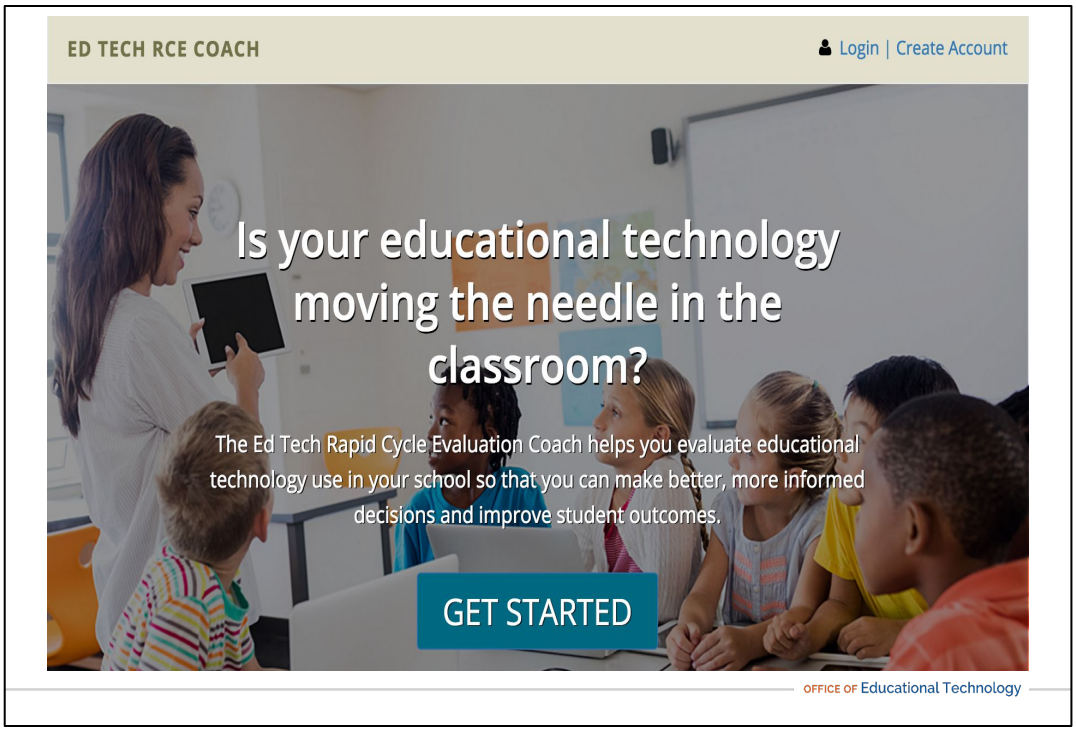
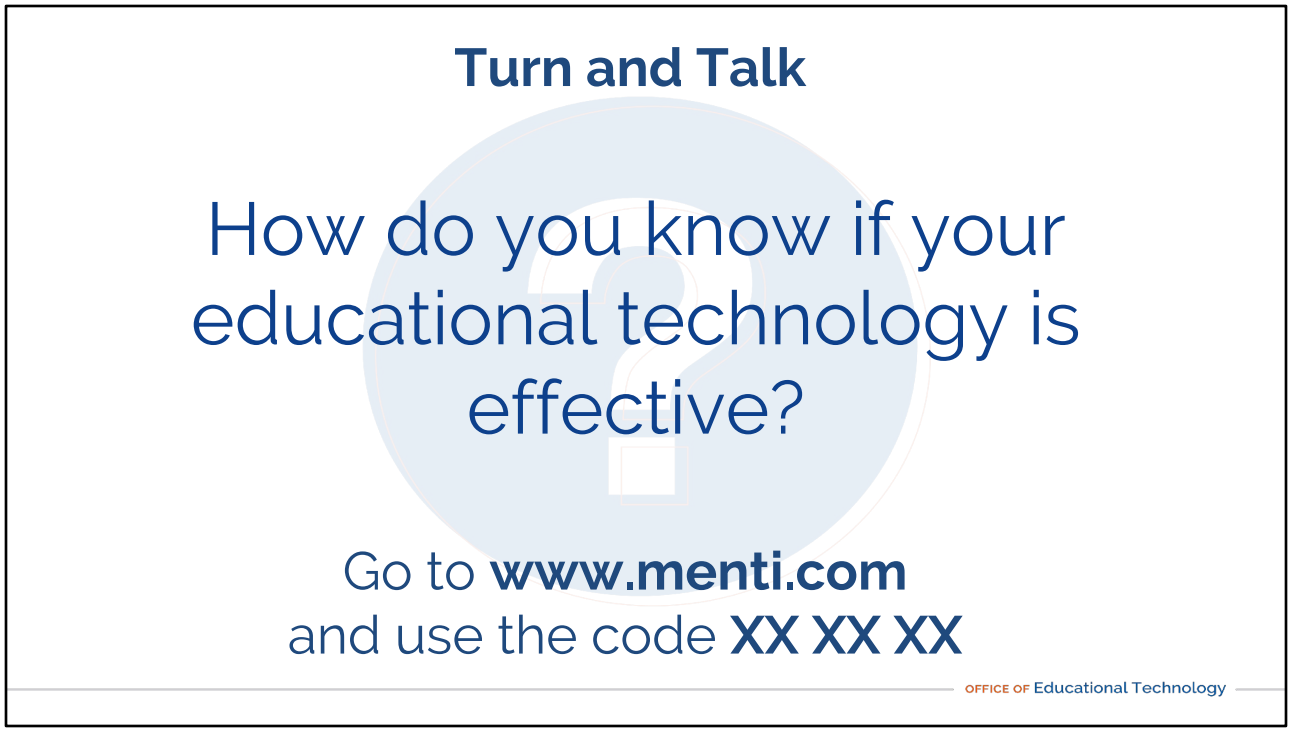


