



onTrain

Online Training, the treasure within

## D. Tools and platforms

### 1. Collaborative Learning Platforms

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## Let's start



Today's society has changed to become digital. The proliferation of communication technology, side by side with the Internet, computers and mobile phones, has made us more connected, to the point that all this technology is present in our daily lives, and is more connected, to the point that all this technology is present in our daily lives, and is now a requirement in the workplace. In 2005, 14 years ago, researchers such as Castells stated that "*the network society is not the emerging social structure of the -information Age: it already configures the nucleus of our societies*". This not only remains true, but is soon to become more prominent, as technology infiltrates in all fields of our lives, with AI, SmartCities, Digital Transformation, and so on.

In line with these changes, the industry has changed its requirements, to encompass a worker's profile that masters technology suited to each field of specialty. Hence, having e-skills is now a requirement to future employers and key to improving the careers of those already employed.

### What am I learning here and why?

It is of the utmost importance to let our reader know how collaborative online tools and learning platforms contribute to improving learning processes and knowledge acquisition, and what are the best strategies to use them for successful lifelong learning.

### What content will I find here?

The content of this chapter will help you understand better what are Web 2.0 and 3.0 collaborative tools and how to use them properly in your teaching practices. It will also explain what Learning Platforms are.

## What Web 2.0 and 3.0 Collaborative Tools are?



As digital technology is changing our society, and the ways we interact with each other, it has also been changing the way out young digital native students, learn.

Recent students have concluded that the high connectivity that our students are used to in their social lives, which they have acquired through digital tools, is having repercussions on their learning skills. Some are positive but others are negative.

Socially, students use the Internet to connect with their peers, family, friends and teachers. They use it to read news, listen to music, watch movies, and also to gather information available online to help them study and learn more about their areas of interest. These tools, and diverse types of media, are used simultaneously, making their profile proactive and aggregated rendering traditional methods of teaching boring and outdated in their eyes.

As such educational institutions are changing their teaching methods to better suit the learning style of students. Collaborative learning is learning that happens with students working together to reach a common goal (Dillenbourg 1999; Dooly 2008). However, collaboration requires a lot more than cooperation. It can happen with students learning with each other, teachers learning from students. In collaborative learning, the students are responsible for each other's learning as well as for their own, helping each other to learn and exchanging knowledge. Whilst collaborative learning happens in traditional location-bound learning environments, online collaborative learning is taking it to a new level, making it possible for students to be online, in different parts of the globe, working in real time, on the same document, at the same time.

The actual difference between traditional collaborative learning and online collaborative learning is that this new digital one is centered on the student, making it possible to consider it as a social construct, facilitated by interaction, evaluation and cooperation among peers (Lee & Bonk, 2014). Collaborative teaching enhances critical skills and active critical thinking as well as promoting problem resolution skills and satisfaction among students (Gupta & Bostrom, 2004).

Most studies about online collaborative learning note that technology has contributed to the rise of collaborative work and learning, because it allows knowledge to be constructed through technology, online platforms and tools. Knowledge construction is based on a language's social processes, making it discursive, relational and conversational by nature, and that is why Web 2.0 tools can and do contribute so well to this type of learning (Sigala 2007). According to Sigala, Web 2.0 tools can promote collaborative learning because they encourage knowledge construction processes, by allowing students to access knowledge through them, transform it, and share it. These tools are also a suitable place for teachers to understand how students learn and their processes of knowledge construction. Hence allowing improvement and adaptation strategies based on Web 2.0, to enable students to Access, revisit, transform, create, share and get feedback, making the learning experience much more prosperous.

Tools that can be used to create a safe space for students to learn collaboratively online are diverse. One aspect needed to be taken into consideration is what is the primary goal of each tool or platform. i.e., if a tool was created to promote an online community, then this will probably be a suitable tool to create a closed group, for students to talk, exchange ideas and links, but that is all. We can, of course, use several tools, each one to develop a specific aspect or skill. This is why VLE (Virtual Learning Environments), PLE (Personal Learning Environments) and LMS (Learning Management Systems) have gained popularity in so many educational institutions.

## What are Learning Platforms?

Learning Platforms, Learning Environments and Learning Systems have become popular in all learning institutions. Depending on the learning that occurs, they might be mandatory to use, or optional. For example: In e-learning institutions, they are crucial, because online

education is utilized, however traditional learning institutions, they might not be mandatory to use, but they can be used to improve the way students access all documents, information and even tests that the teacher has prepared for them.

But first, let us discuss what these platforms, their characteristics, their limitations and strengths are. VLEs or Virtual Learning Environments are formal and closed, confined to a class, a course or a specific subject. Currently the most popular is Moodle. According to their online description, Moodle's goal is to give educators the best tools to manage and promote learning, however, it first needs installing on a web server. It enables teachers to create and manage a space for students to interact synchronously or asynchronously. Teachers can access content students provide and, create protected environments that allow access and management of user profiles. They can manage access to available content in a variety of formats while having several tools for communication, to control, accompany and manage and access activities made by the students. It is easy to see that this platform has the teacher as a central agent. Even though VLEs facilitate the students' access to information, the teacher must make it available first. Students often use such platforms to get documents made available by the teachers, to complete tests set by teachers, or to attach work documents, but they do not favour these platforms for interaction or communication. They already use far better and much more familiar ones, such as social networking tools. This is perfectly natural, as these tools were designed specifically for communication.

