D-Upskill.50

E-GUIDE 2:

Orchestrating Teaching & Learning in Digital Environments

D-Upskill.50: Smart toolkit for supporting adult workers and adults educators in the educational digital upskilling pathway

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1. Teaching (classroom technologies)

Introduction

In this sub-area, educators need to organize and apply digital devices and resources in the tutoring procedure, so as to amplify the effectiveness of teaching interventions. They will try to organize correctly and coordinate the virtual teaching interventions as well as assess and create innovative forms and pedagogical strategies for teaching.

Benefits of using digital technologies in the classroom

During and the aftermath of the COVID-19 era students and teachers were forced to utilize digital technologies at a rapid pace to conduct their lessons whether they had experience or not. For some teachers there was no problem in adapting to the new settings, as they had already incorporated digital tools and technologies for their lessons before. However, on the other hand, there were a vast number of teachers and trainers with zero or little experience of these new technologies and their life become more complicated from one day to another. Despite the hardships that may be experienced, we ought not to overlook the multiple advantages that arise from using digital tools for educational purposes.

On the other way around, we should also bear in mind that we cannot think of ourselves without using technological devices (such as laptops, tablets, mobile phones, televisions, etc.) in our life daily. Tech devices are dominant in our modern world and there is huge familiarity. Although the constant use, their integration into educational environments may be a little slow in several cases. Based on experience recent

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research, technology tends to make educational sessions easier and more interesting both for the teacher and students. Now, let's find out some of the crucial benefits by using technological devices and digital tools during the teaching process;

1. **Engagement.** When using technology in the classroom, students tend to be more engaged during the course. The benefits are impressive when there is one device available for each student. Technological novelties assist teachers to present their curriculum in a more fun and engaging manner and educational environment. Thus, teachers tend to make use of digital tools that include interactive software and programs for students to reply digitally to the activities/ questions.

2. **Collaboration.** Technology improves collaboration among students. Apart from creating leaflets, posters, assignments on paper, they now can create them (online) on technological devices and at the same time interact and communicate with their peers for the best solutions. For example, they can draw, write, comment on text/ presentation, etc. together simultaneously.

3. **Productivity.** By using technological products and their tools tasks and activities become easier. In this way, people, and in our case teachers and students, have the opportunity to organize their curriculum, homework, meetings, time slots, extracurricular activities better, for instance when using a calendar, online classrooms, or even word processors.

4. **Creativity.** When surfing on the Internet the possibilities are endless, especially for users who tend to seek opportunities for creative software (arts, music, video, drawing, etc.). They can access anything and anytime they wish for and enhance their skills. For example, tablets offer the chance to catch students' drawings so they can later edit them in many ways.

5. **Automation** is the biggest advantage that technology could ever offer to teachers, i.e., they can upload their material (curriculum, assignments, etc.) on online platforms. This means that students can study in self-paced modes, participate in self- assessments, which makes grading easier, and even parents can access their kid's progress and send messages to teachers.

Ideas for integrating Technology in Classrooms

Not sure how to integrate technology in your classroom? Let's give you some ideas.

1. **Blogs or websites.** Serious steps have been taken in the technology realm the recent years and now users are able to create their own website or blog through easy steps. Not only teachers but also students can create their own website by uploading the material, submitting assignments and homework, organizing their files and agenda, etc. This gives them a feeling of creativity which will surely have better results when attending class.
2. **Online discussions.** Collaborative learning could be enhanced through online discussions through forums or on a separate part of the learning platform. In this manner, students can raise their voice and express their point of view as well as their queries to be replied to.
3. **Social Media.** Social media is an integrated part of our lives, and we are constantly connected, so why not use it for your classroom benefit? There are plenty options you may use social media for educational purposes. For instance, you can create a Facebook page where, e.g., videos, photos, files relevant to the course can be uploaded or discussions could be initiated. Additionally, a twitter page would help to notify students of any last-minute changes in the curriculum/ program.

Objectives

At the end of this module, you will have the ability to:

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- Use classroom technology to support their teaching, e.g., digital whiteboards, mobile devices.
- Shape the lesson plan in order that different (teacher-led and learner-led) virtual activities collectively reinforce the gaining knowledge of the objective.
- Install gaining knowledge sessions, activities, and interactions in a virtual environment.
- Create and manage teaching material, collaboration, and interplay in a virtual environment.
- Consider how educator-led virtual interventions – whether live or in a virtual environment - can guide the studying objective in high quality.
- Think about the effectiveness and appropriateness of the digital pedagogical methods selected and flexibly modify methods and strategies.
- Test and develop new formats and pedagogical techniques for instruction (e.g., flipped classroom)

Instructions

How to use technologies in classroom

If you are a newcomer or have low experience of using technologies in classroom, we provide here some suggestions for better usage, how to become familiar with this method and how to make the most of the technological achievements. For this reason, we introduce you to the SAMR model: Substitution, Augment, Modification, and Redefinition.

The SAMR model of technological integration in education consists of four steps, from the first, where technology replaces traditional teaching methods, to the last, where technology is completely integrated and enables teaching methods that were not possible with conventional teaching methods. This model can be applied to the formulation of a plan to help teachers and school staff move from the non-use or limited use of technology to integration into their teaching processes.

Substitution is the first step and it can easily be applied to the adoption of new technologies, especially for the use of interactive whiteboards: teachers can use smartboards as a direct replacement for traditional chalkboards to display or present information digitally.

The interactive whiteboard can then be used to display (**augment**) multimedia resources, such as videos, podcasts or PowerPoint presentations. Interactive whiteboards can also be used to add annotations to existing materials, making it easy to take notes or highlight specific relevant content, if necessary, during a lesson.

When the third step, **modification**, is reached, students can collaborate through an interactive whiteboard, i.e., for brainstorming sessions or solve mathematical problems with each other and compare their results and methods. Additionally, interactive whiteboards can be used to evaluate students and provide them with direct feedback.

In the final phase of **redefinition**, digital tools can be used to completely remodel the structure and meaning of a lesson. Interactive whiteboards are very easy to use to turn-on-the-spot classes into mixed classes or even completely online courses through collaborative tools such as Microsoft Teams and Google Classroom, so students and teachers can easily communicate and share content. You can also invite guests to participate in the lesson to form their professional opinion on the topic. Interactive whiteboards can also be combined with virtual reality headsets to create learning experiences that are not possible in traditional teaching methods.

