

DIGITAL TEACHING & LEARNING TOOLS

What follows is just a sampling of free (or at least relatively inexpensive) tools that could help facilitate a variety of learning activities and processes in the online and/or hybrid classroom (as well as in the face-to-face classroom!). There are *many* excellent tools that are not included here, and not all tools or apps will work for every instructor. Brief descriptions and links to more information are included below.

Collaboration Tools

MICROSOFT OFFICE 365 COLLABORATION TOOLS (www.office.com)

OneNote Class Notebook: Offers a collaboration space for students and teachers, as well as a content library for instructors to distribute materials to students. Student notebooks are private spaces for individual students to save and submit work, and for instructors to review and comment.

Microsoft Office Whiteboard: A freeform canvas designed for pen, touch, and keyboard.

Word Online documents: Sharing an online Word document via OneDrive can allow multiple users to edit and comment on a single version simultaneously as well as work asynchronously.

Microsoft Teams: A chat-based collaboration tool that provides dispersed teams with the ability to work together and share information via a common space. It offers features like document collaboration, one-on-one chat, team chat, video conferencing, and file sharing.

Sharepoint: A browser-based collaboration platform upon which users upload a variety of files, including Office documents, PDFs, images, videos, exported email messages, calendar entries, tasks, contracts, and project information. It allows for viewing and editing Word, Excel and PowerPoint files from within a web browser.

GOOGLE COLLABORATION TOOLS: (www.google.com)

Google Docs, Sheets, and Slides: Collaborative documents, spreadsheets, and slideware, respectively. Students can work on a document synchronously or asynchronously.

<https://www.google.com/docs/about/>

<https://www.google.com/sheets/about/>

<https://www.google.com/slides/about/>

Google Jamboard: A collaborative digital whiteboard app that can allow students (both in class and remotely) to do things like post digital “sticky notes” or freehand drawings, to work collaboratively to organize them, and so on. Useful for brainstorming activities, group discussions, etc.

https://edu.google.com/products/jamboard/?modal_active=none

Padlet: An online bulletin board application that students or instructors can use to post text, images, links, or videos. Useful for sharing information, collaborating and brainstorming, etc.

<https://padlet.com/>

Mural: Offers a large digital workspace/whiteboard for visual collaboration, allowing for virtual sticky notes, images, drawings, and commenting, both synchronously and asynchronously. The large workspace allows users to zoom in or out, making it particularly useful for activities like collaborative concept mapping.

[Mural.co](https://mural.co)

Flipgrid: A social learning platform that allows educators to post materials or questions to which students respond with a video. Students can also respond to one another, creating a “web of discussion.”

<https://info.flipgrid.com/>

<https://static.flipgrid.com/docs/Flipgrid-Remote-Learning.pdf>

Notion: A workspace and notetaking app where multiple users can write, plan, and collaborate in real time, allowing them to take notes, add tasks, manage projects, etc. Offers a free basic plan as well as other various pricing levels.

<https://www.notion.so/>

SimpleMind: A cross-platform tool for mind mapping. Offers horizontal, vertical, top-down and other layouts, and a very large page size and number of elements. Users can add images, video recordings, and voice memos as well.

<https://simplemind.eu/>

Polling and Formative Assessment Tools

Poll Everywhere: An online polling system app that can be embedded into a variety of slideware to gather and display real-time student responses to multiple choice or open-ended questions. Free version allows up to 25 responses.

www.polleverywhere.com

Microsoft Forms: Allows users to create surveys, quizzes, and polls with multiple-choice or open-ended questions. Responses are connected to a spreadsheet. Included as part of Office 365.

www.forms.office.com

Google Forms: Allows users to create surveys, quizzes, and polls with multiple-choice or open-ended questions. Responses are connected to a spreadsheet. Free with Google account.

<https://www.google.com/forms/about/>

Top Hat: Allows users to create surveys, quizzes, polls, and synchronous discussions. Can also be used for attendance, lecture streaming, and recording class meetings. Instructors can also use it for administer homework assignments and other assessments. Multiple pricing options.

<https://tophat.com/>

Pear Deck: A Google Slides Add-On that helps facilitate formative assessment and allows instructors to incorporate interactive questions within presentations. The app includes templates to support different kinds of activities at different points of a lecture or class, such as “exit tickets” at the end of a class session. Students can submit their

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<http://inside.collin.edu/tl/profdev.html>

responses privately for instructors to assess their understanding, and responses can be displayed anonymously to the class.

<https://www.peardeck.com/googleslides>

Socrative: Allows user to administer quizzes, surveys, competitions, and team activities to collect real time data about student comprehension. Various pricing plans; free version allows up to 50 students per “room.”

<https://www.socrative.com/>

NoRedInk: An online tool used for teaching grammar, usage, mechanics and style to students. While it is designed for students in 4th – 12th grade, it could be useful for introductory or developmental reading and writing college courses. Free content includes diagnostic testing features to determine student strengths and deficiencies, adaptive learning technology that adjusts to student correct and incorrect responses, immediate feedback for students, and auto-grading for all assignments.

<https://www.noredink.com/>

Kahoot: A game-based learning platform that allows users to easily create, share and play learning games or trivia quizzes. It also allows for “Team Mode,” “Ghost Mode,” and “Blind Kahooting.”