Time: 1-2 minutes

Say: The Office of Educational Technology at the US Department of Education partnered with the Institute for Education Sciences to contract Mathematica Policy Research & SRI International to design and field test tools to conduct rapid cycle evaluations in order to bring more evidence into decision making of edtech acquisitions and implementation methodologies.

What came out of this partnership was the Ed Tech Rapid Cycle Evaluation Coach, a platform that school and district leaders can use to conduct rigorous, quick turnaround evaluations of ed tech in an actionable timeframe with reliable results. It essentially walks you through an evaluation process in 5 easy steps, with coaching, prompts, and PD throughout.

The platform is free, web-based and openly licensed, and it's available now for anyone to get started on an evaluation. You can access the platform at www.edtechrce.org.

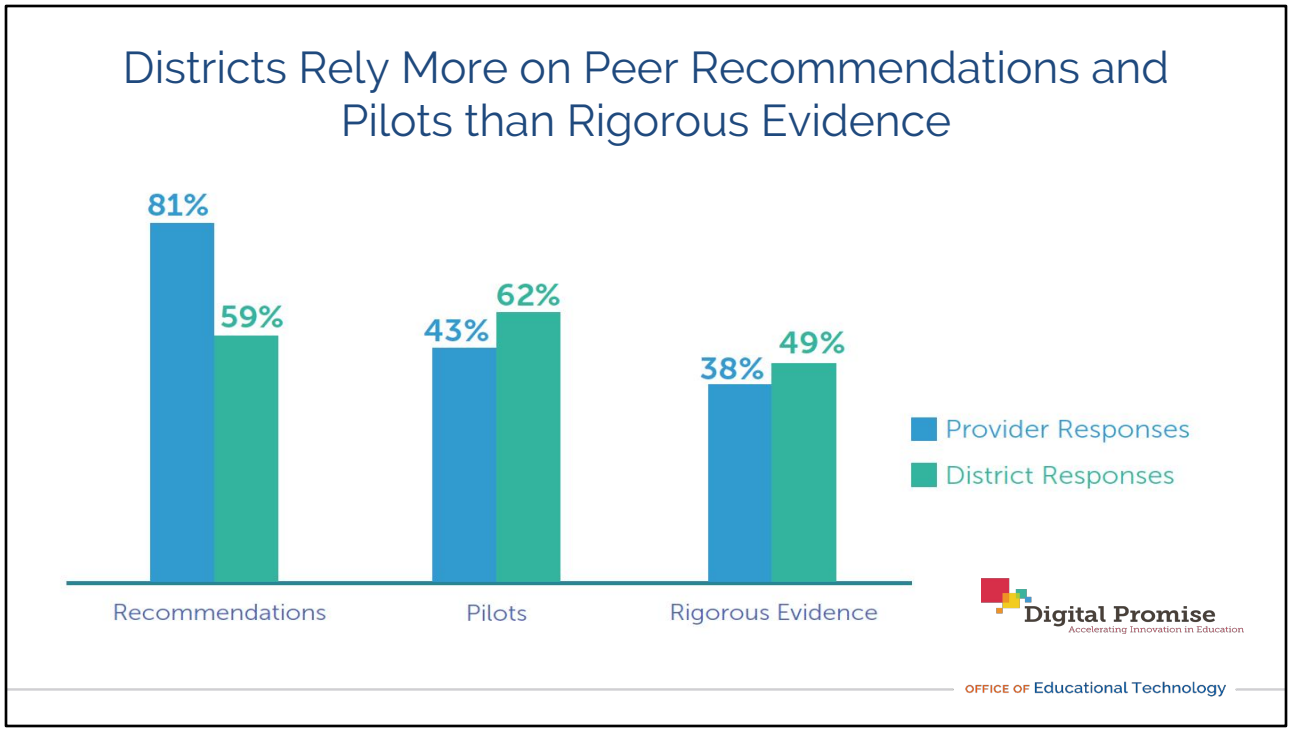


Time: 3-5 minutes

Setup: If you'd like to use the interactive poll shown here, go to www.mentimeter.com and create an account. This online tool lets you to create questions for the group you are presenting to and allows them to record and share their answers.

Say: How do you know if your educational technology is effective? Take out your phones/on your device, go to menti.com and type in this access code. It will then prompt you for your response. We'll circle back for a group discussion in 2 minutes.

Why is there a need for the RCE Coach?



Time: 1-2 minutes
Say: Why is there a need for this? At many schools and districts, it is currently not common practice to use rigorous evidence when making purchasing decisions around edtech. Often, schools and districts will rely highly on peer recommendations or marketing materials from the developers when making these decisions and one main goal of the RCE Coach is to bring more evidence into this process.

Time: 2-3 minutes

Say: Traditional research has its limitations:

1) Takes too long

Waiting as long as two years to know whether or not an app helps students learn is simply too long—apps are often updated on a weekly or monthly basis as new features are added, bugs are fixed, and user feedback is implemented. The app measured at the start of a traditional multi-year study may be a completely different app by the time the study is finished, making the results of the study irrelevant.

2) Costs too much and can't keep up

The complete development costs for many educational apps are a fraction of the cost for conducting traditional educational research studies. It wouldn't be economically feasible for most app creators (or schools) to spend $250k (a low price tag for traditional educational research) to evaluate the effectiveness of an app that only cost a total of $50k to build. Even if cost were not an issue, there is also a logistical volume problem with applying traditional research methods to evaluating educational apps; traditional research methods simply can't keep up with the ever increasing number of apps.

Serve Different Purposes

traditional research

=

high confidence of certainty of causal connections

OFFICE OF Educational Technology

Time: 1-2 minutes

Say: Additionally traditional large-scale research approaches are meant to demonstrate causal connections with a high degree of certainty and across different populations and settings.

Rapid cycle tech evaluations have a different purpose. Most school leaders, for example, don't require absolute certainty that an app is the key factor for improving student achievement. Instead, they want to know if an app is likely to work with their students and teachers. And they want to know which tools work in specific circumstances -- if a tool's use is limited to an after-school program, for example, the big evaluation that looks at average effects may not provide the most useful evidence, but a targeted RCE could assess whether a tool works in this setting.

We can start to build evidence in these smaller studies -- each study may be small and may not be totally conclusive, but the collection of some evidence is better than no evidence and definitely better than an over-reliance on the opinions of a small group of peers or well-designed marketing materials.

Context is King

OFFICE OF Educational Technology

Time: 1 minute

Say: Instead of asking the question - does it work or not- , we're more interested in understanding how it works in specific conditions: this kind of teacher, these kinds of students, this kind of school.

The new What Works Clearinghouse site - Find What Works - has been recently updated to include significant context tagging too, so the field is moving in this direction.