Don't know how to use the above-mentioned proposed technologies of the previous section? Below we cite some tutorials with several of the above tools so you may start working on and creating your own curriculum and teaching methods with the assistance of technology.

Check out the following links for further directions:

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Mentimeter: https://www.youtube.com/watch?v=gv1zNPmJsKE

Coggle: https://www.youtube.com/watch?v=1nDVarltLP0

Prezi : https://www.youtube.com/watch?v=NN4Q0SmqBsM

Canva: https://www.youtube.com/watch?v=EWIkcwdsnms&t=3s

Need for more tutorials on digital tools? please visit YouTube and type on the search bar "How to use…" and the name of the tool you are interested in, e.g., *"How to use Microsoft Teams".*

Tips and tricks

For more impressive results, we gathered here some useful tips that might help you to be more productive and efficient when teaching online.

1. Test all technological tools beforehand.
2. Record and share your lectures.
3. Encourage students to turn on their cameras.
4. Take advantage of the online teaching resources.
5. Give sufficient breaks to your class.
6. Use video-conferencing software with possibilities of attendance lists and features.
7. Design interactive elements in the lesson plan.
8. Connect with other teachers online, even locally or globally.
9. Invest in a proper online teaching headset.

Repository (tables)

List of useful platforms, tools and resources that can be used as classroom technologies.

	Name	Link
1	Padlet	Padlet.com
2	Perusall	Perusall.com
3	Mentimeter	Mentimeter.com
4	Blackboard	Blackboard.com
5	ItsLearning	Itslearning.com
6	Turinitin	Turnitin.com
7	Duolingo	Duolingo.com
8	Miroboard	https://miro.com
9	Skype	https://www.skype.com/en/
10	Moodle	
11	Google Classroom	https://classroom.google.com
12	Microsoft Teams	https://www.microsoft.com/en-us/microsoft-teams/group-chat-software
13	Vevox	https://www.vevox.com/

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14	Kahoot	https://kahoot.com
15	Kialo	https://www.kialo-edu.com/
16	Flipgrid	https://info.flip.com/
17	Explain everything	https://explaineverything.com/
18	Educreations	https://www.educreations.com
19	Visme	https://www.visme.co/
20	TED-Ed	https://ed.ted.com
21	ClassDojo	https://www.classdojo.com
22	Flowdock	https://www.flowdock.com/
23	GoToMeeting	https://www.gotomeeting.com/en-no
24	Slack	https://resources.workable.com/tutorial/source-on-slack
25	WebEx	https://www.webex.com/
26	Asana	https://asana.com/
27	Dapulse	https://monday.com/
28	ProofHub	https://www.proofhub.com/
29	Redbooth	https://redbooth.com/
30	Trello	https://trello.com/
31	Wimi	https://www.wimi-teamwork.com/
32	Milanote	https://milanote.com/
33	Igloo	https://www.igloosoftware.com/
34	Google Docs	https://drive.google.com/drive
35	Quip	https://quip.com/
36	Microsoft Onenote	https://www.microsoft.com/en-us/microsoft-365/onenote/digital-note-taking-app
37	Minecraft Education	https://education.minecraft.net/
38	SMART Learning Suite	https://www.smarttech.com/en/smart-learning-suite
39	Go-Lab	https://www.golabz.eu/
40	TalkMath	https://talkmath.org/
41	Hypothesis	https://web.hypothes.is/
42	Wooclap	https://www.wooclap.com/
43	Jitsi Meet	https://meet.jit.si/
44	LearnDash	https://www.learndash.com
45	Coggle	https://coggle.it/
46	Prezi	https://prezi.com/login
47	Nearpod	https://nearpod.com/
48	Canva	https://www.canva.com/

Assessment

Now that you have finished this module, it is time for some self- reflection.

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	YES	NO
I am aware of the available options to integrate digital technology in my classroom.		
I am aware of the available potential digital tools that I can use for my lesson.		
Based on the instructions given, I understood the basic steps of using digital tools.		
Based on the instructions given, I can use the digital tools for my lesson.		
It is clear to me the benefits of using technology for my lessons.		

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2. Guidance (Structure & set-up of the lesson – methods and tools)

Introduction

In this sub-area, educators need to use digital technologies and services to improve and amplify the learner's cooperation and enhance the interaction with learners, either separated or as a team, in and out of class, during the learning procedure. By experiment and utilizing new digital technologies make it possible to support, counsel, and lead the learners on time.

A lesson structure maps out the teaching and learning that will occur in class. A clearly thought out lesson has set steps that need to be achieved, with parts in between to be filled with more knowledge through scaffolding. Engaging with students about expectations, content, and outcomes also helps to boost student confidence in the current subject or topic.

The benefits of effective pacing in the classroom are the following;

1. Maximize class time

Take the time to plan out individual lessons and lesson sequences for the best outcomes. Effective lesson pacing optimizes the time spent on each task and maintains an engaged class through the use of smooth transitions.

2. Maintain engagement

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Planned sequencing of a variety of teaching and learning activities also helps to stimulate and maintain engagement by creating links between lesson and unit learning. It helps minimize disruptions and facilitates a logical order and flow.

3. Achieve outcomes

With a clear structure in mind for the lessons in your classroom, it's more likely that you and your students will meet goals and achieve desired outcomes.

Creating a great online course comes down to starting with a great plan. First, you will need to sit down and map out all your ideas and goals. Then, turn those ideas and goals into a bulletproof outline. The outline accounts for each step along the way to your goal, complete with material formats, lesson structures, and how you will measure your students' success as they progress through the course.

Objectives

At the end of this module, you will have the ability to:

- Communicate with their learners using digital tools to solve their questions directly and easily e.g., about homework assignments.
- Identify the learners' needs by creating online learning activities to guide and assist them.
- Communicate with students in a collaborative digital environment.
- Monitor learners' reactions in the classroom and offer help and support when needed.
- Use digital technologies to monitor student progress remotely and intervene, when necessary, while allowing self-regulation.
- Experiment and discover new ways of guiding and supporting learners using digital technologies.

