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COLLABORATIVE LEARNING USING ONLINE TOOLS

*Alina MARDARI, lector universitar, doctorand,
UPS “Ion Creanga” din Chișinău, RM*

Rezumat. *Capacitatea de a lucra în colaborare este foarte apreciată la locul de muncă de astăzi. Cu toate acestea, colaborarea nu se întâmplă adesea în mod natural într-un grup. Anumite strategii trebuie aplicate pentru a coordona eforturile individuale și a monitoriza procesul de învățare, astfel încât să poată avea loc o colaborare eficientă. Învățarea colaborativă bazată pe tehnologie capătă o relevanță crescândă în învățământul superior. În ciuda numărului considerabil de instrumente și aplicații online care sprijină învățarea colaborativă, adoptarea lor la cursurile de clasă este încă în stadiile incipiente. Această lucrare se concentrează pe Padlet, Sway, Jamboard și prezintă unele dintre utilizările acestor aplicații web care susțin învățarea colaborativă în predarea la clasă.*

Cuvinte cheie: *Învățare colaborativă, platforme online, Padlet, Sway, Jamboard, lucru în echipă.*

In the current knowledge society, work is becoming more knowledge-based, interdisciplinary and complicated. Due today's global economy, collaboration has become an essential skill necessary for effective functioning in society. Consequently, in recent years, education has been undergoing a shift from teacher-centered and instruction-based curriculum implementation to student-centered and inquiry-based learning [5, p.751]. Students are routinely required to engage in collaborative learning activities such as group projects, presentations, group discussion, and peer evaluation that require significant collaboration and communication with classmates. Collaborative learning is not a buzzword any more but becomes a necessity. It is hardly possible for an individual to complete sophisticated tasks without the support of others. The ability to work collaboratively is hence highly valued in today's workplace [2, p. 426].

The Concept of Collaborative Learning and Collaborative Tools

Collaborative learning has always been an important strategy to use in classroom teaching [7]. It refers to tasks that require joint intellectual efforts among students or between students and teachers. In most instances, this involves students working in groups to co-construct an artifact (e.g., report or presentation) for assessment [18, p.19]. More specifically, it also involves social interactions as small groups of students solve an academic problem together [1, p.163]. The students are responsible for one another's learning as well as their own [10, p. 295]. Thus, the success of one student helps other students to be successful. According to Alavi, collaborative learning is an activity which involves the group of students collaborating to accomplish the problem-solving task given as learning activities requirement. The collaboration, as mentioned by Patel, Pettit, and Wilson [16, p. 19], involves two or more participants to interact each other, at the particular period, working together to achieve the same goal. As a learning strategy, it emphasizes social and intellectual interaction in the learning process such that the differences in

knowledge, skills, and attitudes among collaborators become strengths rather than weaknesses. Knowledge is shared and acquired during communication, negotiation, and production of materials [9, p.443]. Through collaborative learning, learners have the opportunity to equip themselves with stronger analytical skills for interpreting information and acquiring further knowledge [15, p.514]. In return, they contribute by co-constructing and sharing knowledge within their learning community [17, p.103].

The activities in collaborative learning do not only work together but also require teamwork with defined roles to reach group success [6, p.59]. Lizzio and Wilson [14, p.699] indicate the factors which contribute the effectiveness of collaboration; those are team-building activities, the frequency of meetings, and the value that individuals place on the process of learning, or goal orientation. Besides that, collaborative activities have the potential to boost more reticent language learners' confidence to participate in classroom activities [9, p. 288] and to help them maintain their self-esteem, overcome their shyness and lack of self-confidence, and learn interpersonal relationships. These all lead to developing students' ability in the process to be autonomous learners [11, 114]. Collaboration activities in the group can be done without physical meetings of its member by using collaborative tools. Collaborative tools are usually web-based, it can be accessed by the user easily. Web-based tools can support group collaboration activities with no requirement to pay at the high price, it just needs to use internet access, and there is no requirement to have other additional hardware [21, p.39]. Becker and Cline gives some tools considered as collaborative ones such as e-mail, audio conferencing, collaborative presentation software, conference room video-conferencing, desktop video conferencing, discussion database, document management software, electronic white boarding, group authoring, group scheduling and calendaring, knowledge management systems, personal communication tools like laptop, mobile phone, pagers, and so on [3, p.1400].

