Apps for Mobile Devices

Dr. Mark Morton

Centre for Teaching Excellence

University of Waterloo

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Introduction

The term "mobile device" is sometimes used to refer to a laptop computer, but more often it refers to a tablet computer (such as Apple's iPad, Microsoft's Surface, or Samsung's Galaxy) or a smart phone (such as Apple's iPhone, Samsung's Galaxy, Microsoft's Windows Phone, or Blackberry's Passport).

The term "app" – which is short for "application software – refers to a computer program that is designed to run on a mobile device.

Since the emergence of the iPhone in 2007, the number of apps that have been developed for the various mobile device operating systems has grown enormously. As of October 2014, there were 1.3 million apps for Apple devices; 800,000 apps for Android devices; 400,000 apps for Windows devices; and 120,000 apps for Blackberry devices.

Most of these apps are designed for some purpose relating to entertainment, productivity, or education. Many are of high quality, while others are not. Hundreds if not thousands of them can be used by instructors and students to enhance learning. This document will identify apps that will be of interest to many instructors and students. However, given the large number of apps, and given that some apps will be of interest to those working in one discipline but not another, this document will not attempt to be comprehensive. Instead, the apps included here will be useful in their own right, but they are also intended to suggest the kind and range of apps that are available.

This document organizes apps into the categories listed below. However, a given app might easily fit into several categories. For convenience, each app will be included only in the category that best applies to it.

1. **Creation Apps**. Creation apps allow you to make digital artifacts, such as a document, image, video, concept map, and so on.
2. **Curation Apps**. Curation apps allow you to organize and manage various sources of digital content.
3. **Content Apps.** Content apps provide information, and can be divided into four subcategories:
    a. **Traditional Content.** These apps replicate the kind of content found in books, but repurpose it for mobile devices.
    b. **Enhanced Content**. These apps provide traditional content but with enhancements that digital media makes possible.
    c. **New Media**. These apps include podcasts, videos, and screencasts.
    d. **Augmented Reality**. These apps superimpose digital information onto the physical environment of the user.
4. **Presentation Apps**. Presentation apps allow you to deliver lectures or other presentations to an audience.

5. **Note Taking Apps**. Note Taking apps allow you to use your mobile device to take written, typed, or audio notes.
6. **Productivity App**s. Productivity apps help you work more efficiently and save you time.
7. **Connecting Apps**. Connecting apps allow you to connect with others who share your interests, or to collaborate with others who are working on a project with you.
8. **Language Acquisition Apps**. Language acquisition apps help you learn a new language.
9. **Social Learning Apps**. Social learning apps facilitate collaborative learning and enhance student engagement.

Creation App: Camera Awesome

Most mobile devices have a camera built into them, and also come with a native photo editing app. However, more advanced Camera apps, such as Camera Awesome, have a greater suite of features. Camera Awesome allows you to crop photos, adjust attributes such as contrast and brightness, and apply a selection of filters to enhance your photos. Camera Awesome also integrates with SmugMug, an online photo sharing service.

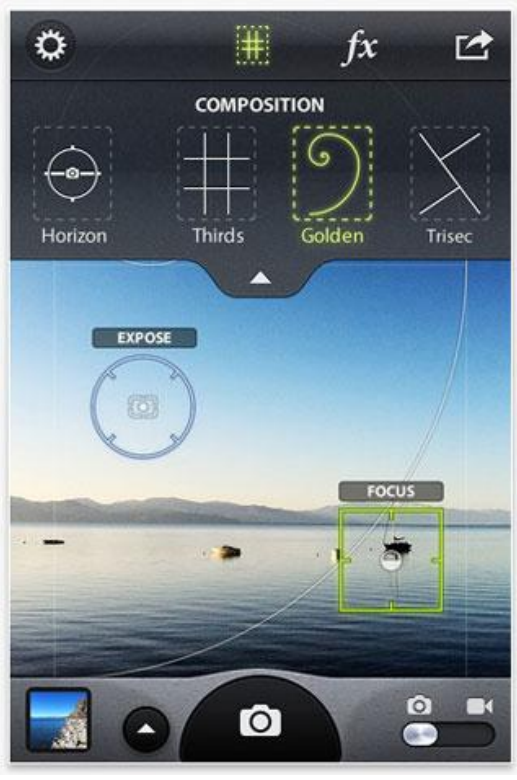
Example(s) of educational use

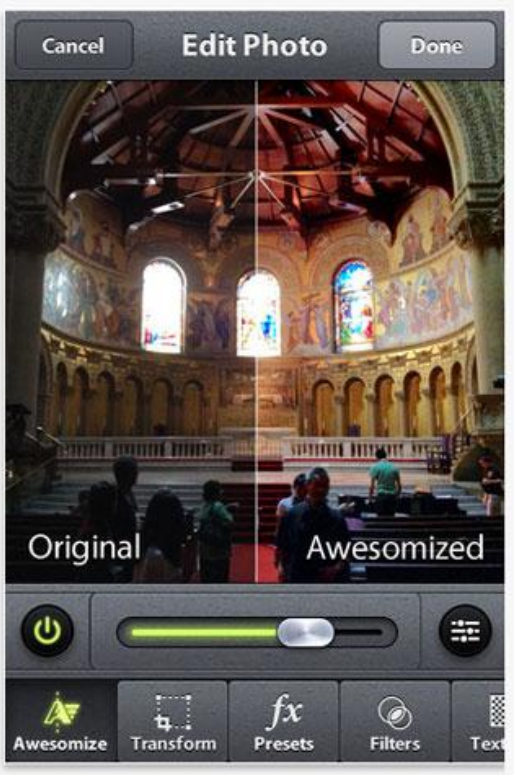
- Students in botany courses can take and share photos of plants identified during field trips.
- Students can photograph a whiteboard for later review, after they (or the instructor) have added notes, diagrams, or other content to the whiteboard.

Available for: iOS (free) and Android ($3.00).

Other resources

- Camera Awesome home: http://news.smugmug.com/tag/camera-awesome
- Review: http://digital-photography-school.com/smugmugs-camera-awesome-app-for-iphones-review
- YouTube video: http://youtu.be/fga8Eoxd8bI





Creation App: Dictamus

This app allows you to make audio recordings of your voice or any other sound source. After making the audio recording, you can delete or insert new segments. It can also be configured to record only when you are speaking. You can export the audio recording in several formats, and can share it via email, Dropbox, FTP, Evernote, and so on.

Example(s) of educational use

- Use Dictamus to make a brief audio podcast for your course, one that introduces key concepts that you will expand upon in a later lecture.
- Have your students use Dictamus to take audio notes while observing a lab-based activity, or while in the midst of a field trip.

Available for: iOS ($16.99) and Android ($9.99)

Other resources

- Dictamus home page: http://www.dictate-connect.com
- YouTube video: http://youtu.be/gvUcyA33Gng
- YouTube video on using Podcasts to engage student: http://youtu.be/n_as7U1ogqQ

Creation App: Explain Everything

This app allows you to make a screencast – that is, a video recording of anything that appears on the screen of your mobile device accompanied by your voice narration of that visual content. With Explain Everything, you can import a document (PDF, DOC, PPT, and so on), annotate it with text or finger sketches, and add elements such as arrows to it – all while capturing your audio explanation of the content. You can then export and share the resulting screencast.

Example(s) of educational use

- Use Explain Everything to create screencasts for your students that introduce key concepts which you will expand upon in a later lecture.
- Use Explain Everything to create screencasts that deliver most of your course content, freeing up class time for active learning experiences; this is known as flipping the classroom.

Available for: iOS ($2.99), Android ($3.54), Windows ($2.99)

Other resources

- Home page: http://www.morriscooke.com/
- YouTube video: http://youtu.be/b00ZeszvjP4

Curation App: Evernote

Evernote helps you collect, annotate, and share digital artifacts, which are referred to as "notes." The notes can be documents that you type or handwrite, photos that you take or acquire, audio memos, or web pages. The power of Evernote arises from the fact that you can tag your notes with key words, which makes it easy to search for them later on. You can also search the text of any note, or you can search the notes according to their date of creation. Notes can also have files (such as a PDF) attached to them. Users can also sort notes into folders, and can share individual notes or collections of notes with others. Evernote can be installed on a desktop or laptop PC, or on a mobile device. Changes made to Evernote on one device are synchronized across all devices.