Instructions

How to structure & set-up of the lesson through digital technologies

The use of technology in classroom (or out of it) is an easy way for students to have access to valid information and educational materials and gives them fun opportunities to practice what they have learned. It is also a very efficient tool for teachers that allows them to better understand the student's needs, create a better curriculum structure and promote inclusion, collaboration and productivity.

More specifically the use of technology can benefit teachers and students also by:

Addressing different learning styles and not only the auditory one (students who learn most effectively through listening), like it was happening in the past. With the use of technology and the tools it provides, teachers can accommodate all of their students' needs.

Prepare both students and teachers for a digital word: the use of technology for learning purposes is not just a tool to make learning easier and more fun. Teachers and students actually can learn how to use, develop and maybe update some of those tools, making them highly competitive in the job market too, in the long term.

The digital tools and methods that you can use are the following:

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Creation of mobile games: online mobile games will not only make the learning procedure more fun and interesting for the students but will also help teachers identify easier the learners' needs and difficulties. The results of the games will provide feedback. In that way teachers will be able to monitor remotely the progress of students and will know in what areas they need to focus on each student.

Use of multimedia database: for groups of students to collaborate by creating and commenting on one another's "notes" to share ideas or information. An example is the use of HPL I. CSILE in classrooms. This method has been proven very successful and has been used by teachers to have access to students "way of thinking" to support them in a more efficient way.

Creation of forums: where students will be able to share their thoughts and questions on the topics provided either by the training material or a forum can be created inside the gaming platform that was mentioned above. Again, it is an easy way for the teachers to better understand students' needs and gather information on individual learner performance and answer all the questions directly at the forum and gather all the questions that need to be developed in more detail in class.

Use of Padlet: to create a blended learning task either in the classroom or outside of it and it can either be used for a team assignment or an individual one.

MOOCs or other online courses: transform the class by making it completely online.

Smartboards and PowerPoints: teachers can engage interactive examples during a big topic, making the lesson more interesting.

Use of Schoology, or Moodle: to manage course content, assignments, and assessments.

Use LibreOffice, Prezi, or Google Docs, Power PointExplore: for student-created multimedia presentations

Use Kidblog: to encourage individual student blogging using.

Start using Voicethread: to have students create digital stories.

Use ToonDoo: to get the students to create cartoons using,

Use Windows Movie Maker or Animoto: to have students create videos.

Use Weebly or Wikispaces: as a tool to build websites with students

Enable students to work through course content at their own pace through the use of **screencasts, e-books, and other digital media.**

Use Poll Everywhere or Socrative: to poll in classroom or in order to vote on when an assignment or task is convenient for most of the students.

Use TodaysMeet: to start live class discussions.

Use Evernote: to explore enhanced digital note taking.

Use the Animoto app: to have students create videos

Use a voice recording app: to record group discussions or have students record themselves reading aloud for fluency checks.

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Use the Puppet Pals app: to assign student-created comics .

Use the Whiteboard: for collaborative tasks.

Try out a tool like Nearpod: to project information onto student devices.

Steps for a successful technological integration:

The first step in successful tech integration is recognizing the change that may need to happen inside of yourself and in your approach to teaching. When any teacher brings technology into the classroom, he or she will no longer be the center of attention. The level of refocused attention will, of course, depend on the amount and the type of technology (e.g., mobile device, e-reader, laptop, interactive whiteboard) being brought into the classroom. However, this does not mean that the teacher is no longer essential to the learning process. While students may be surrounded by technology at home, it is dangerous to assume that they know how to use it for learning. Most students still need a guide to help them use digital tools effectively for learning and collaboration.

The second step as a teacher trying to integrate technology in the classroom is to understand what resources you have available and adjust the class to it.(It is not always possible to create an expensive gaming content).For instance, in a classroom with only an interactive whiteboard and one computer, learning will still remain teacher centered and integration will revolve around teacher needs, which are not necessarily student needs. Still, there are ways to use an interactive whiteboard to make it a tool for your students. Even with one computer in the room, there are ways to integrate that one machine into your classroom and still make sure that you and your students are indeed doing things that you couldn't do before, not just doing the same things you did before in a quicker, more efficient way.

To begin to move technological integration of course you have to take into account several factors: First of all how “technologically literate” is your audience. For example: What skills are applied to nearly all tools (e.g., saving a file, naming a file, finding a file, logging in and out of accounts)? Have your students mastered these basic skills? How many different tools will you introduce this year? How many is too many? Is it necessary to use technology in all parts of the class? Will it be more helpful for the students at that point? Also, what level of integration do you want in your classroom by the end of the school year? What specific steps must you take to achieve that goal? What is a realistic goal based on time and resources?

Starting to use technology in a class can be challenging, especially at the beginning. Here are some quick tips for sharing resources effectively:

Once you have discovered what level of access you have and what possibilities this access affords you, it is time to address your own comfort level with the technology that is in your classroom. This can be achieved through self-assessment and/or the use of a fellow teacher or an instructional coach in your school or district. Once you know your comfort level, then you can begin to build a professional-development plan for yourself. This can be done alone, as part of your "grade team," or as part of your school or district's personal- growth plan. You can also begin to seek out professional-development opportunities online and outside of your district or school to begin to connect with other educators exploring the same challenges and seeking solutions.

Unlike many other aspects of teaching, technology changes constantly. Just as in any industry, it is vital that educators stay current with new trends and developments in both pedagogy and new technologies. If you have a tech-integration specialist at your school, then use this person to your full advantage, as they are the front line for the tools you have or may want to bring into your classroom.

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Technology in education is here to stay so the real question now is not if we will use it or not but what tools we will use and how to use them effectively. Even with limited access, with careful planning, some risk taking, and an open mind, teachers can successfully use technology to enhance their teaching and bring learning to life for their students.

Tips and tricks

- Before releasing the content of an online course, receive feedback on it. For example, check if you are talking too fast in case of video content, if your content is clear and easy to understand from the users, if the platform is easy to use and also take into account if people with disabilities will also find it easy to use.
- Use the tech tool yourself first before putting your students in front of it.
- Hold an introductory session with your students when introducing a new tool.
- Have a plan for collecting student work.
- Communicate with other colleagues that may want to use the resources as well.
- Manage time with the resources wisely. Set goals for work completion with your students.
- Communicate with your administration about how and when you will be using shared technology.