Although much research literature in computer supported collaborative learning (CSCL) reports mixed or negative findings [12, p.239], numerous positive results have been demonstrated in research studies. For instance, group work has shown to be able to promote student critical thinking skills, problem solving skills, social skills and self-esteem [8]. It often leads to better learning outcomes than individual work. However, the positive benefits do not automatically happen in a collaborative learning environment. They call for sound instructional design.

Many challenges exist in the instructional design process of collaborative learning. One is how to effectively coordinate group members' individual efforts and build on their strengths so that they all work towards the same direction [2, p.429]. Another is how to closely monitor the learning process and fairly assess students' individual contributions. Teachers cannot arbitrarily assume that each member makes an equal contribution to the group work and hence give the same marks to all members. Such challenges must be deliberately addressed so that effective collaboration can take place. It seems that technologies have great potential in addressing these issues.

With the rapid development of ICT (information and communication technologies) technologies play an increasingly important role in collaboration. People are using various technological devices such as computers and mobile phones to communicate and interact with others, especially in the pandemic period the whole planet has found itself in. Undoubtedly the

use of technologies has made communication and collaboration more convenient and affordable than before. Nevertheless, technologies are not a necessary condition or a panacea for effective collaboration. It is not the mere presence or complexity of technologies that improves learning experiences, but the quality of match between technologies and the learning task [13, p.152].

One way of using technologies for social collaborative learning is a group of people use an online workspace to share ideas or resources. They may not necessarily work on the same document at the same time, but they can upload/download files, share information, and negotiate ideas in the workspace. Through communication and collaboration, they learn from one another and construct meaningful knowledge. Examples of such workspaces include discussion forums, Google Groups, and other social networking tools like Facebook.

The use of technologies in collaborative learning has the potential to benefit students and teachers. Students can use ICT as a communication tool, a productivity tool, a repository, or a documentation tool [13, p.153] Teachers can use ICT to monitor and track the collaborative learning process, so that they can fairly assess students' individual contributions and identify problems promptly [4, p.93].

Among the wide range of online tools that contribute to collaborative learning and proved their efficiency during my teaching practice online in the pandemic period and not only are: Sway, Padlet and Jamboard.

Since internet facility is required for using Sway, lots of information can also be accessed in real time, and sharing that information through technology is both instantaneous and convenient. Sway has the following collaborative features:

Easy to use: whatever you want to make, it is easy to create and edit Sways with other people. Simply share an edit link with any group of students you would like to work with. When they click the link and log in, your Sway will show up on their “My Sways” page, too (with an icon indicating it's a shared Sway to help you all stay organized). They can edit the Sway just as you can—and at the same exact time as well. As always with Sway, your work is saved automatically as you go along.

Invite others to edit a Sway you have created: in the top right, tap or click **Share** and select the new **add an author** icon to generate an edit link. Then copy the URL and share it via email, social media, or however else you wish—with however many students/groups/people you want to work with.

Keep track of who is editing and who has access: It is easy to check who has editing permissions to one of your Sways, as well as which Sways you can edit which have been shared with you by others. On your My Sways page, tap or click the shared **Sway** icon for any Sway to see who has access to edit it. You can also now tap or click the **My Sways** drop-down next to filter your view of your My Sways page to show just your own Sways, Sways that have been shared with you, or both combined. If you are editing a Sway at the same time as other people, you can also see a count of how many people are working on the Sway at the same time as you, and who they are. Also, you can see where in the Sway other people are editing so you can avoid stepping on each other's edits. One will see their initials show up next to whatever Card they are currently editing. If you do try to edit the exact same location that someone else is modifying, the last one to make an edit wins.