VLEs are most of the time complemented with online social networks and communication tools, as they are more attractive visually, and already familiar to all students, possibly even a natural environment to them, fostering communication, engagement and facilitating critical thinking.

Hence a lot of the web 2.0 tools can be used to improve learning, some will facilitate live conferencing, others are prepared for video sharing, social networking, collaborative work, content creation, bookmarking, RSS feeds, messaging and pinboards, digital portfolios, etc..The fact is that web 2.0 tools will allow anyone to create their own Personal Learning Environment (PLE), by all tools that will improve and facilitate their learning process. Another positive aspect is that PLEs are centred on the learner, to specifically support their type of learning, and also enhancing proactiveness and self-organization.

## What are Collaborative Learning Platforms?

Learning in this digital age, with all these tools and platforms requires digital skill. Young students will gain skills intuitively, but this might pose a problem for adults as these skills must be mastered before they can use them unrestricted in their learning process. According to McCormack (2010) the demand for digital skills or e-skills has been growing fast, because they are "crucial to boost competitiveness, productivity and innovation, as well as the professionalism and employability of the workforce". The same author defends that education is yet to cope with this demand, even if the latest data suggest there is a correlation of 85% between e-skills and competitiveness.

Collaborative Learning Platforms (CLP) emerged with Web 2.0, and are now an essential part of our work tools. There are several types of CLP:

- 1- Formal CLP, such as the ones provided by LMSs, such as [Moodle](#), or [Blackboard](#), [Spiral](#), [Actively Learn](#), [Peergrade](#), [TrainingOrchestra](#), [Udemy](#), [WizIQ](#), [Canvas LMS](#), [Create LMS](#), [Litmos](#), [Totara Learn](#), [Nearpod](#),
- 2- Social CLP, like [eXo](#), [Atiral](#), [NowComment](#), [MURAL](#), [Skillshare](#) [CueThink](#), [Google Hangouts](#), [YO Teach!](#), [Tricider](#), [Edmodo](#),
- 3- Synchronous document creation, as [Google Drive](#), [Drawp for School](#), [ePals](#)
- 4- Design CLP, 3D design hub promotes innovation, collaboration, and creation, like [Makers Empire](#), [Minecraft: Education Edition](#),
- 5- Video or image based CLP, such as [Skype](#), [Colibri](#), [VoiceThread](#), [Siftr](#)
- 6- Presentations CLP, just like [Prezi](#), [Popplet](#), [Explain Everything](#), [MightyMeeting](#), [Pear Deck](#)
- 7- Gamified CLP, such as [GooseChase EDU](#), [Classcraft](#), [Adobe Captivate Prime](#), [h5p](#)
- 8- Project management CLP, like [Asana](#), [Microsoft Teams](#), [Absorb LMS](#)
- 9- Bookmarking, just like [Diigo](#),
- 10- Board like CLP, such as [Padlet](#),
- 11- Math specific CLP, as [Scratchwork](#),
- 12- Storytelling CLP, like [Story Wars](#),
- 13- Document analysis CLP, such as [Genius](#),
- 14- Quizz based CLP, like [Piazza](#), [Kahoot](#), [Socrative](#),
- 15- AI based CLP, such as [docebo](#),

CLP are “*about enabling the next level collaboration central to modern teaching and learning. The right platform brings together people, learning content and insights. This can make the difference between success and failure for teachers and students*” ( Dall, Dickinson, Payne, & Tierney, 2018). They proceed by stating that collaboration is a crucial skill and that collaborative students are more likely to improve skills in other areas like mathematics. Hence a good CLP will enable cooperation in and out of class; will help students build on each other’s ideas, contribute to creating modern, collaborative classrooms, that empower students to work together, save time and eliminate handouts.

CLPs are excellent ways to develop critical skills such as collaboration is, because this skill is viewed as one of the most relevant sought after by companies in today’s digital economy. In fact, these tools are used in companies to promote and provide access to continuous learning and improvement, as they try to keep up with technology’s rapid, constant growth. Some educational institutions have realised this and have come up with online e-learning CLPs, so that company workers can seek further training or even develop new skills, through them, without ever setting foot out of the office.

Companies use CLPs so that their workforce can not only learn new skills but also improve effectiveness. CLPs offer a place to discuss new ideas, synchronously write a document, control and monitor project work hours and tasks, and a place to socialise. All of this from anywhere in the world. The possibilities to work collaboratively anywhere and anytime will increase as the workers master these tools.

Of course, there are negative aspects, such as loss of personal time and isolation, and this can only be controlled by each individual's good sense, and respect for personal space.