Repository (tables)

List of useful platforms, tools and resources that can be used.

More information on HPL I. CSILE in classrooms:	https://psycnet.apa.org/record/1994-98346-007
Padlet sources	https://padlet.com/
Moodle options	https://www.openlms.net/
Training of learners to ask deep questions in a STEM environment	https://www.idrive.com/

Assessment

Self-Assessment/self-reflection (checklist similar to the statements) based on the content learned with the guide.

	YES	NO
I rarely or almost never communicate with learners by digital means, e.g. email.		
I use digital means of communication e.g. e-mail or chat to help with any questions that learners may have e.g. about homework		
I use a common digital communication channel with my learners to help them with their questions and problems. **I communicate frequently with my learners and pay attention to their problems and questions.**		
I communicate with learners in the collaborative digital environments I use, checking their reactions and providing explicit guidance and assistance as needed.		

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I discover new forms and formats to provide assistance and guidance, using digital technologies.		
When I design my teaching programme in digital environments, I identify the needs of students for guidance and meet them, e.g. with a help or FAQ section, or with instructional videos. When I use digital learning activities in the classroom, I want to make sure that I am able to monitor (digitally) learners' reactions, so that I can offer guidance when needed.		
Experiment and discover new ways of guiding and supporting learners using digital technologies.		

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3. Collaborative learning (Structure and management of the contents, collaboration, and interaction in the digital environments)

Introduction

In this sub-area, educators need to promote the usage of digital technologies to cultivate and augment collaboration. They will aim to empower themselves to utilize digital technologies in everyday tasks, such as assignments that need cooperation. As a result, they will boost communication and collaborative settings of creativity.

The advantages of the collaborative work in a classroom

Collaborative work refers to the common goal that several people have when working or learning together; this group of people tries their utmost to exchange ideas, conceptions, and awareness to fulfil a task or a project.

But which are the concrete advantages for learners when working collaboratively in the classroom?

Some of the benefits are the following:

- Values, such as teamwork, cooperation, appreciation, or promotion of learning, are boosted and developed.
- Learning is encouraged since students can enhance their skills and knowledge through interaction with the rest of the students, accomplishing group learning.

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- Knowledge could be easily exchanged among peers who collaborate with each other by swapping their ideas, theories, and knowledge.
- Communication is enhanced and developed. Through students' continual cooperation and discussion, communication skills could be improved day by day. This refers not only to children but also to adults.
- Listening to criticism and advice is promoted. Learners will try to promote their own thoughts and ideas to the rest of the group and then argue for or against their peers' arguments. In this way, learners receive a full understanding of the topic from all angles.
- Public speaking is developed, too, since individuals learn to speak in front of other people by gaining confidence, for instance, during the final presentation of the task results in the rest of the classroom.

So, having these in mind, consider once again as a teacher of applying collaborative work during your lessons.

Objectives

At the end of this module, you will have:

- The ability to implement collaborative learning tasks using digital devices, resources, or digital information strategies.
- The ability to implement collaborative learning tasks in a digital environment, like blogs, wikis, and learning management systems (LMS).
- To apply digital technologies to transfer collaborative expertise.
- To audit and advise learners during their digital creation in digital surroundings.
- To use digital practices for peer assessment which will also work as a base for collaborative self-regulation and learning among peers.
- To utilize digital technologies to explore fresh formats and methodologies for collaborative learning.

Instructions

How to create a collaborative and interactive digital learning environment

In recent years, pedagogy has tended to turn from teacher-centered learning to student-centered learning methods for more optimized results. But for many teachers in several countries around the globe is a kind of advanced methodology. For this reason, we present some tips and strategies for teachers to engage in these different learning pathways.

1. **Case studies.** Present some past cases in the same field so students can use these as a template and gain experience.
2. **Problem-based learning.** Try to introduce a particular problem for students to wonder about and solve. This situation works better when learners are separated into groups for a specific period and demand an understanding of the problem so they can all together start thinking of alternative ways to solve this and finally come to a common answer which will be the solution to the problem.
3. **Establish clear group goals.** This would keep the group members on track and offer the students explicit guidelines to reach their goal of compromising.

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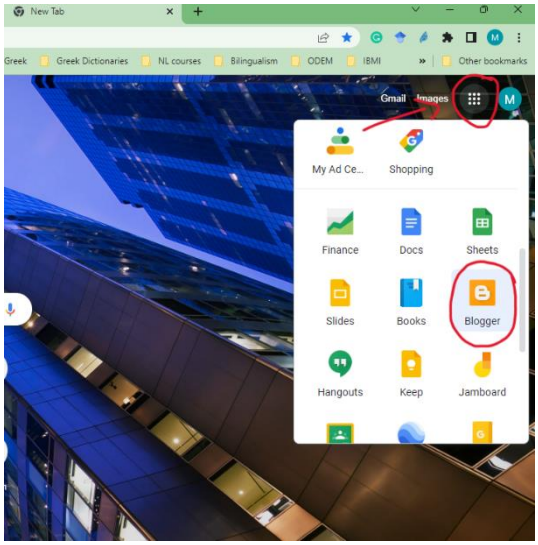
4. **Simulations.** Suggest students take over a specific role while solving the 'problem' and discussing the potential solutions. For example, one could be the moderator of the discussion, and another might write notes, etc.
5. **Peer editing**. Through this approach, students might be able to review each other's work in written form. In this case, both (the editor & writer) benefit from this method since the first should try to read critically and effectively communicate criticism. On the other hand, the writer should learn to consume and apply feedback to their benefit.

In any way, please do not feel disappointed if some groups or students might not be effective or if the collaboration does not work. Collaborative learning and working in collaborative environments take time; it is tough to be acquired and demands students to leave their selfish way of thinking away.

An example of how to use collaborative tools in your lecture.

Google Blogger

1. To begin with Google Blogger, you first need to access it. On the top of the right corner of your Google page you will find a square with 9 dots. If you click on it, you may see many options; select the one named "Blogger".