<https://kahoot.com/>

<https://kahoot.com/blog/2017/04/10/8-ways-use-kahoot-beyond-basics/>

Discussion, Chat, and Communication Tools

Slack: Platform for unified instant messaging with “team members” via multiple channels and threads. Free version also supports 1:1 voice and video calls between teammates.

<https://slack.com/>

Groupme: Free app for group texting and chatting via phone, tablet, or computer without having to share phone numbers or personal email addresses.

<https://groupme.com/en-US/>

Skype for Business: Instant messaging application, available through Office 365, that allows users to “chat” in real time individually or in groups. Can also support video calls.

www.office.com

Remind: Communication app that allows instructors to send messages to an entire class, smaller groups, or individual students without needing to share phone numbers or other personal contact information. Messages cannot be edited or deleted to maintain a complete message history.

www.remind.com

Critical Reading and Notetaking Tools

Perusall: A social annotation tool that allows students and instructors to collectively markup and annotate PDF documents. Perusall is designed to integrate with the Canvas LMS. This can help foster critical reading skills and facilitate discussion, allowing for students to respond to each other's comments. It even offers a "student confusion report" to instructors – a one-page summary of concepts students struggled with, or those that engaged with the most.

<https://perusall.com/>

eComma: An open source tool that allows a group of users to annotate the same text together and to share their annotations with each other. May be used synchronously or asynchronously.

<https://ecomma.coerll.utexas.edu/about-ecomma/>

eMargin: An online collaborative annotation tool that allows users to highlight, color-code, write notes, and assign tags to individual words or passages of a text. Annotations can be shared amongst groups and used to facilitate discussion.

<http://emargin.bcu.ac.uk/>

Hypothes.is: Free platform for annotation of digital texts enabling collaborative sentence-level note taking or critique over readings amongst students. Can be used to facilitate online discussion or other group activities/assignments.

<https://web.hypothes.is/>

Vialogues: Facilitates time-stamped discussions about videos; includes a collection of thought-providing videos to use, but also allows users to upload or link to other videos.

<https://www.vialogues.com/>

Video and Demonstration Tools

Screencastify: Free screen recorder extension for the Google Chrome browser that allows users to record their screens via screen capture, as well as their voices/faces via webcam and microphone.

<https://www.screencastify.com/>

Loom: Free screencasting software available via Chrome extension or desktop app. Allows users to record camera and screen with audio, then download the video for sharing.

<https://www.loom.com/>

Microsoft Stream: Platform for users to upload, view, and share videos. Provides automatic video transcript, and also allows for timecodes and comments. Available with Microsoft Office 365.

www.office.com

Powtoon: A cloud-based animation software for creating animated presentations and animated explainer videos.

www.powtoon.com

Buncee: A web-based tool for creating interactive multimedia presentations. The user can integrate content from both external and internal sources as well as create content directly on each slide.

<https://app.edu.buncee.com/>

EDpuzzle: A teaching tool used to place interactive content into pre-existing videos from a variety of sources, such as TED or YouTube, or into videos you have created.

<https://edpuzzle.com/>

Online Demonstration and Simulation Repositories

MERLOT: Virtual labs and simulations from numerous disciplines.

<https://www.merlot.org/merlot/materials.htm?keywords=virtual+labs&sort.property=relevance>

Psytoolkit: Online psychology demonstrations and experiments that students can run on their own computers.

<https://www.psytoolkit.org/experiment-library/>

PhET: Interactive science and math simulations.

<https://phet.colorado.edu/>

Tools for Expediting Feedback

Vocaroo: Free online recording software you can use for voice recordings of feedback to students.

<https://vocaroo.com/>

Text expanders: Tools to expedite written feedback that repeatedly uses the same phrase/s. A few are free, and others vary in price. A few free options include:

Phrase Express: For Windows, Mac, iOS, and Android. Along with the regular text expansion features, it also offers features such as dynamic phrases, date and time stamps, system-wide auto correction.

<https://www.phraseexpress.com/>

AutoHotKey: For Windows. Offers simple built-in commands for beginners as well as features for more experienced developers.

<https://www.autohotkey.com/>

Auto Text Expander for Google Chrome: Google Chrome extension feature for Windows. Basic text expander.

<https://chrome.google.com/webstore/detail/auto-text-expander-for-go/iibninhmiggehlcdolcilmhacighjamp?hl=en>

Photo and Graphics Tools

Graphic Design tools (for infographics, posters, pamphlets, flyers, presentations, etc.)

Canva: Free version offers a multitude of free templates and design types, as well as free photos and graphics to use and photo editing tools. Allows users to export designs as PDF, JPG, or PNG files, and has built-in sharing and presentation mode.

<https://www.canva.com/create/infographics/>

Piktochart: Free version offers simple graphics tools with themed templates and access to a library of images and icons. Free version also allows users to maintain up to 5 active visuals with a Piktochart watermark, which they can download and share.

<https://piktochart.com/formats/infographics/>

Venngage: Free version offers numerous templates, an autosave feature, and the ability to organize designs in folders. Users of free version can maintain up to 5 visuals.

www.venngage.com

Photo Editing Tools and Repositories

PIXLR X: Free web-based photo editing tool. Free version offers basic editing tools and a small selection of overlays and stickers.

<https://pixlr.com/x/>

Pixabay: Free high-quality stock photos, illustrations, videos, and music.

<https://pixabay.com/>

Freerange: Free high-resolution stock photos and illustrations.

<https://freerangestock.com/index.php>