Revoke editing permissions and remove other authors: As the original owner of a Sway, it is easy for you to remove other editors and revoke all edit and view links to your Sway. Simply tap or click **Share** in the top right, select **Need to revoke access?** and then select **Revoke All Shared Links**. If you want to share editing or viewing links again, or with a new set of people, simply repeat the sharing process described earlier.

Make a copy of a Sway: Now one can make a copy of your Sway to preserve that original so you don't have to worry. Making a copy is also the easiest way to make your second and third Sways once you have one you like! It's also a great way to have a template Sway for future Sways you might want to create. For example, a teacher can now create a template report for his or her students to use as a basis for their work. When duplicating the template, Sway adds a personal copy to their account, without affecting the original.

To copy a Sway you are editing or viewing, tap or click the ... in the top right and select **Duplicate this Sway**. Also, on your My Sways page, simply tap or click the ... for a desired Sway and then click or tap the middle icon, which looks like a stack of documents.

A couple fun things to try now that you can create and edit Sways with others:

- **Live Swaying in class**—Project a Sway in a classroom, and watch how a group of students can contribute their ideas to it together at the same time. Now students can add their work directly to a class Sway that can be shared with parents as easily as sending the link!
- **Capturing an event**—Use Sway at an event to do a live blog with other attendees—it is a new way to “cover” a conference in real-time while allowing letting others follow along who are not attending. Everyone in attendance can add to their section of notes and other authors can watch it update live while previewing the Sway.
- **Working together**—Of course, try out working together on some of the most common scenarios: writing reports, designing projects, crafting proposals or piecing together presentations. We on the Sway team are using these collaboration features all the time now—including for our own telemetry reports, where we periodically make a copy to generate a record, yet keep the original Sway up-to-date with the latest information and analysis. [23]

Uses of Padlet for collaborative learning

Padlet (www.padlet.com) is a free multimedia wall that allows real-time interaction both among students and between the students and the teacher and that facilitates whole-class participation. An increasing number of teachers during recent years has recognized that Padlet is a useful tool to improve collaborative learning. Some of its advantages are: a) easy to use, b) instant collaboration (any student can see when anyone else is uploading something in the wall), c) multimedia (almost everything can be placed on the Padlet) and d) mobile (it can work on many different devices) [22, p.222]. Its applications in the classroom are endless, from a tool to evaluate lessons until a way of asking for ideas. In addition, files from the Padlet walls can be saved and copied into any other application. Padlet can be used for simple tasks or for expert teaching and it does not require special training or experience in the use of web 2.0 tools [20, p.23]. Six applications of Padlet were crucial during the teaching process of the undergraduate students whose major is English, namely research resource gathering, class resources, class diary, FAQ (frequently asked questions), brainstorming and online dialogue.

Class resources: Any type of file can be posted on Padlet and it can be viewed instantly on the wall so it provides a valuable way to compile teaching resources. In doing so, there are created as many Padlets as classroom sessions we have with the students and we insert hyperlinks in the corresponding calendar. Then, the teacher and the students place the videos, documents and images that are used during the lessons in the corresponding Padlet. The students can read and download the resources directly from the wall.

Class diary: A class diary is a report created immediately after each session that includes a summary of the session and qualitative data about the teaching process. We proposed our students to work in small groups (5 people maximum). Each group is responsible for the class diary of a session. The benefits of this diary are twofold. On the one hand, it provides the teacher with valuable information about the development of the sessions: how do the students feel? what do they get out of the session? does the teacher need to explain anything again?, etc. On the other hand, it allows students that can not attend the session to check the progresses made in the class.

Frequently asked questions We also create a section entitled “FAQ” with the answers to some of the most relevant questions that arose during the session. The teacher is the responsible for this section by including short and clear answers to the students’ concerns (e.g. how many questions will the exam have?).

Brainstorming Padlet is a suitable tool for brainstorming because it provides an easy and quick way to place the students’ ideas on the wall. It also allows archiving brainstorming ideas and using them when needed. Padlet allows the student’s postings to be viewed simultaneously by other students thus contributing to the generation of new ideas. Students can individually add their thoughts to the wall at the same time other students are contributing with their ideas. Students can also be asked to work in small groups to analyze the ideas from everyone in the classroom.