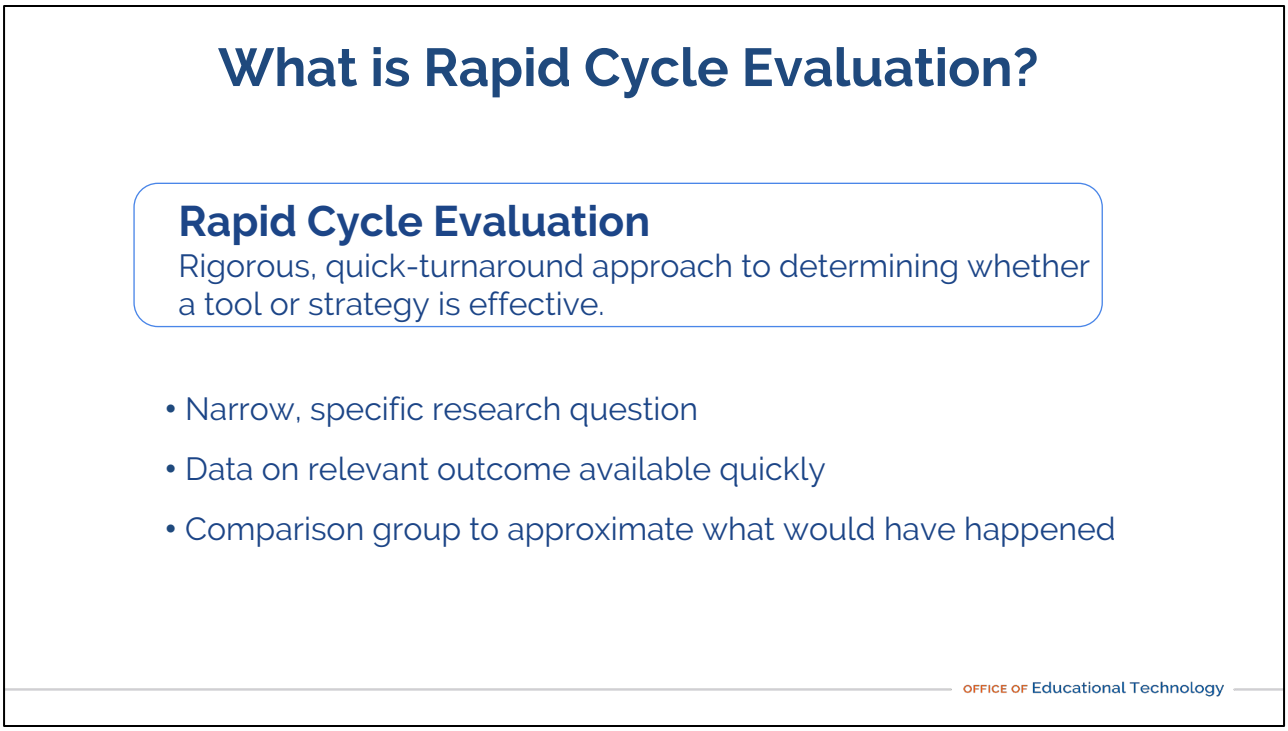
Time: 1 minutes

Say: The RCE Coach can even help change the way we do traditional pilots, which are often a “kick the tires” approach. We want to change this across the ecosystem.