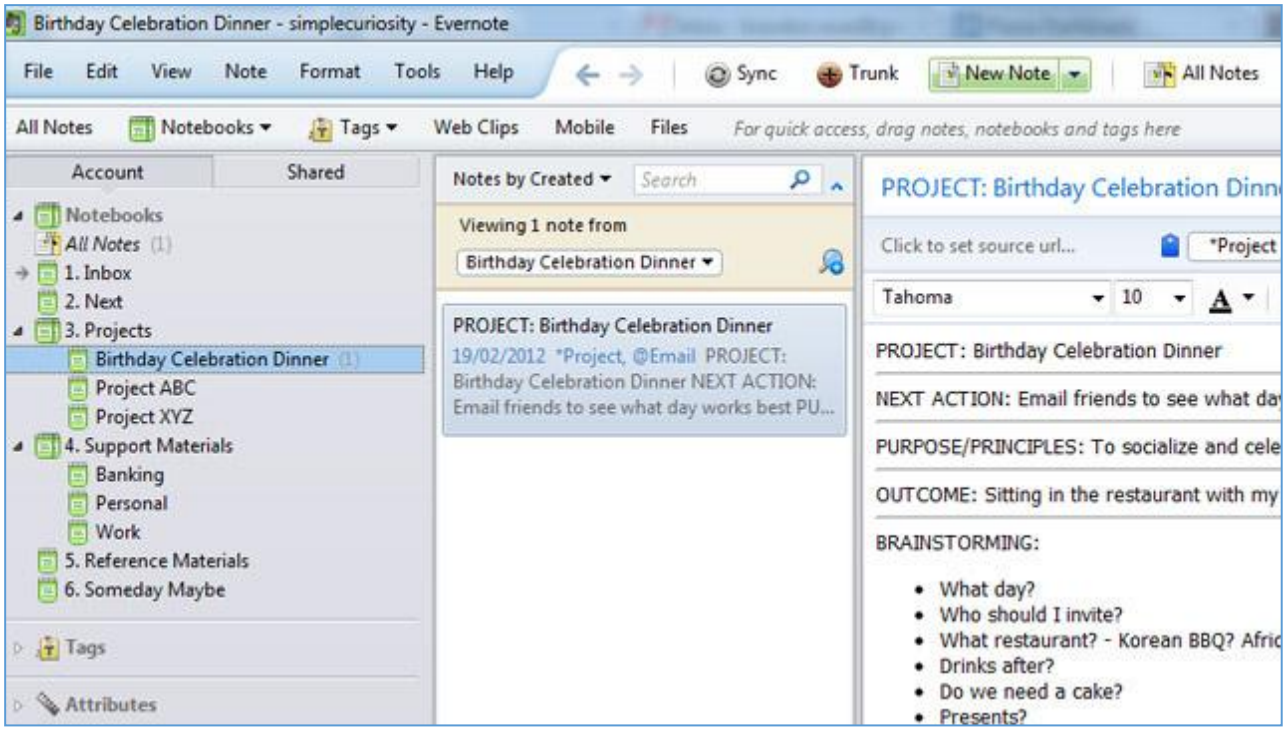
Example(s) of educational use

- Use it to collect online resources that pertain to your research interests.
- Use it to share your collections of online resources with students.

Available for: iOS (free), Android (free), Windows (free), Blackberry (free).

Other resources

- YouTube video: http://youtu.be/XO9wQ3yP95w



Curation App: Diigo

Diigo is a social bookmarking tool. With it, a user can save the location of a web resource, tag it with key words to facilitate finding it at a later date, add it to a list of thematically related web resources, and share those resources with others. Groups can also be created with Diigo, so that individuals working on the same project can all contribute web resources to the same group.

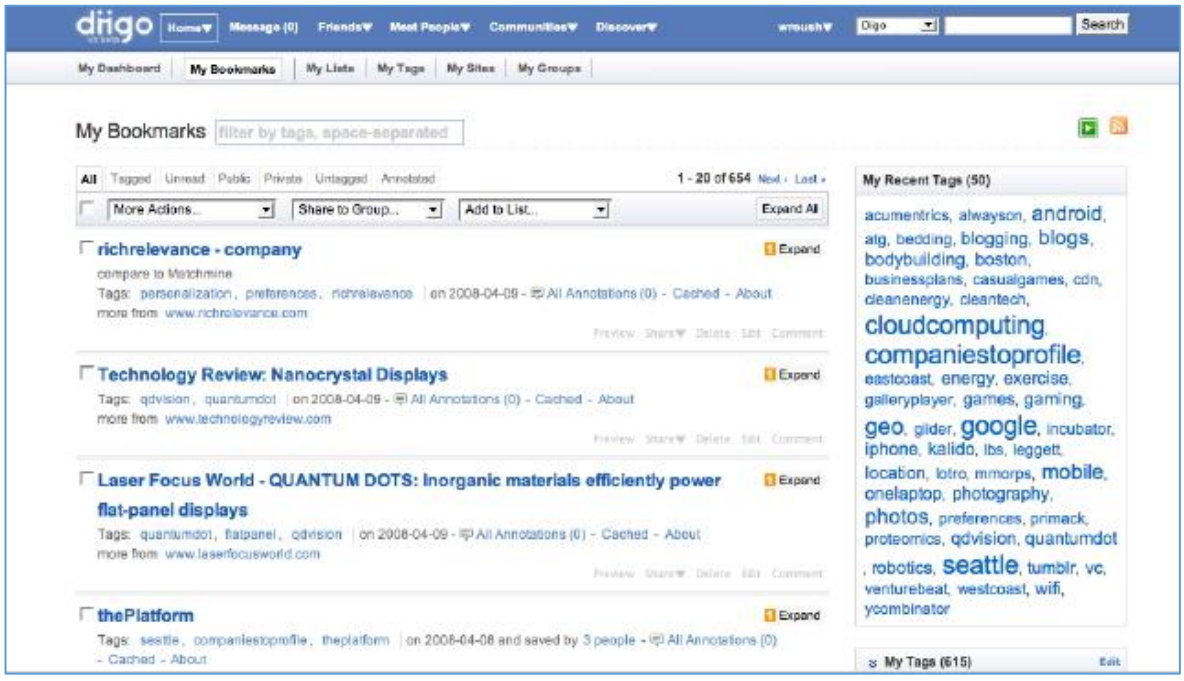
Example(s) of educational use

- Use it as an individual or with a group to collect and annotate online resources.
- At the beginning of a course, create a Diigo group for the students in your course. Ask them to contribute online resources to group as the course proceeds, and to annotate a resource contributed by a classmate each week. By the end of the course, they will have collaborated in creating a thorough, annotated repository of relevant course materials.

Available for: iOS (free), Android (free).

Other resources

- Centre for Teaching Excellence Teaching Tip on Diigo: https://uwaterloo.ca/cte/teaching-resources/teaching-tips/educational-technologies/all/diigo-social-bookmarking
- YouTube video: http://youtu.be/mlYXVYTayZs



Curation App: Readability

Readability allows you to do two things. First, it strips away needless content (such as sidebars and advertisements) from web pages, which makes it easier to read the main content. Second, it lets you save web pages so that you can read them later, even when you are not connected to the Internet. A similar app is Pocket, which also allows you to save video that is embedded in web pages, and lets you display text in a variety of font sizes and styles.

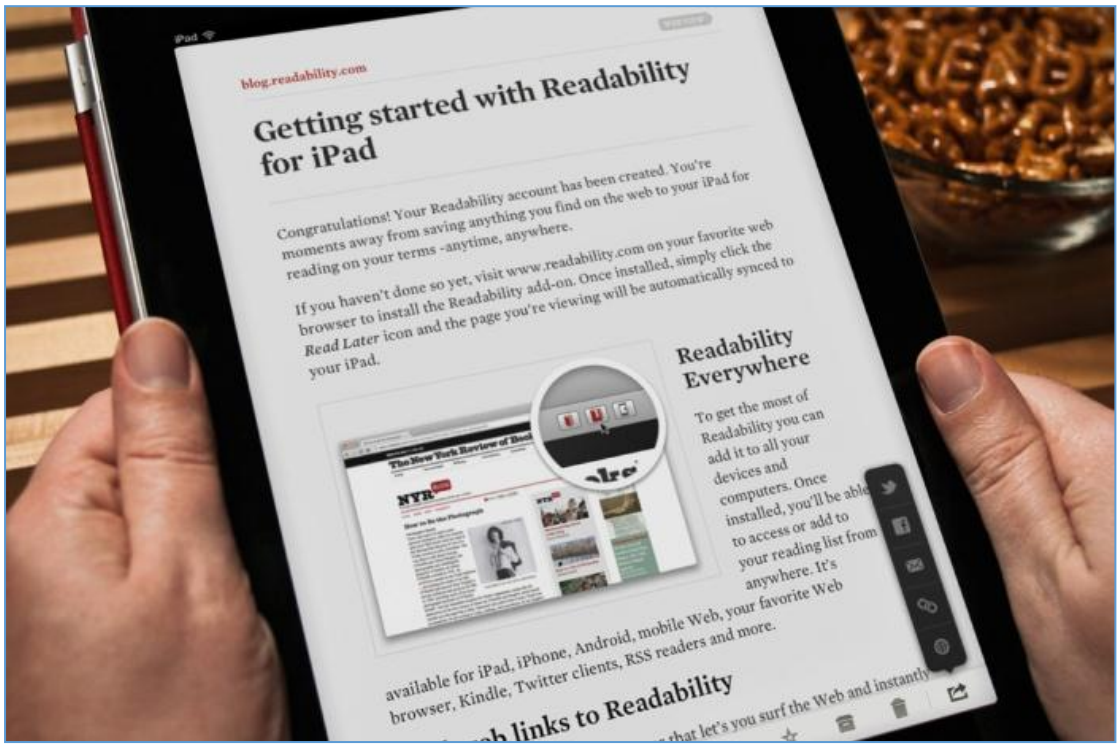
Example(s) of educational use

- Use it to save online documents in order to read them at a more convenient time.

Available for: iOS (free), Android (free), and any web browser (free).

Other resources

- Readability home: https://www.readability.com
- Review: http://www.macworld.com/article/2014255/ios-app-review-readability-provides-convenience-for-mobile-reading.html
- YouTube video: http://youtu.be/pwV_UjrPEIY



Content App: Traditional Content: Kindle

Kindle is used for reading eBooks. You purchase an eBook from an online bookstore, download it, and read it in the app. The app recreates the feeling that you are reading a real book: for example, instead of scrolling down a single long web page, you flip from one page to the next. Kindle allows you to highlight sections of the text, and to type in annotations; you can also adjust the size of the text. The Kindle app is used for eBooks purchased from Amazon. Other bookstores use the Kobo app, which is very similar to the Kindle in terms of functionality.