Online dialogue Padlet also allows to conduct an interactive debate among students. Padlet offers different collaboration options, such as the possibility to insert comments on others’ posts or to react with a voting system. These options provide opportunities for online dialogue and even for peer-assessment because students have immediate access to the reactions of their classmates to their contributions in the wall.

A tool widely used in an online classroom that can foster collaborative learning is Jamboard. Google Jamboard is a great tool for anyone who needs to collaborate on a whiteboard and already has a Google account. Jamboard is free and incredibly user-friendly. As you work with a Jamboard, anyone who has access to the board will see everything happen in real time; the only caveat is that those you have shared the board with must also have a Google account. Below there are just some activities that can be done on this beautifully and user-friendly tool.

Use shapes to highlight When you draw a shape on Jamboard, you can set the fill color as transparent. Make the border colors different colors and have each one stand for something (like parts of speech in a sentence). Students can duplicate the boxes and use them to highlight important parts of the content on the frame.

Add text to a jam and annotate Take a screenshot of a text, a passage from a book, part of an article, etc. Encourage students to annotate it by using the highlighter or dragging frames around important sentences. Then, they justify their responses. Use multiple frames for multiple passages if needed.

Sticky note brainstorming Jamboard is great for brainstorming, gathering ideas, sorting them by color, organizing them on different frames, moving them together, drawing lines to connect important ideas, etc. Give students a brainstorming space and, if it fits, let them collaborate.

Digital posters Images and text about a topic. We have done posters forever in the classroom and Jamboard gives you access to TONS of images. Besides, students can always collaborate and share on each other's posters.

Circle and guess A fun part about learning something new is guessing. Can I guess the right answer? Can I figure it out on my own? This circle and guess activity can be engaging and get students thinking deep.

Teaching whiteboard Using Jamboard as a teaching whiteboard has lots of benefits. For remote learning, it's a whiteboard you can share on your screen during a video call. Plus, when used anytime in any setting, you can always share your whiteboard with students to view later and bring it back up to add to it.

Storytelling This one's fun! It has so many possibilities. Students can find images and tell a story. You can add images and have students tell stories about them. Or you can do an add and pass activity, where each student adds a slide with an image and some text to the story.

Screen record to describe thinking How do we know what students are thinking when they create with Jamboard? Have students do screen recordings of their jams with a tool like [Screencastify](#). They can describe what they have done, show us how they do it, and tell us why.

Graphic organizers Graphic organizers give students a space to think. They can walk students through a line of thinking and help them get their ideas in order. Create graphic organizers in Jamboard and students will be able to draw, write, and move items around.

Pros/cons discussion Give students a situation and let them debate the pros and cons. They can do this on their own individual frames in a jam or all together on one big frame in Jamboard.

Order of importance After doing a brainstorming or listing session, it might be time to put the most important items in order of importance. Students can add text, sticky notes, images, even drawings in the boxes. In the text below, they justify their responses. [24]

Conclusions

During the use of these collaborative online tools it has been proven the fact that they are beneficial to students' knowledge of the language. The cheapness and potential of these applications bring us to the easy way to communicate and deliver our lessons by making them more interactive and memorable for our students. Some people ask questions, ask one another for help, and the others share their solutions. The learning progress is furthered by the teacher's guidance, the creation of a supportive atmosphere, the creation of a learning community, and the sharing of knowledge and inspiring dialogue. The teacher invites students to work in groups and contribute their ideas thus encouraging the students to help each other. The teachers should praise students, initiate discussion, and use the platforms to confirm whether students do understand the topics or not. The teacher can also use them to get to know the students better. The advantages to the use of collaborative tools in teaching is the broad availability of the teacher to the students, the opportunity for students to help one another, and the opportunity for more in-depth acquaintance with the students on the educational and personal levels. However, students as the participants have positive perceptions of the formal use of the tools to support their learning. It can be said that the integration of the above described platforms into their

education will be easy, fun, and useful. Students get positive feelings and intentions regarding the possible use of online tools in their formal learning.

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