2. You now need to create your own blog. Do you see the list on the left side of the page? Click on "New Blog" and that's it! Start working on your own blog!

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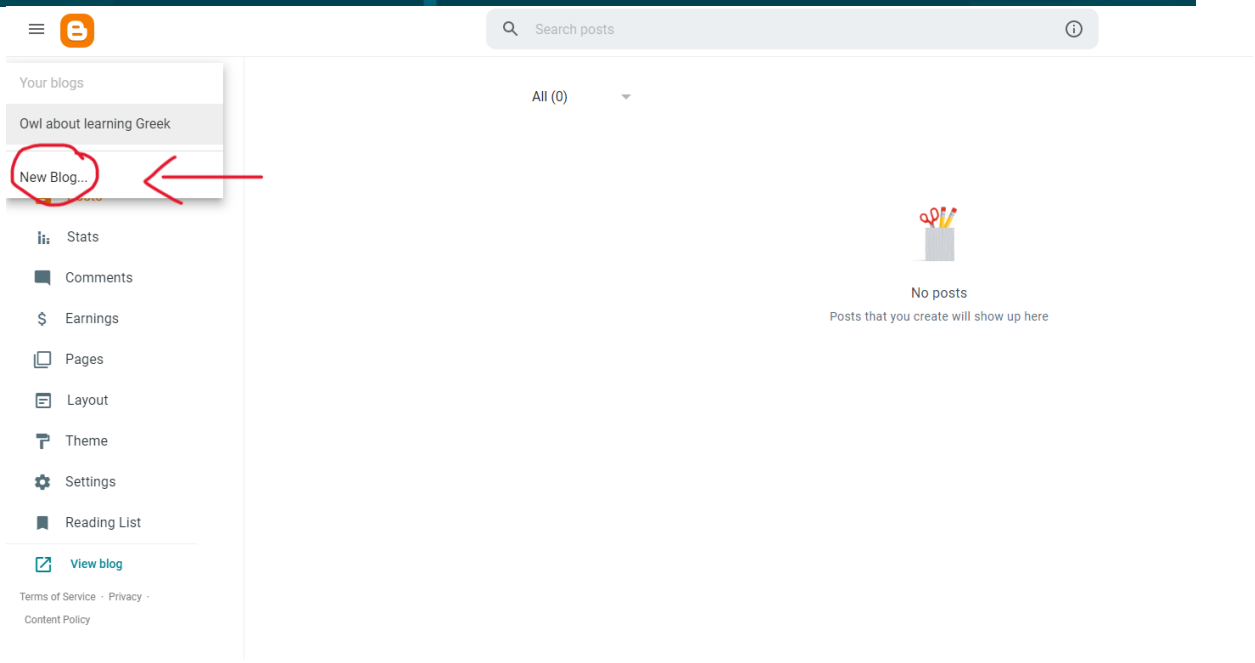

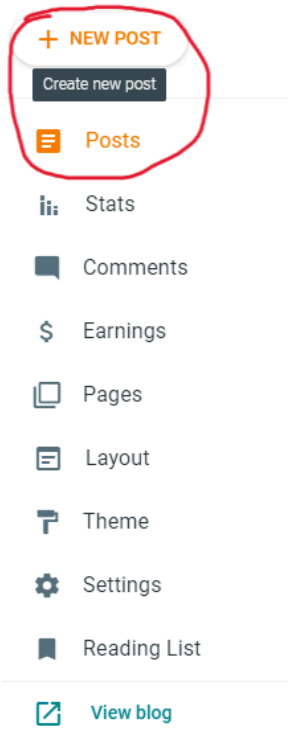

3. Start working on and editing your posts by clicking on “Posts” – “New Post” on the bar on the left side of the page

4. By clicking on the “Layout” option, you can edit the layout of blog, that is to say, the header, the footer, the main body, topics, ads, sidebars, etc.