Example(s) of educational use

- Many textbooks are now available as eBooks, and are usually less expensive than their paper-based counterparts.
- Hundreds of eBooks can be added to a mobile device. A student could store on his mobile device all of the textbooks needed for a four-year degree.

Available for: iOS (free), Android (free), Blackberry (free).

Other resources

- Kobo app page: http://www.kobo.com/apps
- Kindle app page: http://www.amazon.ca/gp/feature.html?docId=1000817631

Content App: Traditional Content: QuizUp

This app uses quizzes to help users acquire knowledge of over 400 topics, such as math, history, art, science, and more. Users compete with other QuizUp users around the world: the more quizzes they "win," the more points they accumulate.

Example(s) of educational use

- Use QuizUp to provide students with an overview of a course-related topic, or to refresh topics that were covered in previous courses.

Available for: iOS (free), Android (free).

Other resources

- QuizUp home: https://quizup.com
- Review: http://www.cnet.com/products/quizup-android
- YouTube video: http://youtu.be/FBrbA7F6tOk

Content App: Enhanced Content: The Elements

This app, which provides information pertaining to the elements in the periodic table, would be similar to a book were it not for the fact that you can rotate the depicted elements – such as a nugget of gold – in all directions. The depicted elements can also be split into a pair of stereo images, so that a user can view it in 3D with the help of 3D glasses.

Example(s) of educational use

- Use it as a complement to a traditional textbook.

Available for: iOS ($13.99)

Other resources

- YouTube video: http://youtu.be/nHiEqf5wb3g
- The Elements home: http://apps.theodoregray.com/home/the-elements-a-visual-exploration/

Content App: Enhanced Content: Pocket Anatomy

This app allows you to view various layers of the human body (muscular, circulatory, skeletal, etc.) and to rotate the image and zoom in on specific sections. It also includes 100,000 words of learning content.

Example(s) of educational use

- Use it as a complement to a traditional textbook.

Available for: iOS ($24.99).

Other resources

- Pocket Anatomy home: http://www.pocketanatomy.com/apps/pocket-anatomy/
- YouTube video: http://youtu.be/NpSQ7mnGrT8

Content App: Enhanced Content: EarthViewer

With this app, you can explore the geological and topographical history of Earth. You can rotate the planet, zoom to a location, and dial back to see what the planet looked like in various periods up to 4.5 billion years ago. It also includes features such as a world temperature map for the past 100 years.

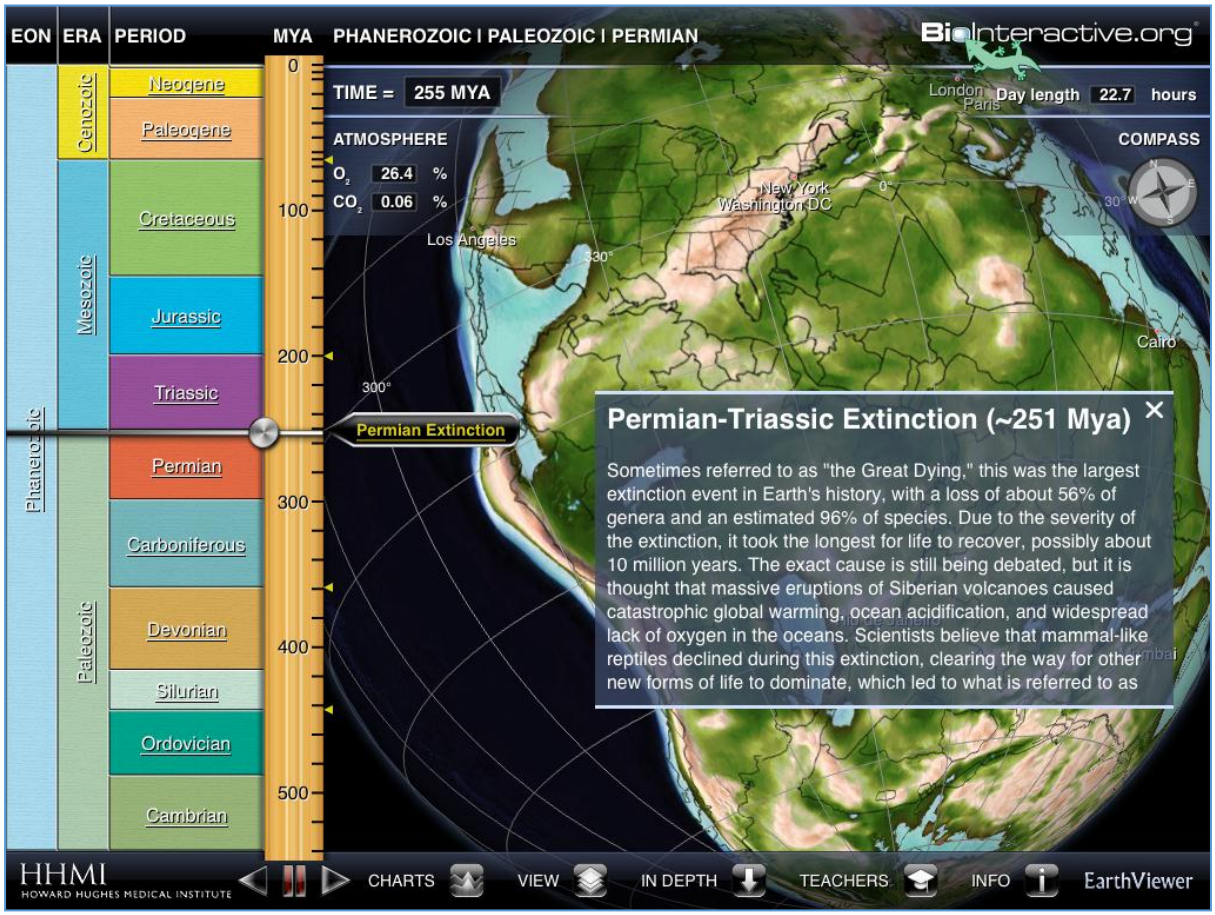
Example(s) of educational use

- Use it as a complement to a traditional textbook.

Available for: iOS (free), Android (free)

Other resources

- EarthViewer home: http://www.hhmi.org/biointeractive/earthviewer
- Review: http://www.pcmag.com/article2/0,2817,2428867,00.asp
- YouTube video: http://youtu.be/auUwpeC2G7s



Content App: New Media: Podcasts

Podcasts are audio-based or video-based episodes that are released according to a pre-set schedule. For example, some podcasts release a new episode daily; others weekly; and still others monthly. To listen to a podcast, or to subscribe to one so that new episodes are automatically downloaded to your mobile device, you need a podcast app such as Podcasts (iOS) or Pocket Casts (Android). Many excellent podcasts pertaining to a wide variety of university disciplines are available. As a single example, Terrence Deacon (University of California Berkley) has created 32 podcasts based on his Biological Anthropology course.

Example(s) of educational use

- Use the Podcasts app to find audio content or video content relevant to your interests.
- Require your students to listen to a podcast series as a component of their course content.

Available for: iOS (Podcasts; free); Android (Pocket Casts; $3.99)

Other resources

- 50 Educational Podcasts: http://gettingsmart.com/2013/02/50-educational-podcasts-you-should-check-out
- Podcasts from the University of California at Berkley: http://webcast.berkeley.edu/series#c,s

Content App: New Media: YouTube

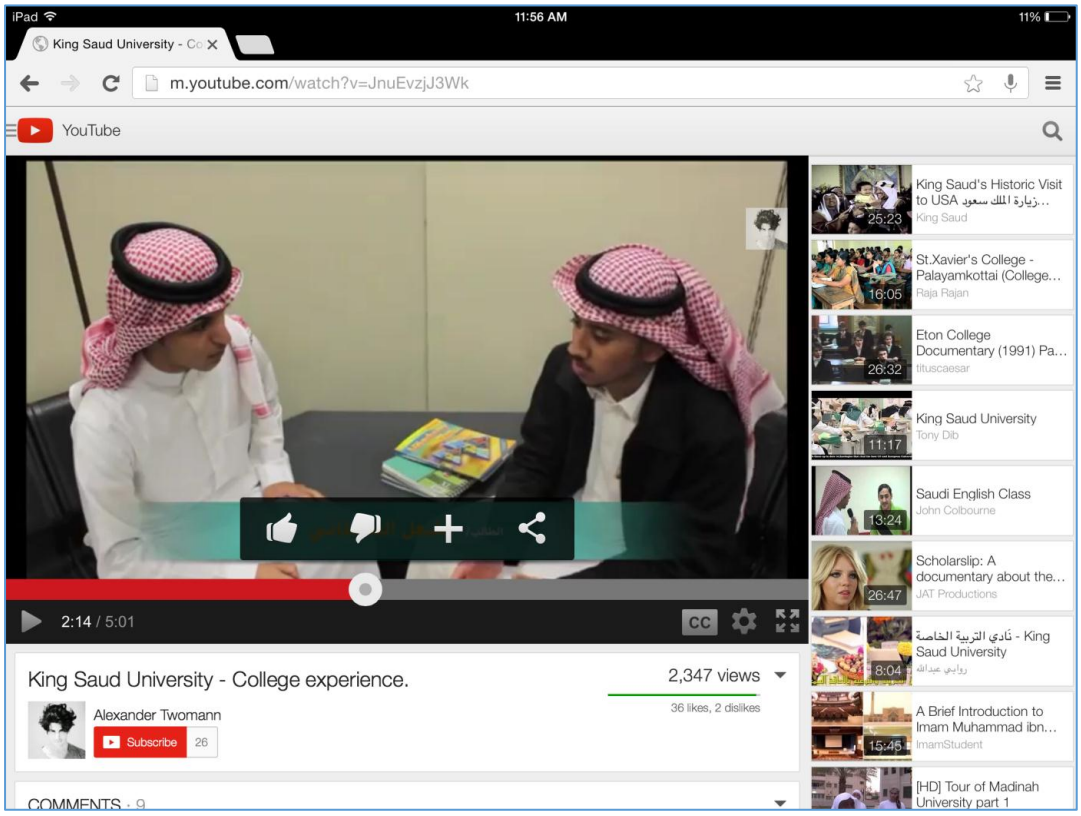
There are hundreds of millions of videos on YouTube. Although most of them are of little educational value, many are very useful for university courses. For example, a YouTube channel called Numberphile features nearly 250 short videos (about eight minutes each) on topics pertaining to math and number theory (such as the Fibonacci sequence and Mersenne Primes). The YouTube app makes it easy to access these videos (but you will still need to search for ones relevant to your discipline).