Let's take a quick look at a few of the CLPs:

- Think Binder: <https://www.crunchbase.com/organization/thinkbinder/technology>

Think Binder is a great way of organizing a study group online. It has text chat and video chat capabilities, it allows people to interact as they would in a traditional study group, but without them having to be at the same physical location. There is cloud storage space and bookmarking facilities for resources which are relevant to the group, and an interactive whiteboard section for those who want to put their ideas down in a visually appealing way.

- Vuolearning: <https://www.vuolearning.com/en>

Vuolearning helps produce training sessions / courses without space or travel costs. Online training sessions / courses can be used anywhere regardless of time and place. Real time analytics allow you to follow up on course performance and ensure knowledge.

You can import your existing materials - You can import PowerPoint or PDF files and enrich them with multimedia or tasks. The content is versatile - you can use the editor to edit existing content and to add new content. You can also add rich content like videos or assignments.

- Drawp for School: <https://app.drawpforschool.com>

Pros: Cloud storage and integration with Google Classroom allow teachers and students to work together anywhere, at any time.

Cons: May take some time to learn the functionality, similar products are available free of charge, and searching the collection of lessons can be confusing.

Bottom Line: This handy tool encourages collaboration and creative expression, and it makes sharing assignments and giving feedback a snap for teachers.

Minecraft: Education Edition: <https://education.minecraft.net>

A set of tutorials and game features brings subjects to life in Minecraft: Education Edition and supports educators in classroom management and formative assessment.

Pros: Highly engaging, adaptable to any subject area; great improvements to teacher controls.

Cons: Some students will be used to the freedom of the original Minecraft game and may balk at the more traditional, guided structure.

Bottom Line: An excellent tool to engage students in learning, collaboration, and critical thinking is now more accessible than ever to teachers.

- Parlay: <https://www.commonsense.org/education/website/parlay>

A comprehensive discussion platform.

Pros: Student activities (read-respond-share-discuss) pave the way for productive class discussions that deepen student understanding.

Cons: The "live" discussion functionality requires students to do a lot on devices while having a discussion.

Bottom Line: A great tool in any subject or topic for teachers looking to make discussion a central part of their classroom.

## Exercises



To help you understand how collaborative learning platforms work and how they can be used in your classroom, we propose a set of activities and exercises that can be implemented.

Most educational institutions have already set up their own collaborative learning platforms. Most have chosen Moodle, because it is free and always evolving, others have chosen Blackboard, but there are quite a few other new CLPs ready to be tested, developed and used. These exercises can be implemented in any such tool.

### Exercise 1:



Most CLPs are used as a simple material repository. Teachers leave the content for students to access and students access it. In this exercise, we dare you to import your content differently. To make the content presentation more visually appealing, try to see if your CLP allows you to insert your content manually. You might use copy/paste to place the text already created on your pdfs and PowerPoints, but the way you carefully present your contents online shows that you care about the adult learners, and that is motivating.

Add images and examples of the content you're trying to explain, so it becomes more visual and clearer for the student to see what you mean.

Add videos of your talking about a specific subject, of tutorials about how to do something that you are requiring.

In summary, take care of the content and how you present it. If you care about it, your students will too.

### Exercise 2:



Create a set of activities related to your content. Most CLPs allow you to import or create tests, games, and pools. These activities will help students feel engaged. Creating several different activities on the same subject will help to identify if



students have understood what they are learning and indicate if they are on the right track, if they need to study harder, or ask for help.

On most CLPs to create this content it might be necessary to create hyperlinks at the end of a text that sends the student to a specific activity or test. More advanced options would be to insert open code that will allow you to embed the activity in the activity.

Make sure that the feedback for these activities is immediate, and that there is a possibility to redo the activities if need be. These activities at this stage are supposed to be formative and not for evaluation.

### Exercise 3:



The final and most critical exercise to turn a general Learning Management Platform into a Collaborative Learning Platform is to create a set of activities that will give your students the feeling that they belong to a community and the possibility of creating knowledge together. To do so:

1. Create a group chat and ask students to present themselves there. If you think it necessary, let them know if you would like them to refer to anything specific on their presentation.
2. At the end of a chapter about a subject, create a challenge! Open a forum, and ask them to comment (supporting their opinion) about a specific important aspect of that chapter. Tell them that they can comment on each other's comments and that they can give an upvote on the statement they like the best (it has to be a colleagues' comment, not their own), and ask them to explain why. You can do this activity at the end of each chapter, as it will help you find out if your students have understood the chapter and will also increase their feeling of community.
3. Create a group activity! Based on their comments in the forums, create groups of three students, and ask them to write a document on specific topics related to the content being taught. Let them know that they can talk using outsource tools, such as Skype or Facetime.
4. Create a Forum for them to deliver the document. Ask them to make a short summary of it. Ask them to comment on each other's assignments and to, again, choose their favourite and explain why.

### Exercise 4:



Assess your students. Give them proper feedback if any question comes up. You can set up a questions' forum, so they can send you their concerns and questions. Monitor and accompany the students along the course.

Check to see if the students access regularly. If they do not, send them a message, asking them if everything is OK, or if they need your assistance.

## Summary



In this chapter, you have learnt what collaborative learning platforms are, and how they can be created and maintained.

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