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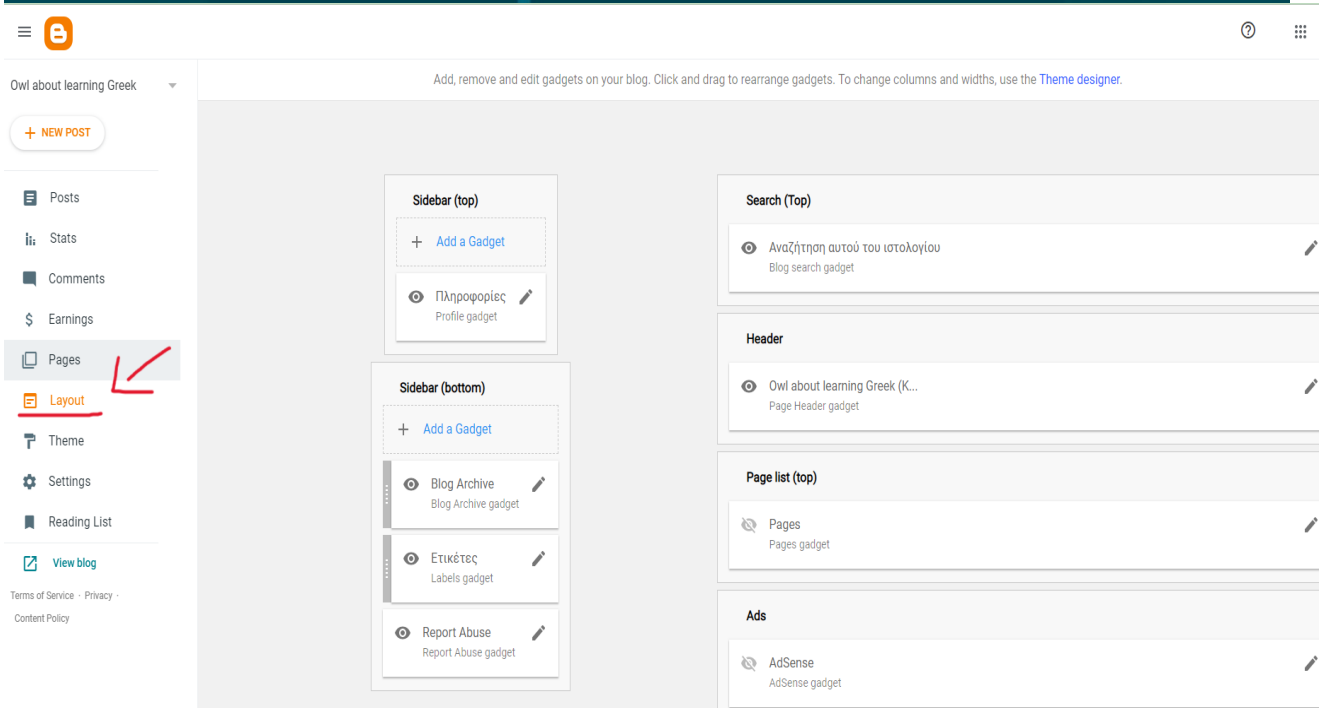
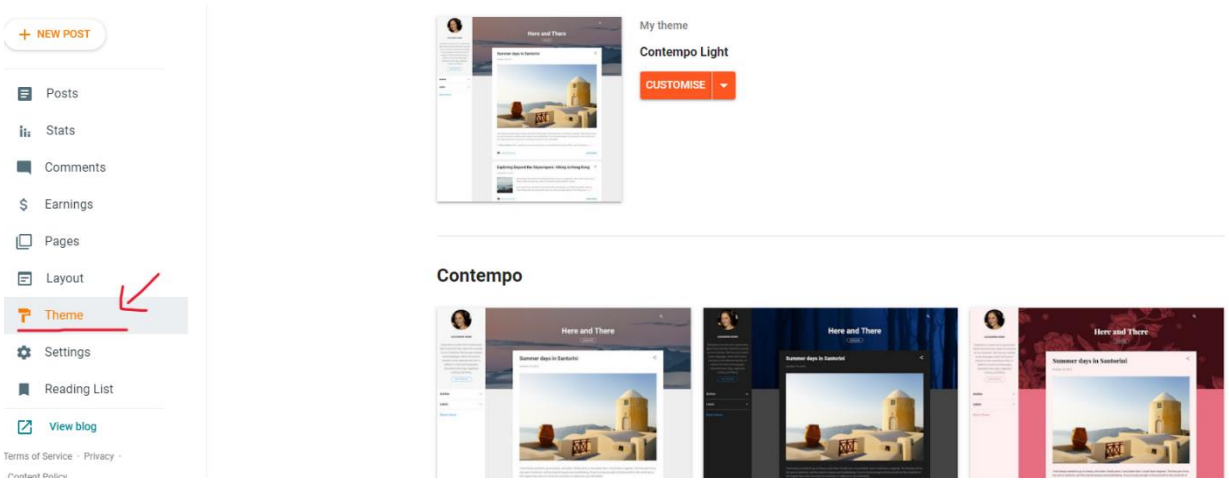


5. On the left sidebar, there is also the option of “Theme”. Click on it to edit the background and colours of your blog.



6. On the “Settings” button you may edit your blog/ profile (language, content, rights, etc.)

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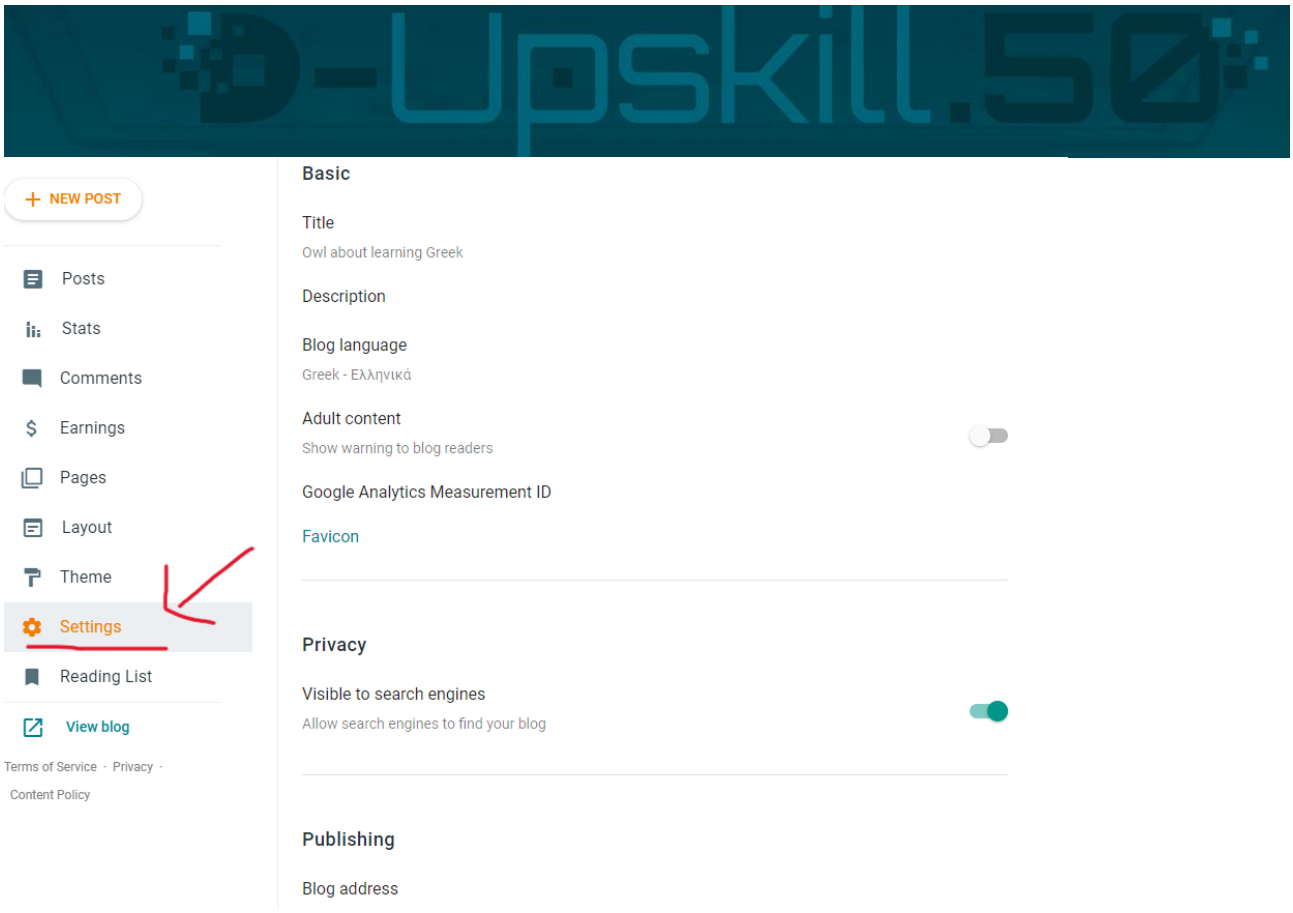
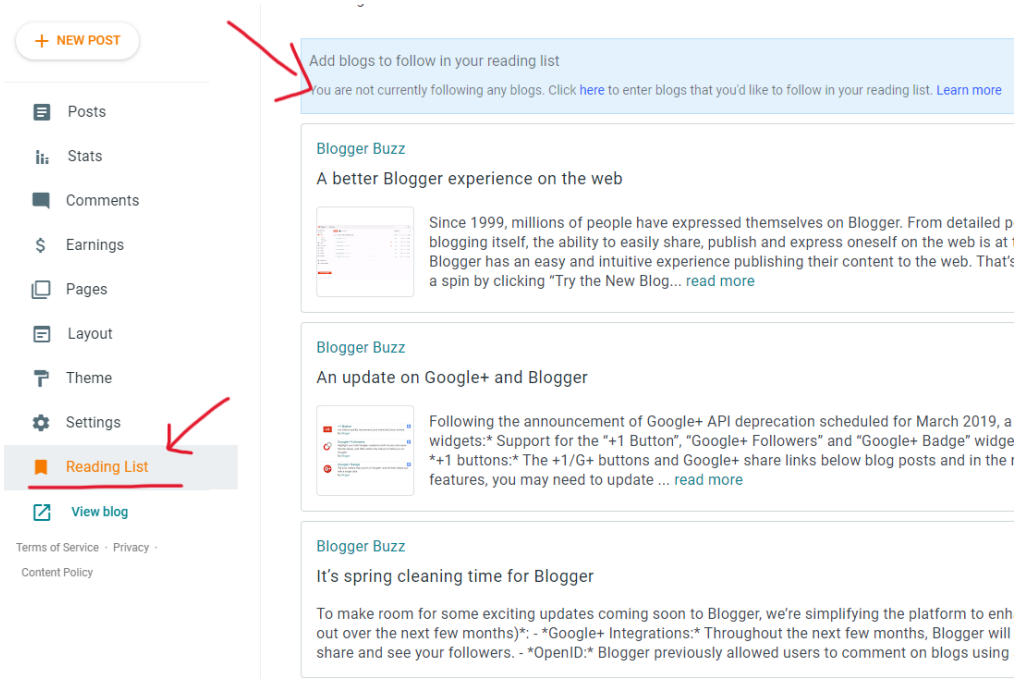