Example(s) of educational use

- Use YouTube videos to enhance specific components of your course, or to introduce or reinforce key concepts.
- **Available for:** iOS, Android, Blackberry, any web browser (free)

Other resources

- YouTube Education Channel: http://www.youtube.com/channel/UCwT12sMzyiJuqWuCDDKEzdw
- JISC Guide: http://www.jiscdigitalmedia.ac.uk/guide/youtube-vimeo-education



Content App: New Media: Khan Academy

The Khan Academy is a repository of over 6000 screencasts on topics in Mathematics, medicine, biology, chemistry, physics, economics, and more. Additionally, the Khan Academy provides over 100,000 practice problems to help users learn the material after viewing a screencast. The Khan Academy can be accessed via any Internet browser, but the Khan Academy app is optimized for mobile devices.

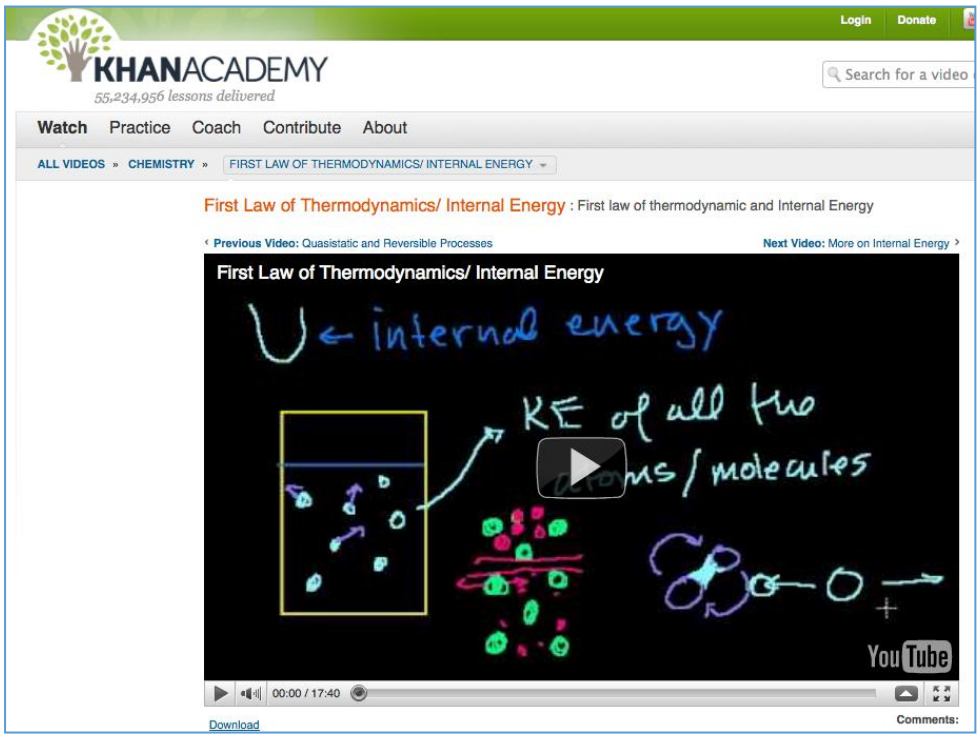
Example(s) of educational use

- Use Khan Academy videos to enhance specific components of your course, or to introduce or reinforce key concepts.
- Have students who lack prerequisite knowledge catch up with other students by watching a relevant series of Khan Academy videos.
- Use it to for inspiration about teaching a specific topic by seeing how it is taught in the Khan Academy.

Available for: iOS (free), Android (free), Blackberry (free), any web browser.

Other resources

- Khan Academy home: https://www.khanacademy.org
- Ted Talk: http://www.ted.com/talks/salman_khan_let_s_use_video_to_reinvent_education
- YouTube: http://youtu.be/jQQjbq0gMmE



Content App: Augmented Reality: LeafSnap

With LeafSnap, a user can take a picture of a leaf from an unknown plant or tree, and the app will identify it and provide botanical information about it. The location of the plant or tree can then be uploaded to an online database where it, along with data from thousands of other users, can be aggregated to reveal distribution patterns.

Example(s) of educational use

- Students in botany courses can use LeafSnap to identify leaves of unknowns plants and trees.

Available for: iOS (free), Android (free)

Other resources

- LeafSnap home: http://leafsnap.com
- YouTube: http://youtu.be/8F9ihUEYr_g

Content App: Augmented Reality: Star Walk

Star Walk is an astronomy app. When you hold your mobile device up to the sky, the app reveals the stars and planets that are currently positioned in that section of the sky, identifies them by name, and provides additional information such as their distance, composition, brightness, and so on. The information provided is always "live" because the Star Walk app employs the mobile device's internal compass, accelerometer, GPS, and regional information to locate itself accurately. If you turn the mobile device toward the ground, the Star Walk app will even display the stars and constellations that are visible on the other side of the Earth.

Example(s) of educational use

- Students in astronomy courses can use Star Walk to identify unknown stars and planets.

Available for: iOS ($2.99), Android ($3.25), Windows Phone ($3.25)

Other resources

- Star Walk home: http://vitotechnology.com/star-walk.html
- YouTube: http://youtu.be/stWaVqdimdw

Content App: Augmented Reality: Layar

Layar works with print-based sources (such as a magazine or poster). If a print-based source has been configured to work with Layar, then you will see additional content – such as a video – when you point your mobile device toward that print-based source. For example, a magazine might include an ad for an upcoming movie. When you view the ad via the camera in your mobile device, the page will "come alive" and a segment of the movie will begin to play. Layar also works with specially configured landscapes. For example, if you goes to Paris and use Layar to view a street through your mobile device, information will be superimposed over the street, showing the best restaurants, important landmarks, historical information and so on.

Example(s) of educational use

- Textbook publishers are beginning to use Layar to enhance their textbooks. For example, in a biology textbook, an image of a cell (when viewed via the Layar app) becomes animated and undergoes cell division.

Available for: iOS (free), Android (free), Blackberry (free).

Other resources:

- Layar home: https://www.layar.com
- YouTube: http://youtu.be/HW9gU_4AUCA
- Layar at Purdue University: https://www.purdue.edu/learning/blog/?p=199

Presentation App: 2Screens

With the 2Screens app, you can import a document or image, annotate it with handwriting or typed text, and display it to an audience by means of a projector. Two screens takes its name from the fact that what the audience sees on the classroom screen need not be the same as what the presenter sees on his mobile device. For example, while the audience sees the document or image (and the annotations), the presenter can also see a column of upcoming slides as well as notes pertaining to the projected document or image. Two screens will work with Apple Airplay, so you can connect wirelessly to the projector. This allows you to walk around with your mobile device, while at the same time using it for your presentation.

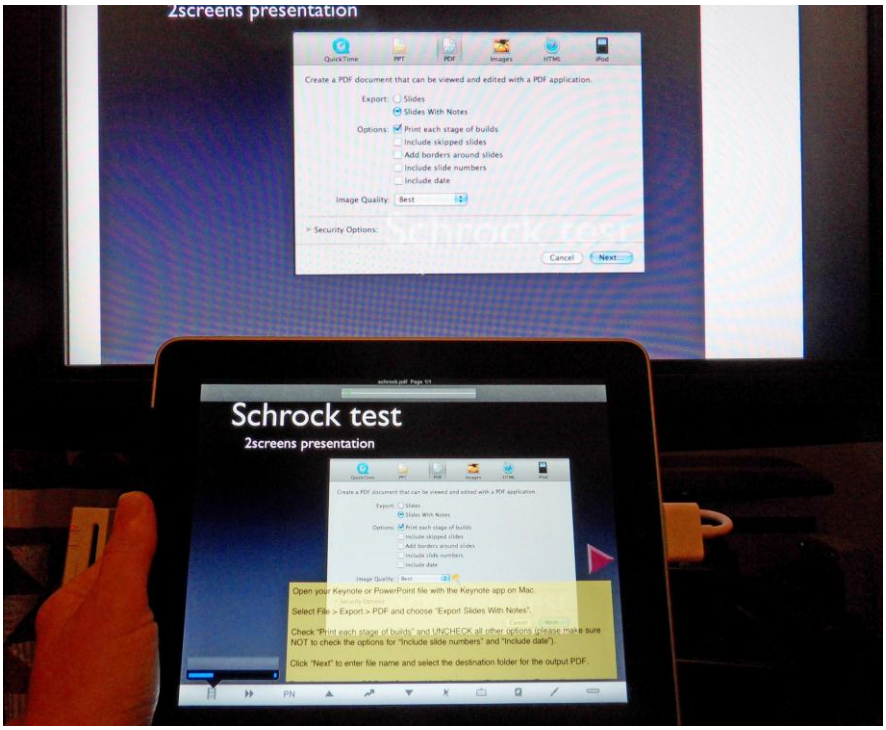
Example(s) of educational use

- Use 2Screens instead of a whiteboard or smart board to make presentations to your students. You can save your presentation (along with your annotations) as screenshots to share later (in, for example, the LMS for the course).

