Guide: Choose a Technology

You can use educational technology to help you achieve the goals you've set for your school or district. But, selecting the technology that best fits your needs can be challenging. If you are looking for a technology to implement, you can use this guide to help you with that process. After following these steps you will hopefully have selected an educational technology that fits your needs and can continue to use the Wizard to learn how you can evaluate whether this new technology is helping you to achieve your goals.

FOUR STEPS FOR SELECTING THE RIGHT TECHNOLOGY

1. **Conduct a needs assessment.**
2. **Discover what technology might fit your needs.**
3. **Vet potential technologies.**
4. **Begin initial conversations with technology providers.**

1. CONDUCT A NEEDS ASSESSMENT.

A needs assessment will help you identify gaps (the needs), set priorities, and determine important criteria for solutions (the educational technology you choose). This assessment can take many forms. It can be informal conversations or interviews with various teachers, students or administrators, or it could be a more formal survey, focus group, or working group. You will have to decide what kind of needs assessment you would like to engage in based on the time and resources you have available. If you feel as though you already know the needs of your school or district and have a sense for how educational technology can help you meet those needs, you may not need to conduct a needs assessment. But, if you do choose to conduct a needs assessment, we've included some guidelines below:

A. Determine your knowledge objective(s). It's important to clearly outline what you want to learn from the assessment you are conducting. Write out some questions you want to be able to answer at the end of the assessment based on the conversations you had. This will help you determine who to talk to and what questions to ask them. For example, if you want to know what features might be most effective in a new technology, you might want to talk to students about the types of virtual tools and games they already use. If you want to know if there are specific subgroups of students that you should target the technology towards, you might want to talk to teachers about which students need the most help. Make sure to write out each of these knowledge objectives and refer back to them throughout the process of designing and conducting your assessment.

B. **Choose who you want to participate in your assessment.** Before you begin conducting your assessment you should determine who you want to hear from. Perhaps your objectives require input from a wide variety of sources, or maybe you only want to focus on teachers, administrators, or students. Determine who you'll need to speak to and invite them to participate in your assessment.

C. Develop your questions. Once you know who will participate, come up with the questions that you will ask them in order to reach your knowledge objectives.

D. Conduct your assessment. You know what you will ask and who you will ask it to, now you can begin your assessment. You'll want to be recording responses in some way. For an informal assessment this may just mean taking notes during or after your conversations. For a more formal survey, this means recording responses in a systematic way.

E. Analyze your data and draw conclusions. After you've spoken to everyone you need to, look back at your data (notes or survey responses) for trends and themes. Do you see any comments being made across multiple participants? Are there needs that people already agree on? These are the things you'll want to take into consideration as you start looking for the right educational technology.

2. DISCOVER WHAT TECHNOLOGY MIGHT FIT YOUR NEEDS.

Below are some questions to keep in mind while you look at the various education technologies that are out there:

- ☐ *What is the problem you are trying to solve?*
- ☐ *Who should be involved in the selection process?*
- ☐ *What are the technical requirements?*
- ☐ *How much training is required and how is it delivered?*
- ☐ *What's the intended implementation approach?*
- ☐ *What kind of data/reporting tools do you need?*

The table below is a good starting point for determining where to look for a technology. There are a number of resources that compile reviews and ratings of technologies. These sites can help you narrow down the number of technologies you are considering.

Table 1: *Available Resources for technology reviews and ratings*

	Resource Name						
Features	**EdSurge**	**Edshelf**	**LearnTrial**	**Common Sense Education**	**What Works Clearinghouse for Digital Resources**	**iTunes**	**Learning Registry**
# of products reviewed	2,077	--	135	2,500	367	80,000	39,000
Avg # of reviews per product	40	<5	100	10-20	--	30	--
User comments/ratings	✓	✓	✓	✓	✗	✓	✗
App Store	✗	✓	✗	✗	✗	✓	✗
Special Features	Includes claims from vendors Offers concierge service Advanced Search Functionality	User-to-user sharing Highlights trending tools	Verifies educators for advanced functionality	Offers tips for implementation Each app has at least one expert review Offers digital citizenship resources for bullying, etc.	Publishes reports/reviews on products Uses third party research to evaluate products Created by the Department of Education		Created by the Department of Education

3. VET POTENTIAL TECHNOLOGIES.

In addition to pre-existing requirements and discoveries from the Needs Assessment, below is a checklist of questions to consider when vetting technologies. At the end of this guide there is a list of other resources that can help you vet education technologies.

