



Frequently Asked Questions

FAQ from School Districts/Educators

Questions about Rapid Cycle Evaluation

1. What is a rapid cycle evaluation (RCE)?

Rapid cycle evaluations use a rigorous, quick turnaround approach to determine whether a technology or implementation approach meets the needs of a district, school, or classroom.

2. Why is rapid cycle evaluation important?

Conducting rapid cycle evaluations empowers educators to evaluate the effectiveness of educational technologies to make informed, evidence-based decisions in actionable timeframes. With the implementation of the Elementary and Secondary Education Act (ESEA), as amended by the Every Student Succeeds Act ([ESSA](#)), the need for evidence-based decision making has increased significantly. The U.S. Department of Education recently released guidance on [Using Evidence to Strengthen Education Investments](#) to help SEAs, LEAs, schools, educators, partner organizations and other stakeholders successfully choose and implement interventions that improve outcomes for students. Conducting rapid cycle evaluations using the RCE Coach is one way to gather such evidence.

Questions about getting started

3. Who should use the RCE Coach?

The RCE Coach is designed for school or district level staff and for educational organizations that wish to evaluate an educational technology. The RCE Coach can be used to test the effectiveness of an educational technology that is already being used in schools or to set up an evaluation for a new educational technology as part of a pilot process.

While the tool was developed for evaluating educational technologies, the RCE process can be used to evaluate other programs, interventions, and strategies.

4. How do I begin using the RCE Coach?

Visit edtechrce.org to answer a few brief questions to create an account. Review all resources and follow the step-by-step process for setting up and conducting an evaluation.

5. What if I'm not ready to start an evaluation right now?

You can access the tools and downloadable guides to learn more about the RCE process. You can find all of the tools on the [Preview Tools](#) page. If you want a better understanding of the RCE process and what you would need to conduct your own evaluation the following tools are particularly helpful:

[RCE Overview](#)

[What You'll Need to Get Started](#)



6. What information does the RCE Coach provide?

The RCE Coach tells you whether an educational technology or way of implementing the technology had the desired effect. The RCE Coach provides summary statistics for the data you upload for your analysis and the results from the analysis to determine whether the technology is moving the needle. It also captures important contextual information about your district or school and how the technology was used, so that the findings can be easily shared and interpreted. All information generated by the RCE Coach is based on data you input into the tool.

7. What do I need in order to use the RCE Coach?

The key ingredients for using the RCE Coach include:

- The educational technology or implementation approach you wish to test

- A group of technology users and non-users, or potential users and potential non-users

- An outcome related to the technology that you can measure, such as district assessment scores

- A dataset that can be uploaded to the RCE Coach

 - If you are setting up a forward-looking pilot, you need to identify the technology and data sources but will pull the information together over the course of the pilot. You will start with a list of participants who will be assigned to pilot the technology or not.

 - If you have already started using the technology and want to do a backwards-looking evaluation, you may have all of this information in hand already. You will need a list of technology users and non-users, a pretest and outcome measure for each participant, and participant background characteristics.

8. How long should an evaluation take to complete?

On average, a typical timeframe for an RCE would be three months from start to finish, but this depends on the nature of the evaluation and your research question. It's possible for some RCEs to be completed in weeks while others may need more than three months. If the outcomes you're interested in take more than a few months to affect or measure, that will drive the timeline. Evaluations are also meant to be iterative, so you may go through the RCE process several times in one school year.

9. What if I care about longer-term outcomes, like high school graduation, but want to see if things are working now?

RCE can still be useful if there are intermediate outcomes that are necessary steps toward the longer-term outcome. In the high school graduation example, it may be the case that increasing attendance or academic performance in the short term is a good step towards improving high school graduation. You could use RCE to assess whether your technology or strategy is having an impact on attendance or achievement measures.

10. How much time will I need to invest?

The amount of time needed to conduct a successful evaluation will vary based on how far along you are in the process (for example, have you already chosen the technology?), the evaluation method, how many stakeholders you need to work with, and how quickly you can collect and



organize your data. If your data are already available, you may be able to complete an evaluation in as little as a few hours.

11. Who should I involve in my Rapid Cycle Evaluation?

Consider including key stakeholders/decision makers and people with the skills necessary to help you complete your evaluation. Our [What You'll Need to Get Started](#) guide will help you understand what you'll need to complete your evaluation. Ideally your evaluation team will include someone with experience handling datasets. Often people with these skills work in offices of accountability or research. However, if you do not have experienced data analysts available, the Coach provides specific instructions for preparing your data. (No prior statistics experience is necessary.) Other desirable team members include an administrative champion; staff in curriculum design, procurement, and/or instructional technology; and teachers who implement the technology.

12. How much data analysis/statistics do I need to know?

With the RCE Coach, your statistical knowledge will not be a barrier to completing a successful evaluation. The RCE Coach is designed for people with varying data analysis and statistics backgrounds. It will be helpful to have someone who is able to put together datasets involved in the process, but user-friendly guides provide all the information you need to set up your data correctly. The RCE Coach's dashboard(s) will complete the statistical portion of your analysis for you. If you have no background in these areas you can refer to the guides provided in the RCE Coach to help you understand the findings produced for your evaluation.