Available for: iOS ($4.99)

Other resources

- 2Screens home: http://www.elpstudio.net/2screens
- YouTube video: http://youtu.be/PI-PV64WUTs



Presentation App: Nearpod

The Nearpod app allows you to create multimedia presentations and then "broadcast" them to your students' mobile devices. For example, an instructor might make a presentation that includes ten slides: slides 1 and 2 might contain content, while slide 3 contains a quiz; slides 4 and 5 contain more content, and slide 6 contains another quiz; and so on. The instructor then uses Nearpod to "push" the presentation to his students' mobile devices. The instructor controls which slide the students see (so that the students cannot advance to a new slide until the instructor does so). Each student's responses to the interactive quizzes are compiled and sent to the instructor.

Example(s) of educational use

- Assuming that all of your students have a mobile device and have installed the Nearpod app, you can use Nearpod on your mobile device to deliver a presentation to them. Rather than looking at a large screen in a classroom (which can make it hard for some students to see, depending on where they are sitting), with Nearpod each student sees the presentation on his own mobile device. Additionally, quizzes can be built into the Nearpod presentation, and each student can respond to the quiz individually.
- At KSU, Nearpod could be used in situations where a male instructor needs to present to female students. The instructor can deliver the presentation remotely, that is, outside of the classroom.

Available for: iOS (free), Android (free), Windows Phone (free), any web browser (free).

Other resources

- Nearpod home: http://www.nearpod.com
- YouTube video: http://youtu.be/rtvFkeB9gwk

Note-Taking App: Penultimate

Penultimate makes it easy to take notes on a mobile device. As you write, the page expands on your screen and then scrolls to the left, meaning that you can write in large letters and that you don't need to move your hand across the page as you write; when you are done taking notes, the page goes back to its normal size on the screen, and your notes are visible in a smaller but easily readable form. When Penultimate is used in conjunction with another app called Evernote, your handwritten notes become machine readable, which means that you can search for a specific word or phrase in your notes. Using Penultimate with Evernote also means that your notes are accessible from any of your mobile devices or desktop PCs. Penultimate works especially well with the Jot Script stylus, which allows fine line control. Penultimate should be used with larger mobile devices (such as the iPad) rather than smaller ones (such as the iPhone).

Example(s) of educational use

- Students can use Penultimate to take notes during lectures. The advantage over traditional, paper-based notes is that notes in Penultimate (when used in conjunction with Evernote) are searchable. As well, a student can keep thousands of pages of notes in Penultimate, and can access them from any device. Finally, while a physical notebook can be lost, the notes in Penultimate can never be lost because they are saved online.
- Instructors can use Penultimate to create handwritten notes or drawings, and can then share individual notes or entire notebooks with students as PDFs.

Available for: iOS (free). For Android, a similar app is PenSupremacy ($1.48).

Other resources

- Penultimate home: https://evernote.com/penultimate/
- YouTube: http://youtu.be/WkGJUVFstqQ
- Review of the Jot Script stylus for Penultimate: http://ipadinsight.com/ipad-accessory-reviews/review-adonit-jot-script-evernote-edition-for-ipad/

Note-Taking App: Notability

With this app, you can take handwritten notes while at the same time recording audio narration. The handwritten notes and the audio are synchronized: tapping a word in the handwritten notes takes you to the relevant point in the audio.

Example(s) of educational use

- Students can use Notability in lectures to simultaneously take typed or handwritten notes and record the lecture. Later, when a student is reviewing his notes and comes across an idea that he doesn't fully understand, he can tap a word in that section of the notes and the app will begin to play the audio that was recorded when that specific note was written.
- Instructors can share PDF versions of their lecture notes with students, and students can then annotate them using Notability.

Available for: iOS ($2.99). An alternative for Android is LectureNotes (#$4.65).

Other resources

- Notability home: http://www.gingerlabs.com
- Review of Notability: http://www.mademd.com/2014/04/med-tech-notability-review-giveaway.html
- YouTube: http://youtu.be/EE5zkMGn6Sk

Note-Taking App: Dragon Dictate

Dragon Dictate is a voice-to-text app: it converts your spoken words into written text. With practice, Dragon Dictate can help you create written documents five times faster than typing them.

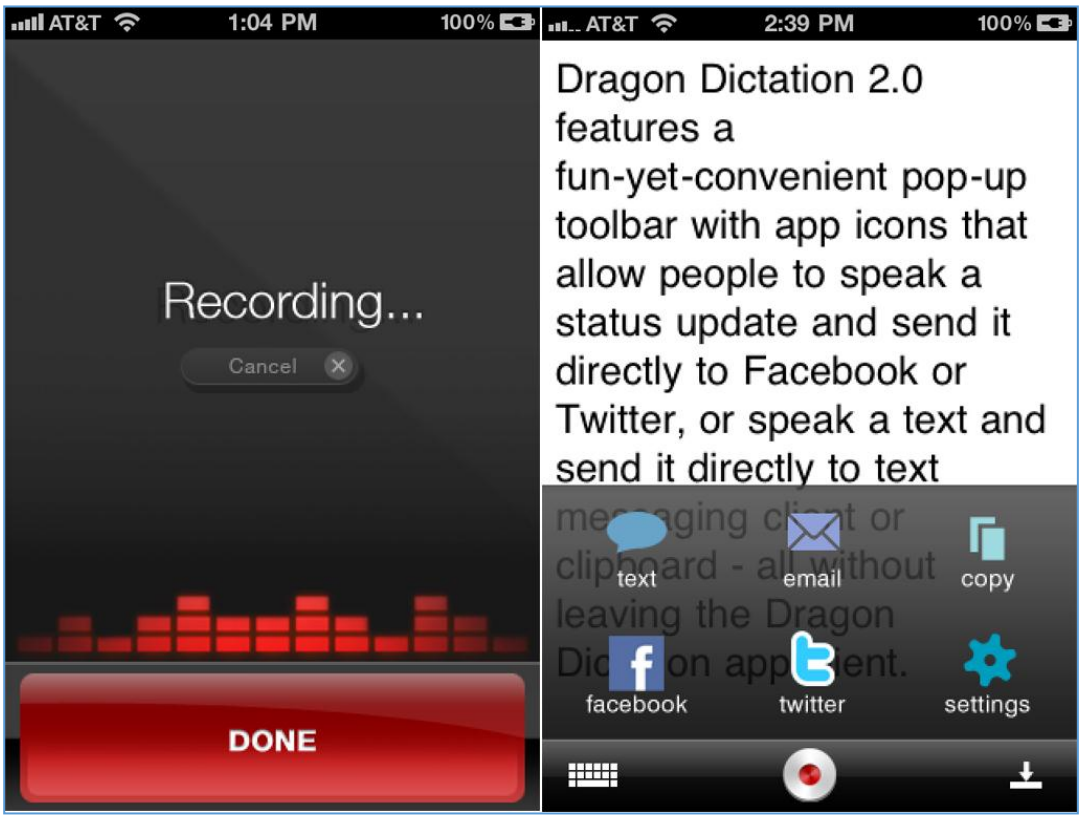
Example(s) of educational use

- Instructors and students can use Dragon Dictate to create documents by dictating them rather than typing them. This saves time, and can also prevent repetitive stress injuries to the wrist that are associated with too much typing.

Available for: iOS (free), Blackberry (free).

Other resources

- Dragon Dictate home: http://www.nuance.com/for-individuals/mobile-applications/dragon-dictation
- YouTube: http://youtu.be/ruKuconzkJo



Note-Taking App: iAnnotate PDF

This app allows you to add notes, annotations, and drawings to PDF documents. Whatever you add is saved with the original PDF file; however, you can restore the original PDF file easily.

Example(s) of educational use

- Have your students submit assignments to you as PDFs, and then use iAnnotate PDF on your mobile device to annotate and grade them. Because those PDFs reside online, you can grade them anywhere, and you no longer need to carry around a briefcase full of paper-based assignments.
- Turn your PowerPoint presentations into PDFs, and then connect your mobile device to the projector in your classroom. Then, use iAnnotate PDF to display the presentation, which you can annotate or draw on as you deliver your lecture.

Available for: iOS ($9.99)

Other resources

- iAnnotate PDF home: http://www.branchfire.com/iannotate
- Review: http://www.facultyfocus.com/articles/app-of-the-week/app-of-the-week-review-iannotate-pdf/
- YouTube: http://youtu.be/kXhaF98ZhVE

Productivity App: Documents to Go

Documents to Go allow you to view, edit, and create Microsoft Office files (Word, Excel, and PowerPoint) and to view PDFs.

Example(s) of educational use

- Use this app to create or edit presentations or documents when you are unable to do so at a desktop PC.

Available for: iOS (free), Android (free), Blackberry (free)

Other resources

- Documents to Go home: http://www.dataviz.com
- Review: http://www.iphonejd.com/iphone_jd/2013/09/documents-to-go-update.html
- YouTube: http://youtu.be/rAQmV_5Kp3Y

Productivity App: Todoist

Todoist is a task-manager that helps you keep track of your projects, tasks, and other to-do items. You can assign your tasks to different categories, indicate how important they are, and give them due dates. You can also share tasks with other users of Todoist. The app is cloud-based, so when you add a task on one device (such as on your smart phone) it will synchronize across all your devices (such as your desktop PC). Tasks can be configured so that you are reminded of impending ones by email or text message.

