classroom or read them to their students. Or they can introduce one tip each day to help students with their learning challenge at school and at home.

Tips to take action for learners:

- Do not condemn yourself: the way you respond to an acute crisis is normal. It makes no sense to get angry over your reaction. Replace 'I wish I hadn't...' with 'It's okay that I didn't... What would I do the next time when facing this?'
- Give yourself time to get back on your feet. Do this by counting till 10 or even longer. Literally take some space from the activity and go do something else.
- Focus your attention on something or someone else. Try to see if you can do something fun with someone or maybe you can offer someone some help. After doing so, try to look back at your situation, how do you feel now?
- Fight against your negative thoughts: rebuke them with arguments or call them to a halt by saying: 'This is not a useful thought'

TIPS TO THINK MORE POSITIVELY



1. Realise that reality is malleable: 'the reality' does not exist. There are currently 7 billion 'realities' for each person on Earth, and each person thinks their reality is the only true reality. You can bend your reality however you want. Using positive thinking you can make your reality look more positive. By realising that everything is relative you can experience life on your own terms.

2. Insert into each day a 5 or 10 minute 'nothing'. Doing nothing is actually doing something. It's about making time to just stop and literally do nothing at all. It won't be easy at first. The more you practice, the easier it gets. When 5 minutes seem too long, try to do it for just 1 minute. Sit down and do nothing.

3. Write a compliment to yourself at the start and end of each day.

4. Catch yourself (and each other) on negativity: find a buddy that also want to learn to be more positive. Catch each other in negative statements and try to turn them directly into a positive thing. Let a bell ring once you get into a negative thoughts spiral. Focus on the things that are good about the thing you are talking or thinking negatively about.

5. Find the flip side of the 'negative' events: Prove to yourself that everything is relative by find the silver lining in every 'negative' event. If you assume that 'good and bad' are simply labels that we ourselves attach to particular events, what would happen if you call a 'bad' event 'good'? A few examples:

- Because you failed that exam you will learn the important lesson that you have to work hard to achieve what you want. A lesson that later helps you reach your dreams.
- Your bus broke down. Therefore, you were forced to bike or walk to school, but that way you discovered how enjoyable cycling actually is, so you now have lost a few pounds and you feel a lot fitter.

6. Smile more – be a ray of sunshine in your house: If you yourself can control how you experience life, you can also control how seriously you take everything. Laughing is healthy. How can you laugh more?

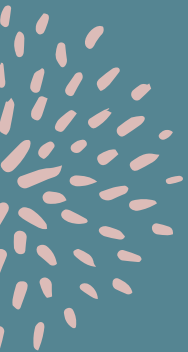
- Play more often. With pets, with your partner, colleagues, your friends and family. Make jokes, play games, have fun.
- Enjoy comedy performances, movies, series and books.
- Study humour around you, learn to appreciate and get more humour in your life.
- Let yourself be tickled.

7. Smile at everyone: Magic, while you read these last paragraphs, have a smile on your face. Normally you laugh if you experience something funny. However, you can also just start laughing. Your brain then receives the idea that there is apparently something funny going on, making your mood improve.

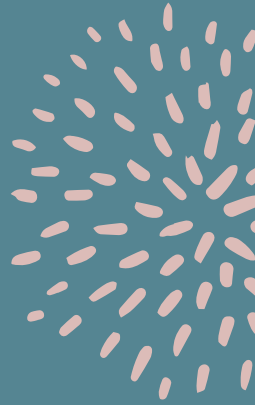
8. You always have a choice. When something 'good' or 'bad' is happening in your life, you always have the choice on how you respond to it. The situation does not change. For example, present a situation to your family, friend and/or colleague and look at how the person looks to the situation.

9. Wake up positive. Get off to a good start! Start with something that you enjoy or that makes you smile. And start the day with the thought that you will make it today.

10. Stop comparing yourself to others. Don't compare yourself to others and don't worry what others think of you. You can't change how others think about you, so don't try to.



TIPS TO THINK MORE POSITIVELY



11. Live in the now. Don't let your mind go to the past or future if it's not necessary. This is often the beginning of negative thoughts.

12. Carpe diem. Enjoy the little things. Surprise yourself. Do something every day for yourself.

13. Use a mantra Choose a mantra that calms you. It could be a word like 'relax', 'peace' or 'loose'. Or a phrase like 'I can now relax', 'all is well' or 'I'm calm', anything is possible, I always have a choice. Repeat this mantra to yourself when you feel tense. Keep something in your pocket that reminds you to use this mantra.

14. Focus on what you want and not on what you don't want. An issue which often occurs is that you focus on what you don't want rather than what you do want. If you focus on the things you don't want, it will be difficult to get the thing you do want in your life.

