## **Guide: Choose a Technology**

Educational technology can help to achieve the goals you've set for your school or district. But selecting the technology that best fits your needs can be challenging. The RCE Coach is targeted to those who have already selected or implemented a technology. If you are looking for a technology to implement, this guide will help you with that process and you can return to the Coach when you are ready to plan a pilot of that technology and start your evaluation.

#### FOUR STEPS FOR SELECTING THE RIGHT TECHNOLOGY

- 1. Conduct a needs assessment.
- Discover what technology might fit your needs.
- 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 might not have to conduct a needs assessment. But if you do choose to conduct a needs assessment, we've included some helpful guidelines:

- 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 answer at the end of the assessment based on the information you collect. 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 you should target specific subgroups of students with the technology, 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 want to focus only 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.** When you know who will participate, develop the questions that you will ask them to reach your knowledge objectives.
- **D. Conduct your assessment.** Now you can begin your assessment. You'll want to record the responses in some way. For an informal assessment this could just mean taking notes during or after your conversations. For a more formal survey, this might mean 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. Have multiple participants made similar comments? Are there needs that people already agree on? These are the things you'll want to consider as you start looking for the right educational technology.

#### 2. DISCOVER WHAT TECHNOLOGY MIGHT FIT YOUR NEEDS.

Here are some questions to keep in mind while you look at the various educational technologies that are available:

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

A number of websites collect information like this, and more, to help you select the right technology. Another good starting point is the What Works Clearinghouse, which can help you find technologies that have been effective in other settings.

#### 3. VET POTENTIAL TECHNOLOGIES.

In addition to existing requirements and discoveries from the needs assessment, here is a checklist of questions to consider when vetting technologies:

- ☐ Does the implementation model you have in mind match what the tool is designed to do?
  - Small groups versus classrooms
  - Remediation versus general practice versus enrichment
  - Self-directed versus system-directed
  - In-class versus independent use
  - Adaptable versus assignable

#### ☐ Product fit

- What problem do you wish to solve, and how does the technology address this problem?
- Does the technology address the desired outcomes for learning, productivity, and so on?
- Does the theory of change or learning underlying the technology match your approach?
- Are student-focused technologies aligned with the standards you care about?

### Product design

- Do intended users find the technology engaging?
- Is it accessible for all target users?
- How easy is the technology to use?

### ☐ Implementation issues

- How easy is the technology to use?
- Do teachers, students, or other intended users have to undertake some preparatory training? Does the developer provide such training?
- Is the technology compatible with your school system's existing technology?
- For technologies meant to be used out of school, do intended users have access to the necessary devices and connectivity?

### ☐ Cost and time needed for implementation

- What are the license costs?
- Will the developer provide a free demonstration period? (This is strongly encouraged!)
- What costs are associated with implementing the technology? Are any additional equipment purchases involved?
- What costs are associated with administrative and teacher time for training, reviewing the technology, and incorporating it into the curriculum?
- Evidence of effectiveness
- Is there strong evidence of the effectiveness of the technology?
- Is the evidence of effectiveness specifically for students and settings like yours?

### System data availability

- What learning and usage indicators does the technology track?
- Do the indicators tracked by the technology provide the information you need to determine whether it is effective in achieving your goals?

#### 4. BEGIN INITIAL CONVERSATIONS WITH TECHNOLOGY PROVIDERS.

When you've narrowed down the number of potential educational technologies, you should begin talking to providers and developers about your needs and specific requirements. Our guide to conversations with product developers can help you start those conversations.

© 2016, Mathematica Policy Research, Inc. This document carries a Creative Commons (CC BY) license which permits re-use of content with attribution as follows: Developed by Mathematica Policy Research, Inc. as part of the Rapid Cycle Tech Evaluations project funded by the U.S. Department of Education.