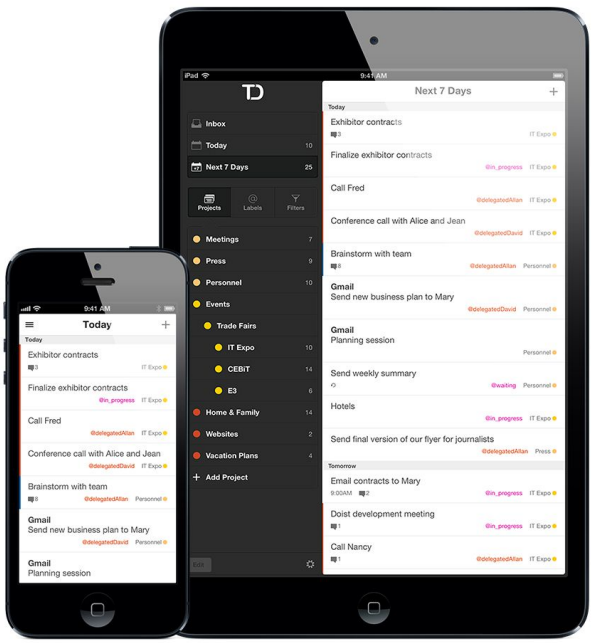
Example(s) of educational use

- Instructors and students can use Todoist to keep track of their projects, assignments, and other tasks. Like any good task manager, Todoist will help you manage your time and responsibilities.

Available for: iOS (free), Android (free), Blackberry (free), and any web browser (free).

Other resources

- Todoist home: https://en.todoist.com
- Review: http://androidcommunity.com/todoist-hands-on-does-it-get-things-done-20140704/
- YouTube: http://youtu.be/nOTITKfabgU



Productivity App: Readme!

Readme! helps you read more quickly. For most people, the pace at which they read is limited not by their mind's ability to understand but rather by their eyes' ability to move back and forth over the text. Readme! overcomes this physical limitation by presenting a text one word at a time on the screen of the user's mobile device: you no longer needs to move your eyes over the text. Readme! works with the following document formats: DOC, RTF, TXT, and ePub. With Readme!, some users can increase their reading speed, with little loss in comprehension, to 720 words per minute.

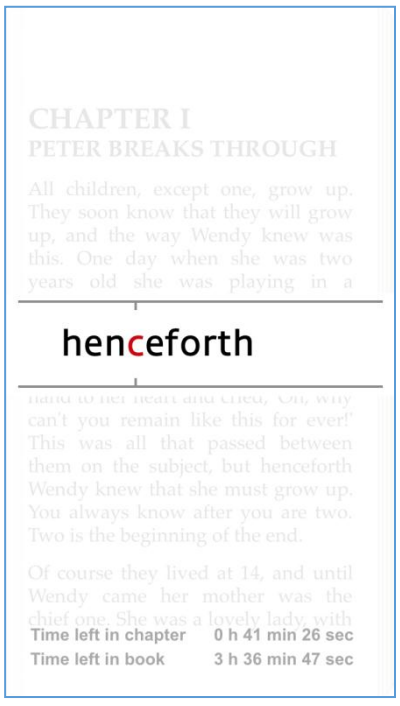
Example(s) of educational use

- Instructors can use this app to read documents that they only need a cursory knowledge of (such as an annual report for a department).
- Students can use this app to quickly read a document to get an overview of it, before rereading it more thoroughly in a normal manner.

Available for: iOS ($1.99), Android ($1.99).

Other resources

- Readme! home: http://www.readmei.com
- Review: http://gadgets.ndtv.com/apps/news/readme-ebook-speed-reading-app-for-iphone-now-available-to-download-546930
- Vimeo video: http://vimeo.com/96971737



Productivity App: Dropbox

Dropbox provides you with online storage for any digital file: photos, documents, videos, and so on. Because the files are stored online, you can access them from any mobile device or PC. Files can also be shared with individual users or can be made publicly available. Dropbox provides 2 GB of storage for free, and additional amounts can be purchased. Alternatives to Dropbox include Sugar Sync (which provides 5 GB of storage for free) and Google Drive (which provides 15 GB of storage for free).

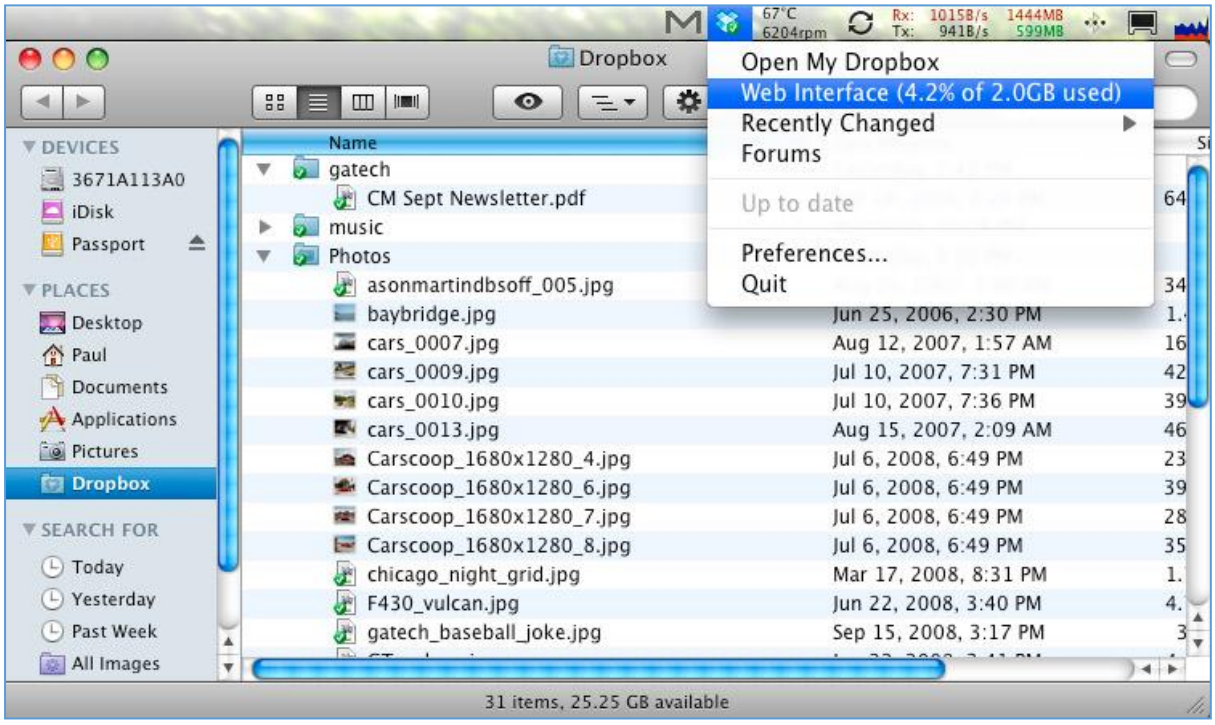
Example(s) of educational use

- Use Dropbox to store files that you need to use in multiple locations (like home and office), so that you can access them anywhere.
- Use DropBox to share files with a group of colleagues or students.

Available for: iOS, Android, Blackberry, any web browser (all free).

Other resources

- Dropbox home: https://www.dropbox.com
- Review: http://www.pcmag.com/article2/0,2817,2343852,00.asp
- YouTube: http://youtu.be/l6tkGSIFsH0



Productivity App: Evolvo

Evolvo is a text-to-speech app, which means that it will read a document, article, or eBook to you using a computer-synthesized voice. You can control the reading speed, and can select from several different voices (including Arabic). Files that work with Evolvo include PDF, TXT, DOC, HTML, RTF, PPT, and more.

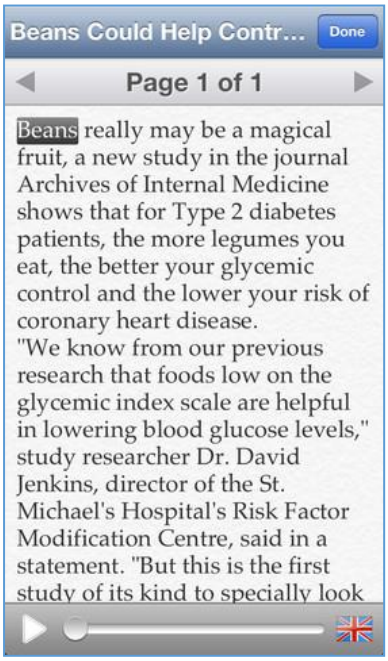
Example(s) of educational use

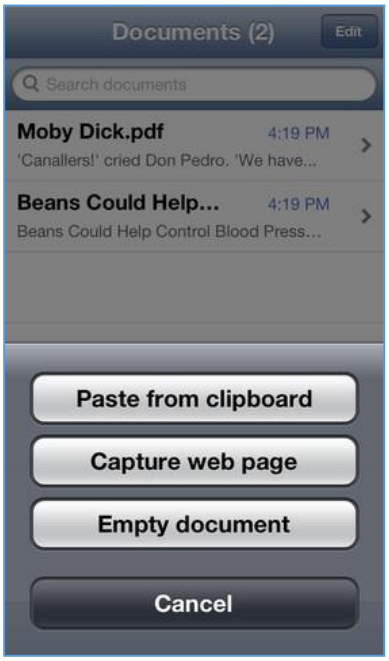
- Use Evolvo to read documents to you when you are too tired to read normally.
- Use Evolvo when you want to read a document more quickly than normal (by increasing the reading speed of Evolvo till it exceeds your own reading speed).
- Individuals with limited vision can use Evolvo to read texts that would otherwise be inaccessible.