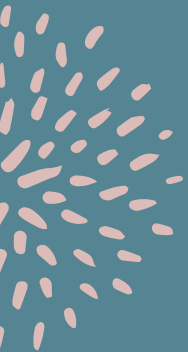
15. Appreciate what you have. This is a very simple but it can really bring more positivity in to your life. Gratitude is a great way to relieve anxiety, sadness and frustration and convert it to more something more positive.

16. Thoughts become things. What you send out, you will attract. This means that when you think negative thoughts, you will attract more negative things to your life. The same applies to positive things in life. You bring more happiness to your life by focusing on the positive.

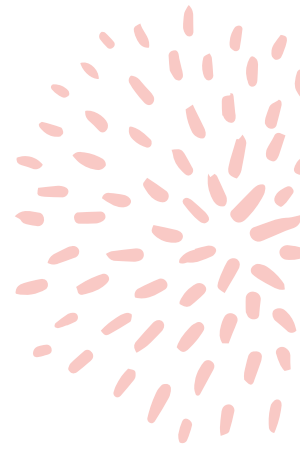
17. Be enthusiastic and share your excitement. Dale Carnegie said: "enthusiasm is the little secret of success". Be enthusiastic and share your excitement because this will give you more positive energy.

18. Read more positive news. Avoid watching the news and reading newspapers. Nowadays there is a lot of negative news represented in the media Actively look for positive news!

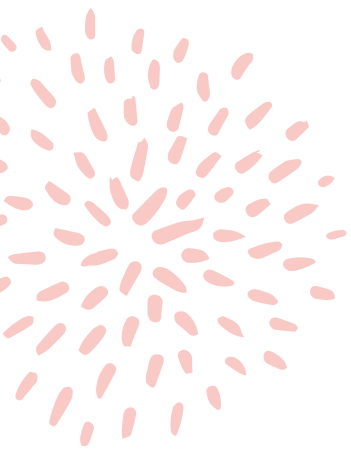
19. Spread positivity. Write cards, tweets, messages on Facebook to your friends and/or family with positive wishes and thoughts. Spreading positivity will help you to feel positive.



IMPROVISATION SKILLS



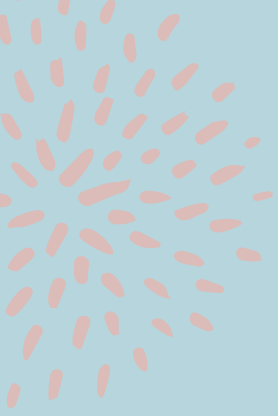
In the teaching profession, sometimes things happen and the existing lesson plan requires to be changed, the ability to adapt and “pull out something there and then “is regarded as the practice of improvisational skill. Students need motivation, to be engaged, they are curious for both knowledge and attention, they are also wanting variation and something exciting, so as a professional, having something or extra materials in your toolbox is very necessary. The emergency resource or material becomes professional, and even better than the planned lesson. Practices of “improvisation” are usually connected to areas and activities like jazz and the performing arts (Barker, 2010; Berliner, 1994; Rudlin, 1994). Taking time to Reflect on the meaning of this concept with regards to how we act, how we talk and relate to others, how we plan and how we carry out what we have planned, would probably be agreed as our day-to-day practice.



HOW TO PRACTICE YOUR IMPROVISATION SKILLS



1. Live in the moment, make the best of the moment.
2. Practice active listening, listen to others.
3. Build relationships, connect in real time with people.
4. Do not be judgmental, say yes to yourself, practice self compassion.
5. Give trust before it is earned. "Don't penalize future communications because of past bad experiences."
6. Give other people a change to shine, take a step back.
7. Value other people contributions.
8. Be creative in your everyday life.
9. Be positive and create a good environment.



CYBERSECURITY

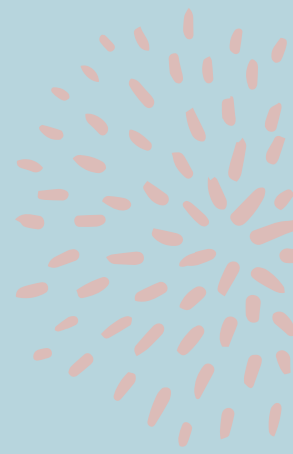
IN THE EDUCATIONAL SECTORS AND INSTITUTIONS, DUE TO LOTS OF DEVICES THAT ARE BEING MANAGED WITH A VARIETY OF DIFFERENT OPERATING SYSTEMS. THIS MAKES THE INSTITUTIONS OF LEARNING VULNERABLE TO CYBER THREATS.

Cybersecurity is a vital subject for everyone, it is important for teachers to have competence about what cybersecurity means, the three types, threats, The students also need to understand how to stay safe online, and to be aware of any potential dangers that might arise.