7. Finally, on the "Reading List" option, you have the opportunity to save for later (use or reading) any readings and articles that might interest you and use for own use or even your students.



Demos on tutorials of how to use the tools.

For more tutorials on how to access and use the digital tools, please visit YouTube and type on the search bar "How to use…" and the name of the tool you are interested in, e.g., *"How to use Miroboards"*.

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Repository (tables)

List of useful platforms, tools and resources that can be used for collaborative learning.

	Name	Link
1	Blackboard	Blackboard.com
2	ItsLearning	Itslearning.com
3	Turinitin	Turnitin.com
4	Miroboard	https://miro.com
5	Skype	https://www.skype.com/en/
6	Google Classroom	https://classroom.google.com
7	Microsoft Teams	https://www.microsoft.com/en-us/microsoft-teams/group-chat-software
8	Vevox	https://www.vevox.com/
9	Kahoot	https://kahoot.com
10	Kialo	https://www.kialo-edu.com/
11	Explain everything	https://explaineverything.com/
12	ClassDojo	https://www.classdojo.com
13	GoToMeeting	https://www.gotomeeting.com/en-no
14	Slack	https://resources.workable.com/tutorial/source-on-slack
15	WebEx	https://www.webex.com/
16	Asana	https://asana.com/
17	Dapulse	https://monday.com/
18	ProofHub	https://www.proofhub.com/
19	Redbooth	https://redbooth.com/
20	Trello	https://trello.com/
21	Wimi	https://www.wimi-teamwork.com/
22	Igloo	https://www.igloosoftware.com/
23	Google Docs	https://drive.google.com/drive
24	Quip	https://quip.com/
25	Microsoft Onenote	https://www.microsoft.com/en-us/microsoft-365/onenote/digital-note-taking-app
26	Minecraft Education	https://education.minecraft.net/
27	Go-Lab	https://www.golabz.eu/
28	Wooclap	https://www.wooclap.com/
29	Jitsi Meet	https://meet.jit.si/
30	LearnDash	https://www.learndash.com
31	Coggle	https://coggle.it/
32	Prezi	https://prezi.com/login
33	Canva	https://www.canva.com/
34	Google Blogger	https://www.blogger.com/blog

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Assessment

Now that you have finished this module, it is time for some self- reflection.

	YES	NO
I am aware of the advantages of collaborative learning in class.		
I am aware of the strategies I can use for a more collaborative environment in class.		
Based on the guidelines I have a basic knowledge on how to use the collaborative digital tools.		
I am aware of some digital tools that I can use for collaboration among students.		
I am aware of implementing a course with collaborative digital tools in class.		

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4. Self-regulated learning (Experimentation with new formats and methods)

Introduction

In this sub-area, educators have the opportunity to realize the crucial role that digital technologies play in self-regulated learning. That is to say; they encourage planning, auditing, and mirroring their learning skills, reporting the progress, using their ideas and thoughts in common, and finding productive solutions.

Self-regulation is an active and constructive process in which students regulate and observe their own behaviour, motivations and cognition by setting their own goals during their learning process. Self-regulated learning refers to how students become masters of their own learning processes. Neither a mental ability nor a performance skill, self-regulation is instead the self-directive process through which learners transform their mental abilities into task-related skills in diverse areas of functioning, such as academia, sports, music, and health.