Available for: iOS ($2.99). An alternative for Android is IVONA Text-To-Speech (free).

Other resources

- Evolvo home: https://itunes.apple.com/ca/app/evolvo/id543469527?mt=8
- IVONA home: https://play.google.com/store/apps/details?id=com.ivona.tts&hl=en





Connecting App: Hootsuite

Hootsuite helps you manage social media updates from sources such as Facebook, Twitter, LinkedIn, and Foursquare. Streams from any or all of those social media platforms can be pulled in to the Hootsuite app. If you have multiple social media accounts – for example, a personal Twitter account and a professional Twitter account – you can use Hootsuite to aggregate that content into a single, organized space. Hootsuite also allows you to create updates that will be delivered according to a specified schedule.

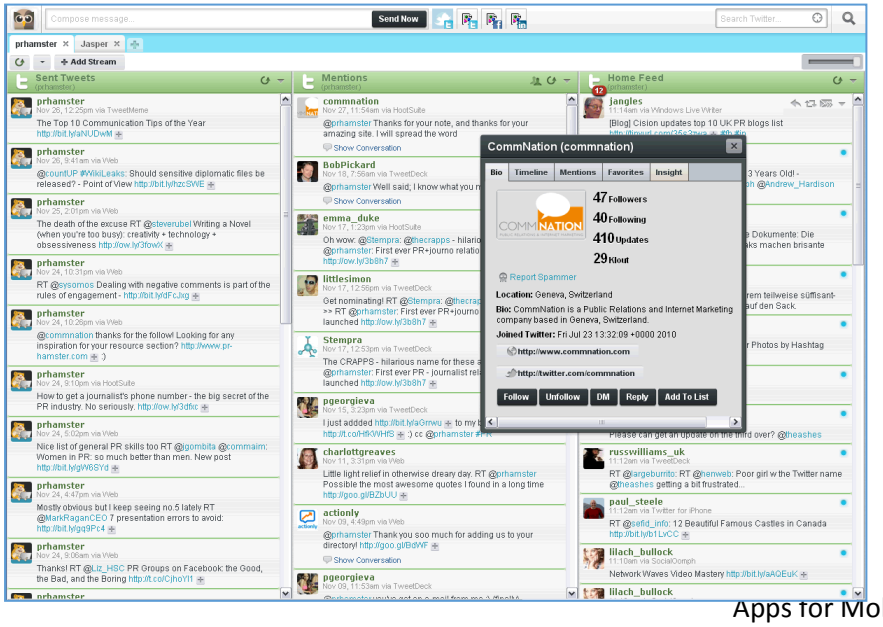
Example(s) of educational use

- Students and instructors can use Hootsuite to manage their social networks more efficiently.
- Use Hootsuite to create content streams for specific searches. For example, you can create a stream to search Twitter for the phrase "blended learning," or create a stream to search LinkedIn for the phrase "chemical engineering."
- Use Hootsuite to schedule future postings to social media sites. For example, if you use Twitter in your course, you can schedule reminders about assignment deadlines to be tweeted automatically.

Available for: iOS (free), Android (free).

Other resources

- Hootsuite home: https://hootsuite.com
- Review: http://iag.me/socialmedia/reviews/7-reasons-why-you-should-use-hootsuite
- YouTube: http://youtu.be/NtDe5lkKP5E



Connecting App: Skype

With Skype, you can make inexpensive phone calls to regular landline phones or cell phones, or to anyone who has Skype installed on a mobile device or PC. Skype also allows you to make video calls (but in this case, both you and the person you are calling must be using Skype, either on a mobile device or on a PC). Groups of individuals can also make conference calls using Skype.

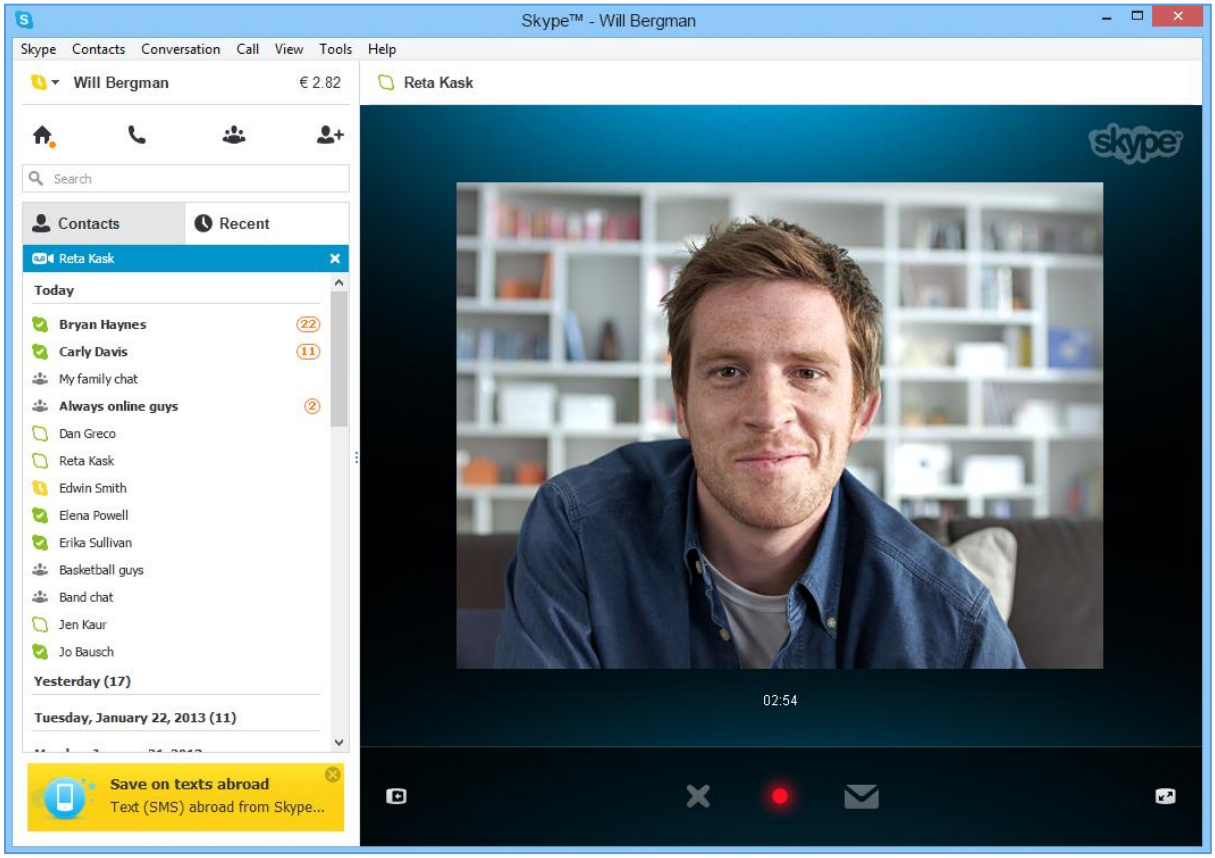
Example(s) of educational use

- Use Skype rather than a landline phone or cell phone to save long distance costs.
- Use Skype to make video calls.

Available for: iOS, Android, Windows Phone, Blackberry (all free).

Other resources

- Skype home: http://www.skype.com
- Skype in the classroom: https://education.skype.com
- YouTube: http://youtu.be/Vn1lTWHfO4g



Connecting App: SyncPad

With SyncPad, you can share an interactive whiteboard with others: what you draw or write on Syncpad appears on the mobile devices of the people you are sharing it with. The other users can simply view what you are sketching or they can interact with it – that is, they can contribute to or edit the sketch. SyncPad also allows you to upload an image or PDF document and write or draw on it.

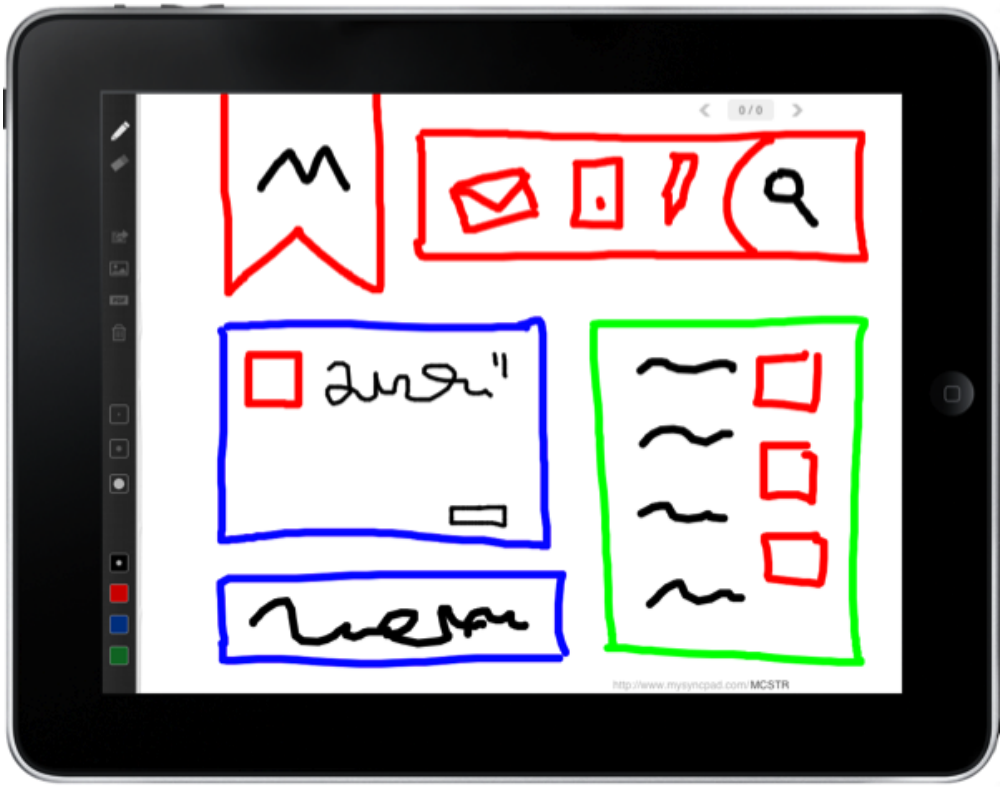
Example(s) of educational use

- Use SyncPad in conjunction with Skype to collaborate with remote colleagues on plans for a research project.
- Students can use Syncpad in conjunction with Skype to collaborate on projects that require sketching, diagramming, or visual designing.