Time: 1 minute

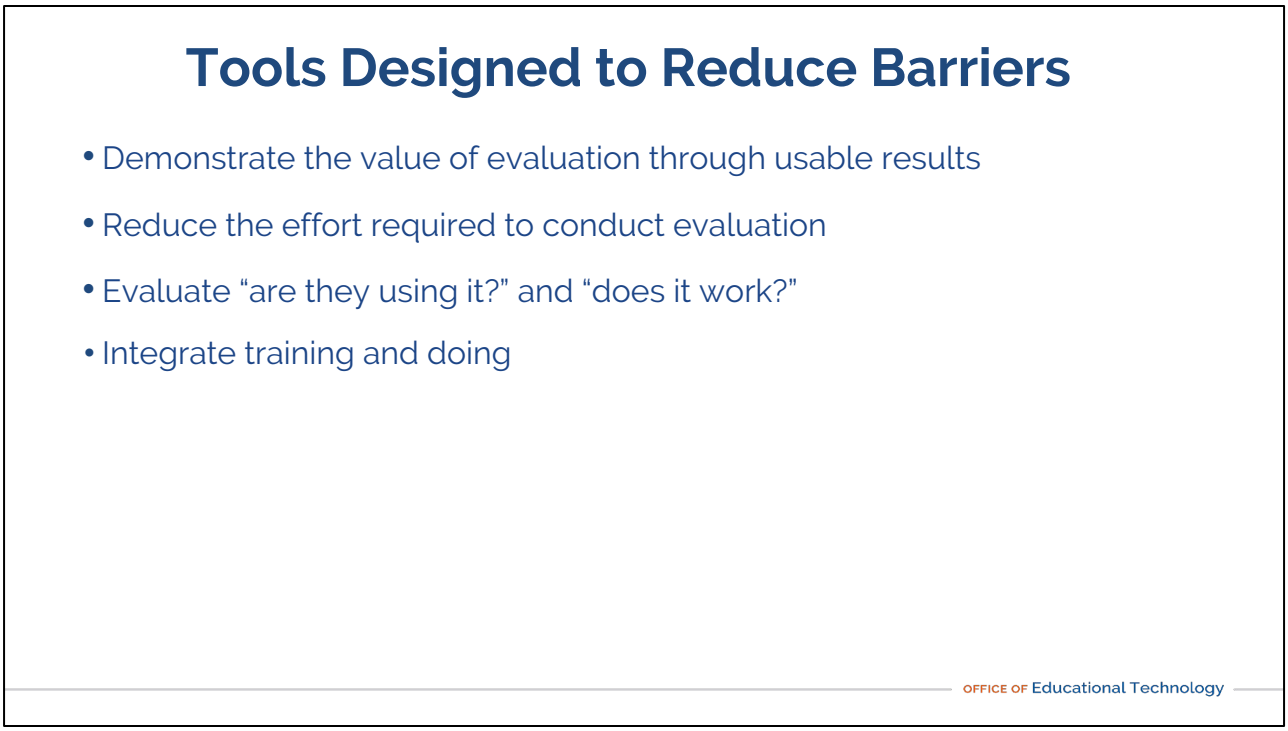
Say: Instead, we want pilots to be done thoughtfully and to be run more like a true test drive.

What is the RCE Coach?



Time: 1-2 minutes

Say: RCE is meant to focus on narrow and specific research questions. The evaluation period generates data in an actionable timeframe. Having a comparison group is an essential component of the RCE process (makes more rigorous).



Time: 1-2 minutes

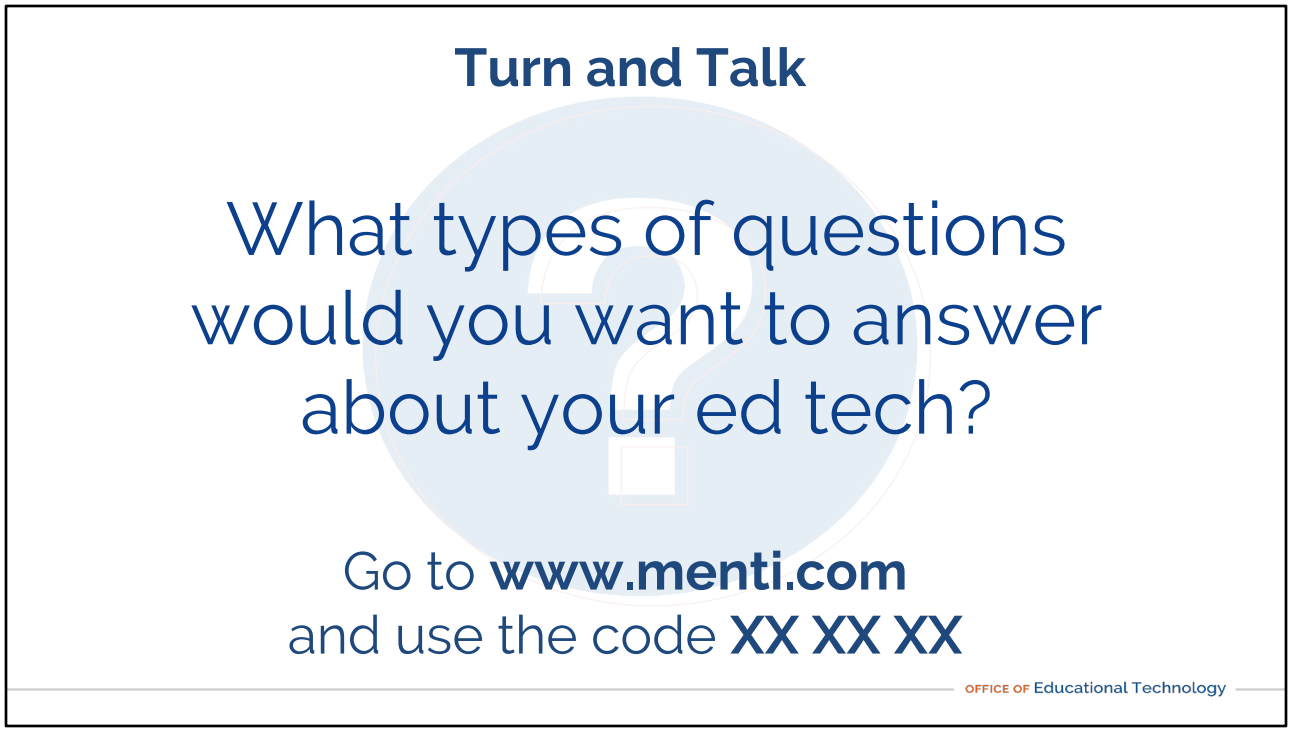
Say: The RCE Coach helps lower these barriers in the following ways (discuss bullets). It demonstrates the value of evaluation by empowering school and district leaders with an easy process that generates relevant evidence about the outcomes that matter/you care about. It reduces the effort required to conduct evaluations by taking the burden of the school/district to do the statistical analysis piece. It provides a methodology and tools to facilitate the questions of "are they actually using it?" and "does it work?" And, it embeds help text, examples and case studies throughout, exactly at the points in the process when you might be unsure, to provide guidance and in-the-moment training.