Objectives

- The use of digital automation, like blogs, diaries, planning tools, etc., to create and arrange their learning path.
- The use of digital practices, like audiovisual recordings and photos, to gather information and track their progress.

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- The use of digital technologies, i.e., ePortfolios, and blogs, to keep track of and demonstrate their efforts and work.
- The use of digital technologies to promote self-reflection and self-assessment during the learning process

Instructions

How to explore new formats and methods in line with digital technologies

Self-regulated learning is crucial for high-ability students. This is because it helps them as they strive for excellence. Achieving excellence requires practice. This takes planning, effort, and persistence over time. Self-regulated learning supports this process. It allows students to become autonomous learners who can pursue their own interests.

Five common instructional practices that have been cited as effective in helping students learn self-regulation are:

1. **Guide learners' self-beliefs, goal setting, and expectations**
    - help students frame new information or feedback in a positive rather than a negative manner (e.g., "keeping track of your homework assignments will help you manage this course successfully," rather than "if you don't keep track you will fail")
    - provide specific cues for using self-regulatory strategies
2. **Promote reflective dialogue**
    - teacher modelling of reflective practices (think aloud)
    - student practice with reflective dialogue
    - group discussions to think through problems/cases (collaborative learning)
3. **Provide corrective feedback**
    - performance standards must be clear and perceived as attainable
    - phrase feedback (positive or negative) as a statement about the task of learning, not about the learner
4. **Help learners make connections between abstract concepts**
    - use case-based instructions or examples that students come up with themselves
    - use hands-on learning activities
    - help students learn to separate relevant from irrelevant information (i.e., help them know where and how to focus their attention; guide their reference standards)
5. **Help learners link new experiences to prior learning**
    - use experiential learning activities
    - focus on application of knowledge in broader contexts
    - integrate real-life examples with classroom information

Strategies that teachers may use in their classes to encourage self-regulated learning include:

- modelling self-regulated learning techniques such as:
    - goal setting
    - reflection
    - managing on/off task behaviour where students are aware of when they become distracted or unfocused.

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- providing corrective feedback on learning strategies
- helping students to adapt learning strategies.
- helping students to link new experiences to prior learning through using KWHL charts.
- using self-monitoring tools
- having students reflect on effective learning strategies. For example, using reflective.
    - questions such as:
    - why is this done?
    - how is it done?
    - when should it be done?
    - what are its limitations?
- asking students to compare the effectiveness of learning strategies for a given problem.
- including self-regulation techniques in the lesson scaffold, such as:
    - planning tools
    - goal setting tools
    - checkpoints
    - reflection points
- supporting students to understand their own learning strengths and weaknesses. For example, students may complete a 'grit ' scale and use this to inform self-regulation goals. 'Grit ' is a term used in psychology to describe the amount of persistence a person has when faced with challenges. Students can use the results of a 'grit ' scale to set goals around improving their persistence levels when provided with difficult work.
- ensuring the self-regulated learning techniques taught to high-ability students match their learning needs.

Repository (tables)

List of useful platforms, tools and resources that can be used.

The individual set of self-regulation strategies that are usually used by successful students fall into three categories: **personal, behavioral, and environmental.**

A. **Personal:** These strategies usually involve how a student organizes and interprets information and can include:
    1. **Organizing and transforming information**
        - outlining
        - summarizing
        - rearrangement of materials
        - highlighting
        - flashcards/index cards
        - draw pictures, diagrams, charts
        - webs/mapping

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2. **Goal setting and planning/standard setting**
    - sequencing, timing, completing
    - time management and pacing
3. **Keeping records and monitoring**
    - note-taking
    - lists of errors made
    - record of marks
    - portfolio, keeping all drafts of assignments
4. **Rehearsing and memorizing** (written or verbal; overt or covert)
    - mnemonic devices
    - teaching someone else the material
    - making sample questions
    - using mental imagery
    - using repetition

B. **Behavioral:** These strategies involve actions that the student takes.
1. **Self-evaluating** (checking quality or progress)
    - task analysis (What does the teacher want me to do? What do I want out of it?)
    - self-instructions; enactive feedback
    - attentiveness
2. **Self-consequating**
    - treats to motivate; self-reinforcement
    - arrangement or imagination of punishments; delay of gratification

C. **Environmental:** These strategies involve seeking assistance and structuring of the physical study environment.
1. **Seeking information** (library, Internet)
    - library resources
    - Internet resources
    - reviewing cards
    - rereading records, tests, textbooks
2. **Environmental structuring**
    - selecting or arranging the physical setting
    - isolating/ eliminating or minimizing distractions
    - break up study periods and spread them over time
3. **Seeking social assistance**
    - from peers
    - from teachers or other adults
    - emulate exemplary models

Webconferencing: https://www.3cx.com/pbx/web-conferencing/
Apple teaching apps: https://www.apple.com/education/k12/teaching-tools/
Moodle: https://moodle.org/
Blackboard:
https://play.google.com/store/apps/details?id=com.blackboard.android.bbstudent&hl=el&gl=US&pli=1
EPlan: https://www.eplan.gr/ypiresies/downloads/

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Assessment

Self-Assessment/self-reflection (checklist similar to the statements) based on the content learned with the guide.

	YES	NO
I never or seldom consider how to use digital technologies for self-regulated tasks or projects		
I make use of digital technologies as a basis for my learning activities and projects, i.e., seeking information or for presentation reasons		
I gather proof and keep track of my progress through digital technologies. i.e., audiovisual recordings, photos, excerpts, etc. I keep track of and demonstrate my efforts and work through digital technologies. I utilize digital automation for self-assessment.		
I utilize digital automation and surroundings to control and keep track of all the learning phases (i.e., organizing, mirroring and self-judgment, evidence, and information tracking). Through digital technologies, I can enhance, adjust, and employ suitable criteria for self-assessment.		
I mirror the suitability and usefulness of my digital practices to cultivate self-paced learning and advance my methods.		
I employ contemporary digital layouts and/ or pedagogical methodologies to promote self-driven learning skills.		

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