Available for: iOS, Android, Windows Phone, Blackberry (all free).

Other resources

- SyncPad home: https://syncpadapp.com
- YouTube: http://youtu.be/4mRah8BBvyg
- Review: http://www.macstories.net/reviews/syncpad-the-collaborative-online-whiteboard-for-ipad-review-giveaway



Language Acquisition: BYKI

There are dozens of excellent apps for learning additional languages, and BYKI is one of them. BYKI uses flashcards, and is therefore good for increasing vocabulary. Its flashcards are "intelligent," meaning that a given card will appear less frequently if you consistently respond with its correct answer. Cards that give you more difficulty will appear more frequently. Another excellent language app is Duolingo, which uses a game-based approach to encourage learners. Busuu is another language app that is unique in connecting people who are trying to learn each other's native language: native French speakers who are learning Arabic will be connected with native Arabic speakers who are learning French, so that they can assist one another.

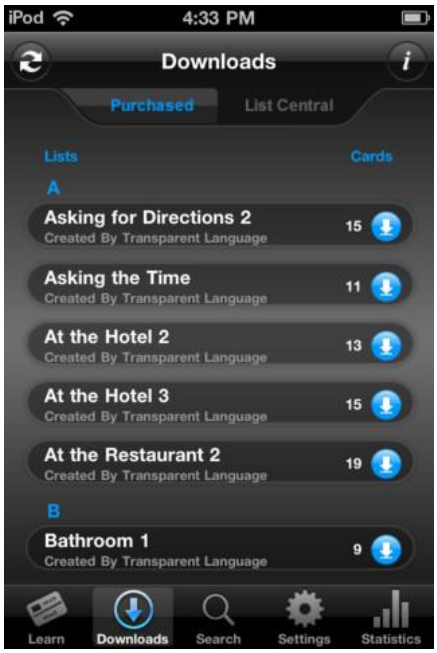
Example(s) of educational use

- Students who are learning a new language can use BYKI (or other language acquisition apps) to supplement their usual course materials. Language acquisition apps are especially suited to mobile devices because they allow a student to acquire vocabulary during what would otherwise be wasted time – for example, while waiting to meet someone, while waiting for a ride, and so on.

Available for: iOS ($7.99), Android ($7.99).

Other resources

- BYKI home: http://www.byki.com
- YouTube Video: http://youtu.be/FrPsaTpY8iE



Social Learning Platform: Top Hat

Top Hat allows an instructor to ask questions during class, in an online learning space. Students then respond to the questions using the Top Hat app on their mobile device. Top Hat aggregates the students responses and shows the results to the instructor as a bar graph. In many ways, Top Hat is similar to the personal response systems – or clickers – that instructors at some universities have used for almost ten years. However, while a clicker is a dedicated handheld unit that students must buy and carry with them, Top Hat is an application that students install on their smart phone, tablet PC, or laptop PC. A similar app is called Socrative.

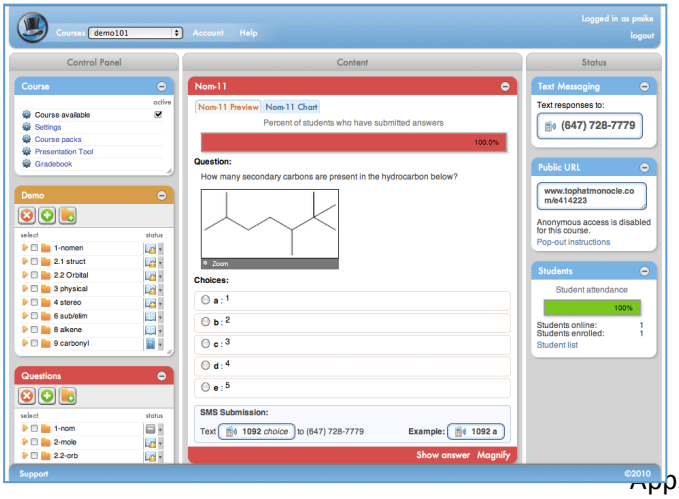
Example(s) of educational use

- Use Top Hat to pose questions to students which they answer individually. Then, after showing the students the bar graph of the results for the whole class, have them discuss the question again in groups of two or three. Finally, have the students again use Top Hat to respond to the same question, and show them the new bar graph results for the class. Typically, the peer instruction they engaged in will result in improved performance and greater engagement.
- Use Top Hat to quiz students at the end of a lecture or unit to assess whether they have really understood the material.

Available for: iOS, Android; the app is free, but a one-term subscription is $20.

Other resources

- Top Hat home: https://tophat.com
- Review: http://mashable.com/2012/10/22/top-hat-monocle
- Vimeo video: http://vimeo.com/37812362



Social Learning Platform: Piazza

Piazza allows instructors to pose questions or problems in an online space which students then collaboratively solve outside of class. What makes Piazza unique is that it combines the functionality of an online discussion forum with the functionality of a wiki: different questions appear in a linear sequence (like an online discussion forum) but students solve the question in a single shared space (like a wiki). After a question seems to be solved, students can vote on its correctness, or the instructor can flag it as officially solved.

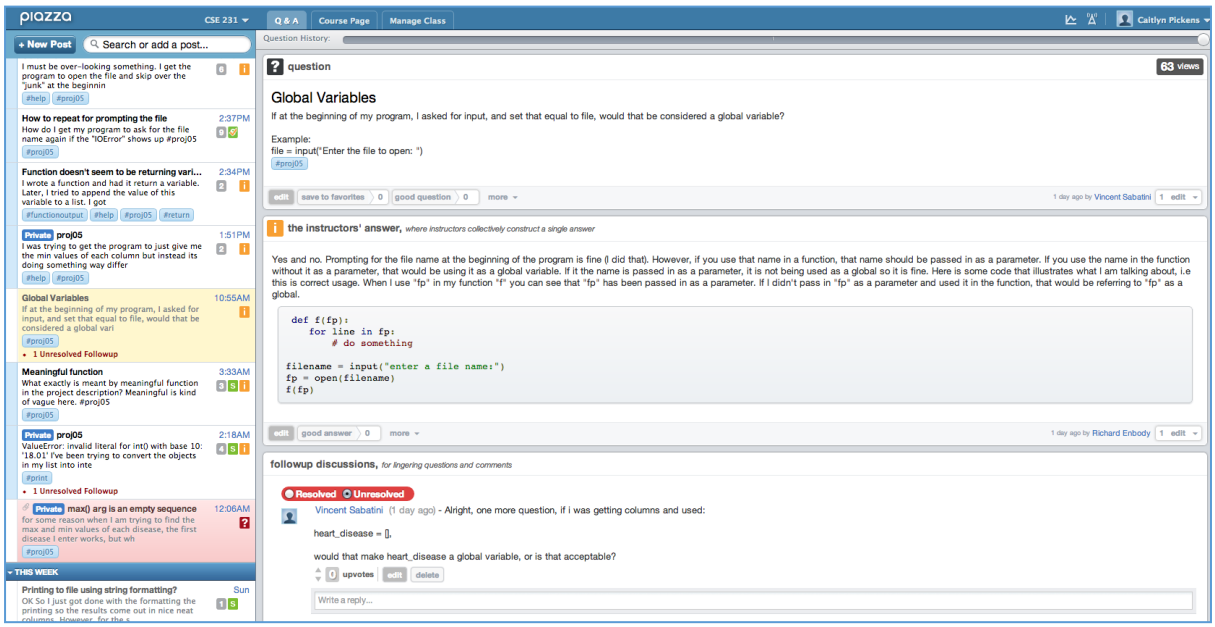
Example(s) of educational use

- Use Piazza to leverage peer instruction in your course. That is, pose questions in Piazza, and ask students to collaborate in solving them. As well, encourage students to pose additional questions of their own, and again ask them to collaboratively solve them. Provide supervision in Piazza by flagging questions that have been fully solved, or by giving hints when the students seem to become stuck.

Available for: iOS (free), Android (free).

Other resources

- Piazza home: https://piazza.com
- Review: http://chronicle.com/blogs/profhacker/using-piazza-to-encourage-interaction/39317



Conclusion

In summary, there are hundreds if not thousands of high quality, inexpensive apps available that can be effectively used by university instructors and students to enhance teaching, learning, and productivity. The ones included in this document are only the tip of the iceberg. To locate apps that might be especially relevant to your discipline, simply do a Google search that includes the word "app," the name of the operating system of your mobile device (such as "iOS" or "Android"), and the name of your discipline or topic. The chances are good that you will find an app to suit your needs.