

How To Evaluate and Select Appropriate Open Technology Resources for K-12 Classrooms

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Summary and Resources



Ms. Schrock has been a school district Director of Technology, an instructional technology specialist, and a middle school librarian. Currently she is an online adjunct graduate-level professor for Wilkes University (PA).

Kathy has authored hundreds of articles and several books about educational technology and is a frequent presenter at national and international conferences. View her current online resources at Kathy Schrock's Guide to Everything!

Introduction: The importance of planning

No matter what hardware your students are using in the classroom, the planning process is still the most important component of meaningfully embedding technology into teaching and learning. Because there are so many open educational resources and paid technology resources available online, including standard evaluation criteria into your planning process is critical.

There are several pedagogical models available to support you as you develop your plans, including models that:

- Allow students to utilize the higher-order thinking skills of Bloom's Revised Taxonomy (analyzing, evaluating, and creating)
- Target the transformational levels of SAMR, providing students with more choices as outlined in the TECH model
- Allow you to think carefully about the relationship between pedagogy and technology included in the TPACK model
- Include the important standards proposed in the ISTE Standards for Students

When deciding which technology resources to use as part of a unit, the first thing to consider is your main goal. Are you seeking an online site, tool, or app to provide additional curriculum content for the student or is the goal for the students to create a product to showcase their acquisition of content knowledge?

The process of evaluating a site or app is different in each case.

Selecting Information for Consumption

Before providing additional learning materials in the form of web page resources, there are several questions you should consider. Some of these include:

- What is the reading level of the sites you are listing?
- How can you determine the credibility of the author of the page?
- Is the information free from bias?
- Is the information current?
- Are citations included on the page?
- Do credible sites also link to the page?
- Is the site easy to navigate?

There are also specific questions to consider when choosing other online resources, such as blogs, podcasts and videos that you want your students to read or view. Some of these resources and relevant criteria include:

Blogs

- Is the purpose of the blog stated on the blog page?
- Are the credentials of the author included?
- Is it obvious from the blog's comments that the creator is an expert on the topic?
- Is the content free from grammatical and spelling errors?
- If the blog is intended to inform, is the information updated regularly?
- Does the content have educational value?

Online Tours

- Is there an option to take a different path during the tour?
- While taking the tour, is there an option to get back to the beginning?
- Does the tour include links to additional websites that can enhance the tour?
- Is there an option to leave feedback about the tour?
- Is a virtual reality version of the tour available?
- Does the online tour have educational value?

Podcasts

- Are the technical qualities (audio, music, transitions) acceptable?
- Is a written transcript of the podcast included?
- Are the speakers in the podcast engaging?
- Is it obvious how to add the podcast to an aggregator like iTunes®?
- If visuals are used, do they enhance the podcast?
- Does the content of the podcast have educational value?

Online Content Videos

- Is the video well planned and organized?
- Are the camera shots varied to add interest?
- If the video includes special effects or music, do they add to the video content?
- Is the vocabulary used by the speaker(s) in the video appropriate for the viewer?
- Is there a transcript of the video included?
- Does the content of the video have educational value?

Online Digital Stories

- Is the topic of the story explained or inferred?
- Does the story have a purpose?
- Is the information presented in an organized and logical manner?
- If music is included, does it improve the story?
- Does the content of the story have educational value?

If you are evaluating a content-based app for iPad® or Android® devices, there are some additional items to consider, including curriculum-connection, authenticity, feedback, differentiation, user-friendliness, reporting, instructions, and more.

Evaluation instruments for iPad and Android apps are avaiable below:

Content-based apps:

http://www.ipads4teachinq.net/uploads/3/9/2/2/392267/evalipad_content.pdf

Creation apps:

http://www.ipads4teaching.net/uploads/3/9/2/2/392267/evalipad_creation.pdf

Selecting Tools for Creation

When planning for the use of technology as an assignment or assessment in the classroom, you must decide whether to provide students with a toolbox of technologies or allow them to choose their own apps. If you decide on the latter, you will need to define the goal of the assignment/assessment—for instance, record a podcast or create a video—so the students can choose the appropriate tool(s).

Again, there are certain criteria to consider when searching for an app that students can use to create a product. Does the app:

- Allow the project to be worked on both on a mobile device and computer?
- Include the ability to screen-capture the process of product creation?
- Allow students to use a microphone to add narration to the product?
- Provide multiple ways to share the final product?
- Include an in-app tutorial or help file?
- Provide instruction in various modalities (i.e. written, video, audio)?
- Offer support from the app creator and include a web page that offers additional help?
- Include a collaborative aspect?

When considering the use of an online tool, some of the same criteria apply, but there are additional things to consider. Does the online tool:

- Allow both private and public products?
- Work without a login?
- Include collaborative aspects?
- Function on Chromebooks® as well as laptops?
- Allow importing from other assets to enhance the product?
- Enable students to export the product to a common file format (JPEG, MP4, etc.)?

Summary and Resources

Whether you want students to use technology resources for content support or the creation of a product, there are countless resources to support you. You can also visit the Critical Evaluation page of my website Kathy Schrock's Guide to Everything (http://www.schrockguide.net/critical-evaluation.html). There you will find downloadable, fillable PDF forms for evaluation of the types of online resources discussed in the article, including:

- Web pages
- Virtual tours
- Blogs
- Podcasts
- Videos
- Digital stories
- iPad/Android content apps
- iPad/Android creation apps

You will also find a complete list of the apps and tools that I recommend for creation products, as well as additional support material on each topic.

- Concept maps: http://www.schrockguide.net/concept-mapping.html
- Digital stories: http://www.schrockquide.net/digital-storytelling.html
- Infographics: http://www.schrockquide.net/infographics-as-an-assessment.html
- Screencasting: http://www.schrockquide.net/screencasting.html
- Sketchnoting: http://www.schrockguide.net/sketchnoting.html
- Creating with the iPad: http://www.ipads4teaching.net/creating-with-the-ipad.html
- Online tools (categorized by type): http://www.schrockguide.net/online-tools.html
- Augmented and Virtual Reality: http://www.schrockquide.net/augmented-reality.html

If you want to learn more about the pedagogical models discussed at the beginning of the article, you can start on this page: http://www.schrockguide.net/samr.html.