- ☐ **Implementation model you have in mind vs. what tool is designed for**; e.g
  - small groups vs. whole class
  - remediation vs. general practice vs enrichment
  - self-directed vs. system-directed
  - in class vs. independent use
  - adaptable vs. assignable

- ☐ **Product fit;** e.g.
  - What is the problem that you wish to solve, and how does the app help to address this problem?
  - Do intended users find the resource engaging?
  - Does the theory of change / learning underlying the app match your approach?

- ☐ **Product design**; e.g.
  - Does the resource address the desired outcomes for learning, productivity, etc?
  - Is it accessible for all target users?
  - For student-focused apps, is it aligned with the standards you care about?

- ☐ **Implementation issues**; e.g
  - How easy is the resource to use?
  - Do teachers / students / other intended users have to undertake some preparatory training? Is this provided by the developer?
  - Is the technology compatible with your school systems?
  - For technologies that are meant to be used out of school, do intended users have access to the necessary devices and bandwidth?

- ☐ **Cost and time** needed for implementation
  - What are the license costs?
  - Will the developer provide a free demo period? (this is strongly encouraged!)
  - What costs are associated with implementing the product? E.g. any new equipment purchases involved?
  - What costs are associated with administrative and teacher time for training, reviewing the product, and incorporating it into the curriculum?

- ☐ **Evidence of effectiveness,** and specifically effectiveness *for students like yours* in *settings like yours*

- ☐ **System data availability***:* what learning and usage indicators does the technology track, and do these provide the information you need to determine whether the technology is having the desired effects?

4. BEGIN INITIAL CONVERSATIONS WITH TECHNOLOGY PROVIDERS.

Once you've narrowed down the number of potential education technologies, you should begin talking to providers and developers. The Starting Conversations with Technology Developers guide in the Wizard will help you with that process.

Table 2: *Other Resources for Vetting Education Technologies*

Rubric	Author(s)	Context/Target Audience	Notes	Link
Kaplan Educational Product Evaluation Checklist	Kaplan, Inc.	Aimed at developers creating apps of any subject	The U.S. Department of Education cited Kaplan's rubric as an industry best practice	Link
The Cheatsheet to Choosing Effective Education Apps	Jeff Dunn	General list targeted toward teachers of any subject	Produced by DailyGenius	Link
Evaluation Rubric for iPod Apps	Harry Walker	General list targeted toward teachers of any subject	Harry Walker is an elementary principal at a school using 1:1 technology and is completing a dissertation on apps' impact on student achievement	Link
Using iPad Applications to Increase Literacy Skills for Children PreK to Grade 3 With Disabilities	Angi Stone-MacDonald	Pre-K - 3 literacy teachers of students with disabilities	Targeted toward early childhood in general and students with disabilities in particular	Link
Mobile Application Selection Rubric	eskillslearning.net	General list targeted toward teachers of any subject	Includes CCSS alignment as a criterion	Link
CRITICAL EVALUATION OF A CONTENT-BASED IPAD/IPOD APP	Kathy Schrock	General list targeted toward teachers of any subject	Includes Bloom's taxonomy and CCSS alignment	Link
Critical Evaluation of a Creation iPad/iPod App	Kathy Schrock	List is focused on choosing apps that let students create		Link
iPad App Assessment Rubric	Chicago Public Schools	List targeted toward school librarians	Users fill out a survey and are directed to a site that scores the app for them	Link
ievaluate App Rubric - 21 Things 4 iPads	Jeannette Van Houten	Targeted toward special education teachers, but could be used more generally		Link
Educational App Evaluation Checklist	Tony Vincent	General list targeted toward teachers of any subject	Used Harry Walker's and edudemic.com's rubrics for inspiration	Link
iPad App Evaluation Guiding Questions	iPad2educate	General list targeted toward teachers of any subject	Includes categories for education apps and organization/utility apps	Link