Examples from the Field

- Does use of **Tech A** in middle school ELA courses lead to improved **benchmark assessment scores**?
  - How do students who used **Tech A** do compared to students who used **Tech B**?
  - Do students who complete all **10 lessons** in **Tech A** have better outcomes than those who do not?
- Does **Tech A** increase **fall NWEA math scores** among **Title I elementary summer program participants** compared to other students from the same schools and grade levels **who did not use Tech A**?

Time: 1-2 minutes

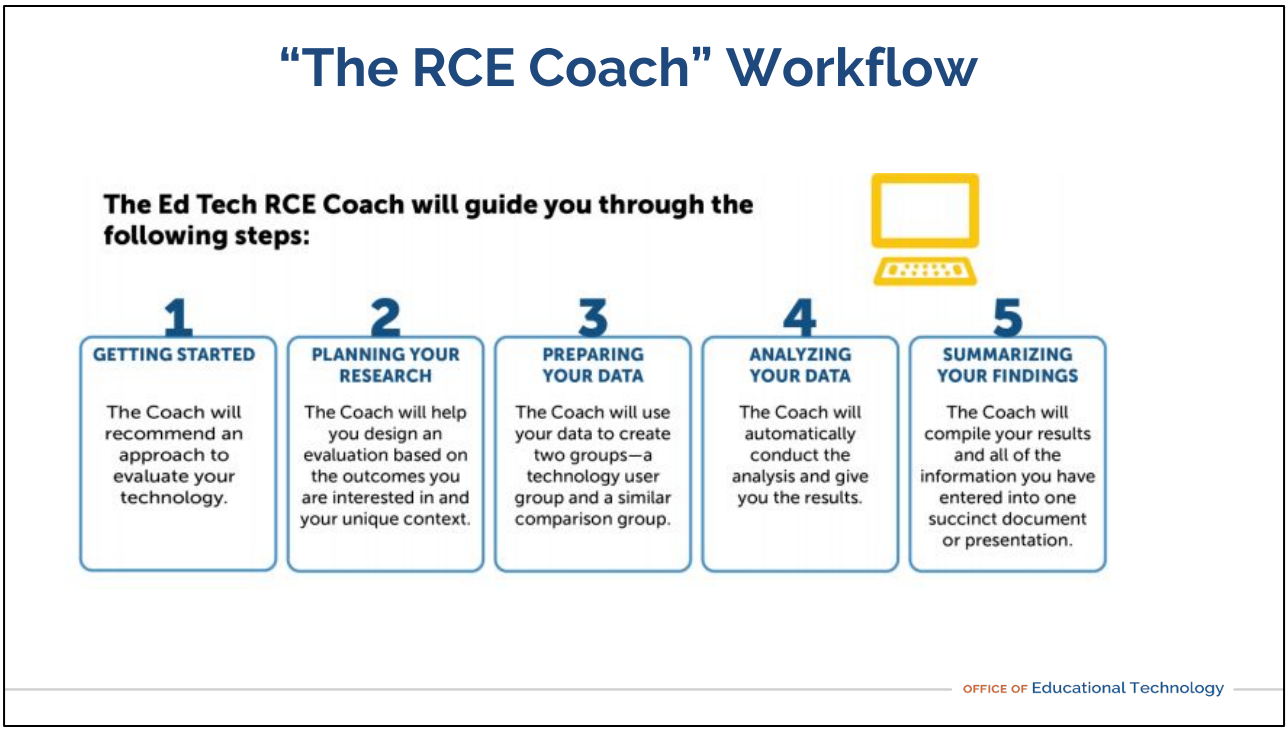
Say: Others that have used the RCE Coach are asking those critical questions about their edtech like “are they using it?” and “does it work?” Here are some examples...