What is Cybersecurity?

Cybersecurity has been and still is quite important in educational institutions. With the ever-changing evolution of web-technology, access to computers and internet in educational institutions has improved and motivated use of new teaching methods at all levels. As such, it has provided educators the opportunity to conduct more efficient and effective operations in teaching situations. From continuously optimizing teaching, computers and internet technology have become an essential part of teaching, aiding students and teachers alike at home, school and work. Although, institutions should be cautious because the same technology used to efficiently conduct work can ultimately harm the online learning program if misused without proper guidance. Therefore, it is important to educate students and teachers about proper use of computers and cyber safety. While educating them, it should be emphasized that computers should be protected from potential hackers attempting to extract personal and confidential information about students, teachers or staff. The importance of cybersecurity is paramount in educational institutions as information technology is the framework that weaves together both administrative and practical aspects of education management. For that reason, it is critical to secure interim access from unauthorized individuals to hinder security breaches.

CYBERSECURITY



Threat to the institution and students:

Cyber security threats that constantly affect educational institutions include phishing, spam, social engineering, ransomware, malware and denial of service attacks. These threats target educational institutions for profit and financial gain. This also affects ordinary individuals and organizations as well. Based on the previously listed threats, phishing is the most common cyber-attack that affects institutions.

Phishing entails sending fraudulent emails containing webpages and malware downloads intended to collect sensitive personal information about individuals. In order to trick people, these emails appear as authentic notifications or advertisements often offering links to deals or external product information from prominent companies that could perhaps be of interest to the educational institution. By clicking on these links, cybercriminals can easily access banking details and other personal information or infect their hardware by installing nested malware contained within the link. The malware then locks computer functions, giving cyber criminals full access to systems, thus easing the process of obtaining sensitive data.

Ransomware on the other hand is another type of malware that encrypts computer files, blocking external access and requires a ransom to regain access to the computer. Just like normal malware, ransomware is also obtained from phishing emails.

Among the cyberattacks mentioned, spam is perhaps the most prevalent type within widespread media. Often mixed up with phishing, spam is known as the malicious links and downloads attached to phishing emails. It is used as the specific way that enables hackers and cyber-criminals to access devices. With spam, virus, malware and all kinds of malicious data can be attached to harm and lock devices.

CHALLENGES:

THERE ARE NUMEROUS CHALLENGES THAT EDUCATIONAL INSTITUTIONS CAN FACE WHEN TRYING TO FIX DEVICES AFFECTED BY CYBER SECURITY BREACHES. IT IS IMPORTANT TO HANDLE BREACHES PROMPTLY WITH THE APPROPRIATE UNDERSTANDING OF HOW TO SOLVE THEM EFFICIENTLY.

As each institution has their own system, the value of quickly recognizing the pattern of faults and fraudulent behavior manifesting early can benefit many students, teachers and staff. Here are some challenges that can arise when experiencing the following:

Unsecured wireless connections: As free-access wireless connections have been proven to be easily hacked, data theft happens frequently. To prevent this, work towards securing these connections needs to be done to ensure safe connectivity at schools.

Wireless Routers: Taking proper care of wireless routers includes installing firewalls and other protective services to hinder security breaches. Schools and other educational institutions have the responsibility of taking care of their routers, ensuring that they are not vulnerable to cyber-attacks.

Social Media: Since social media; both video and message sharing platforms have become prevalent amongst students and teachers, it is important that proper internet education is provided to teach students about appropriate internet etiquette when accessing shared devices.

Awareness: Awareness of the specific threats experienced online should be taught in schools to ensure that students and teachers understand how to protect themselves. As many people are online 24/7, students are likely to encounter cyber threats more frequently and therefore need to understand how to prevent engagement with spam, malware, ransomware and other threats and how to handle eventual missteps with them. Cybersecurity is an emerging field within education. As new information is gradually developed, it is important for schools to keep their systems up to date with necessary safety equipment and to also update their students, staff and teachers on the latest threats.