Time: 3-5 minutes

Setup: Now that you have a menti account created, add this question to your session.

Say: What types of questions would you want to answer about your edtech? Take our your phones/on your device, go to menti.com and type in this access code. It will then prompt you for your response. We'll circle back for a group discussion in 2 minutes.



Time: 3-4 minutes

Say: Great, now that we've discussed what types of questions we have about our edtech implementations, let's get into the Coach's functionalities. The RCE Coach walks you through these steps (discuss steps). Instead of demo-ing the platform for you, we're actually going to have you try the system out on your own with different school based scenarios.

RCE Workshop

Prep for RCE Coach Workshop

1. Create an account at https://edtechrce.org
2. Read scenarios
3. Download data files
    - MathTechX
    - SchoolReady
    - TeachPrep

Time: 10 minutes

Setup: Go through creating an account yourself to make sure you can guide your participants through the process. It's a simple account creation process and should take you no more than 2 minutes. To access the scenarios, go to the RCE Coach's homepage, scroll to the bottom and click on "guides & reference resources", download and print "workshop scenarios". Depending on the size of your group, you may want to break them up into smaller teams to go through this activity. There are three scenarios.

Alternatively, we've seen engagement increase when participants use their own data. This takes some pre-work in that participants will have to come ready with a dataset that is formatted in the way the Coach will accept it. You, as the facilitator, can download the "Preparing Your Data Guide" in order to help your participants with this action step before the workshop should you want them to use their own information.

Say: You will now prep for using the RCE Coach. In just a minute you will visit the Coach's website to create an account. We will then pass out scenarios to each of your small groups for you to read. Lastly, we will show you where to download the fake data sets. (release participants to create accounts and monitor the room).

Three Scenarios

Technology Name	Who uses it	Goal of using the technology	Outcome measure
MathTechX	Students (grades 6-8)	Increase student math scores on state standardized test	**PARCC Math Scores** Range: 650-850 test score points
SchoolReady	Students (grades 9-12)	Decrease student absences and tardiness	**Attendance Records** Days absent in the fall quarter Range: 0 – 45 days
TeachPrep	Teachers	Increase the number of teachers scoring 4 or 5 stars (out 5) on teacher evaluations	**Teacher Evaluations** Percent of teachers scoring 4 or 5 Range: 0-100%

Time: 30-45 minutes

Setup: Once the scenarios are passed out and teams have created their account. Let me begin through the RCE Coach process. Have a few helpers on hand that have previously gone through the sceniors to help.

Say: Now let's start with the RCE Coach process. You will have 30-45 minutes to get through all 5 steps with your team. We will be floating around the room to help.

Time: 10-15 minutes

Say: Now let's discuss our results. Were the results what you expected? If not, what other questions came up?

Time: 3-5 minutes

Say: Now turn to you neighbor and discuss the following questions. We'll discuss as a larger group in 2 minutes. (come back and facilitate the discussion - you can also ask "what might be some challenges in integrating the RCE Coach to your edtech evaluation process?"). Go through these lessons learned from the larger field work done around RCEs of edtech:

Lesson learned from working with partners:

- RCE Coach needs to fit with current practice
- Need champion to follow through
- RCE Coach can be a tool for capacity building
- Lots of interest in evaluating impact of devices - but really it's the intervention/pedagogy that needs to be evaluated
- Reservations about randomized assignment - not sure if they should withhold the use of the edtech from some student while providing it to others
- Practices around usage data are still emergent

Time: 3-5 minutes

Say: Now that you have some familiarity with the RCE Coach, we'd love for you to start using it in your school/district. We recommend determine a "champion" that can lead the work while enlisting the help of others throughout the process. (discuss concrete next steps and commitments with the group before dismissing - ask each team to explain their immediate next steps as an exit ticket)