FIGURE 3: GRAPHIC OVER EDUCATION SECTOR CYBERSECURITY STATISTICS

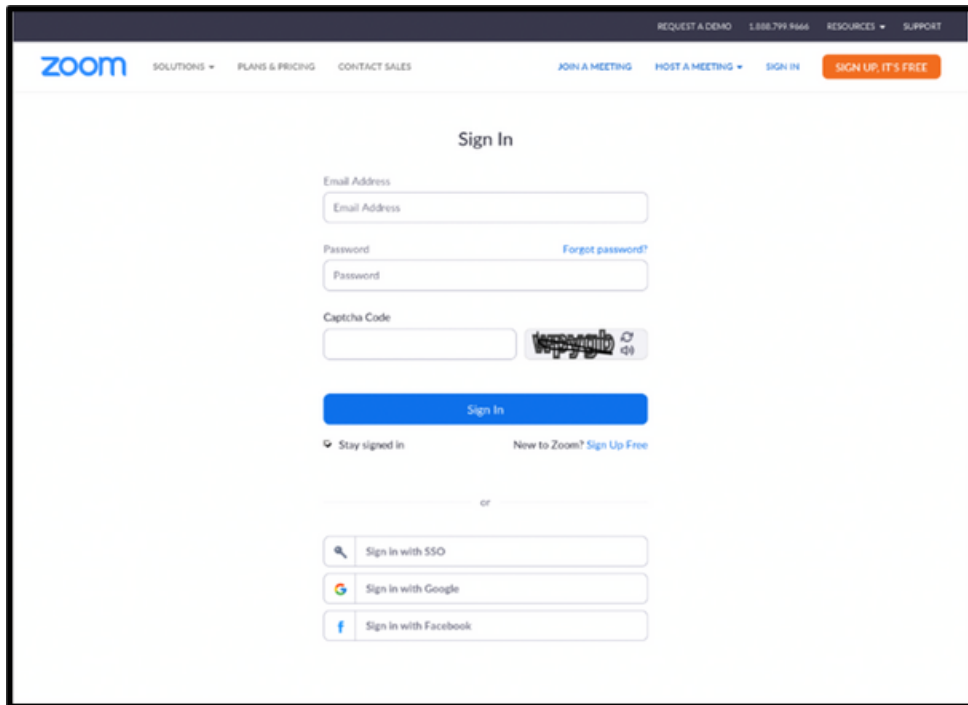


FIGURE : FAKE LOGIN PAGE FOR LMS SITES AND VIDEO CONFERENCE PLATFORMS, ZOOM

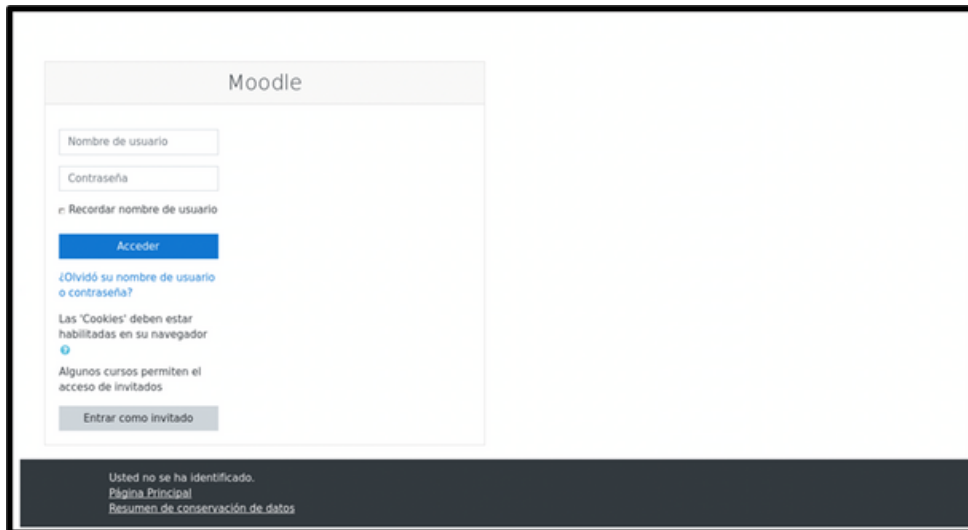


FIGURE 5: FAKE LOGIN PAGES FOR LMS SITES AND VIDEO CONFERENCE PLATFORMS, MOODLE

DISTRIBUTED DENIAL OF SERVICE (DDOS) ATTACKS ALSO AFFECT EDUCATIONAL RESOURCES. BASED ON FINDINGS FROM THE STATES, THE KASPERSKY DDOS INTELLIGENCE SYSTEM REGISTERED THAT DDOS ATTACKS INCREASED DURING 2020 WHEN ONLINE EDUCATION WAS AT A HIGH. LISTED BELOW ARE SOME STATISTICS FROM KASPERSKY.

- Attacks affecting educational resources grew by 550% between January 2019 to January 2020
- Between January to June 2020, the most common platform to experience DDoS threats was Zoom, where 5% of the users experienced hoax files sent to them disguised as Zoom software.
- The most common DDoS threats included malware and adware downloads in various classes.
- In the case of threats prominent in the classroom, it was observed that the highest infection rate per 1000 simultaneous users was 59 infection attempts per 1000 users in Russia and 39 attempts per 1000 users in Germany.



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