13. Can I use the RCE Coach to evaluate devices?

Devices are tools for accomplishing your goals. The RCE process is optimized for evaluating concrete educational technologies, platforms, programs, procedures, and strategies that are enabled through a particular device(s). The first step in using RCE is to get specific about what you are trying to accomplish and the measurable outcomes that will indicate success. If you are interested in the effectiveness of a device, it is critical to think about how the device is being used to further educational goals and to evaluate specific components.

14. Can I compare two different technologies, or different implementations of the same technology?

Yes. Sometimes it is not feasible, practical, or desirable to compare technology users to non-users. You may be more interested in learning about the best way to implement a technology, and a rapid cycle evaluation is a great way to do that.

You can compare two different technologies. For example, you may wish to compare two different reading apps to see which has a larger impact on student reading scores. If you prefer one app over the other, the preferred app can be designated the treatment group's technology in your evaluation. (For example, you may prefer one app because it is less expensive, or anecdotal evidence might show that it appears to be effective.) The Coach can help you test whether one technology is more effective than the other.

You can also compare two groups that are using the same technology in different ways. For example, one group of students may be assigned to use a math app as homework, while the



other group may use the app as part of classroom lessons. The Coach can help you test whether one implementation strategy is more effective than the other.

In both cases, you will only be able to tell whether one approach was more effective than the other and not whether the technology itself was effective. Also, if you are comparing similar technologies or strategies, the two approaches may be equally effective and your results may be inconclusive.

15. What if I'm targeting use of a technology to a specific set of students? Can I still find out if the technology is effective?

To assess the effectiveness of a technology, it's critical to have a good measure of how students would have performed without the technology. This can be challenging when the technology is targeted to a specific set of students. For example, if you use a specific technology with all EL students who are not reading at grade level, you would not have a comparison group that would allow you to make strong conclusions about whether the product is effective. However, if you have a capacity constraint – you don't have enough licenses to use the product with all EL students, or you need to roll it out over time across the district -- you could set up a randomized pilot that would allow you to assess effectiveness. This [guide to opportunistic experiments](#) describes situations where this is a good option. Even when you use a technology with a specific set of students, you could use RCE to evaluate different implementations of the product or different strategies for incorporating the technology for those students. For example, you could randomly select some of the EL students to use the reading technology more frequently than others. Alternatively, you could vary the subjects in which students use the technology.

Questions about evaluation design

16. What is the benefit of randomization over the other designs?

The goal of an evaluation is to determine the impact of the educational technology based on differences in outcomes between users and non-users. In order to be confident that those differences are due solely to technology usage you will need to reduce the chance that something else is affecting the outcome. Randomization is the best way to achieve that because it allows you to create groups that are similar on both observed (such as pretest scores and gender) and unobserved characteristics (such as motivation). Matching, the other design supported by the RCE Coach, allows you to create groups that are similar only on observed characteristics. Therefore, the benefit of randomization is that it will give you the highest level of confidence in your findings.

17. Is randomization unfair?

You are likely implementing a technology because you assume it will benefit users. But for newer technologies, we may not know for sure how they will work in your context and with your students. The best way to learn whether the technology works is by piloting the technology – or offering it to a small group of users on a trial basis. In any pilot there are going to be people who are going to test a technology first, while others will have to wait – a fair way to determine who gets the technology and who does not is through a [random chance process](#) (like flipping a coin). If the technology has an impact, more people can get access when you know that it will benefit them.



18. What questions can I answer using the Ed Tech RCE Coach?

The RCE Coach will allow you to answer the question: Is this educational technology moving the needle? The RCE Coach can answer this question based on any type of user and any outcome of interest you are measuring.

19. Are there situations when RCE is not a good choice?

Yes. RCE is best suited to answering narrow questions – often looking at the effect of a specific technology or strategy – on an outcome that can be expected to be affected quickly. RCE may not be a good choice to assess the effectiveness of a district-wide initiative that has many components. However, you may be able to use RCE to evaluate whether the specific components of that initiative are achieving their goals. These results can then help you improve implementation. In this way RCE can play an important part in a broader culture of learning and improvement. For example, RCE could not effectively evaluate the impact of rolling out 1-to-1 computing district-wide, but it might be able to help you assess the effect of a new class assignment application, enabled by the 1-to-1 initiative, on student homework completion. For more complex or comprehensive research questions, it may be valuable to work with a research partner. The [Regional Educational Laboratories](#) or a local university may be able to connect you with researchers in your area.

20. How large does my sample need to be? My school may be too small to use the RCE Coach.

Many factors contribute to the recommended sample size. These include: whether you are interested in individuals (such as students) or groups of individuals (such as classrooms or schools); how large of an effect you expect the technology will have; and how much the characteristics of students/teachers/schools vary. In general, a larger sample is better. The more students/teachers/schools you have in your sample, the more likely it is that you will receive an answer to your research question (rather than inconclusive results). However, samples do not necessarily need to be huge, and having some data is better than having no data. For example, we have seen successful evaluations with as few as 30 students.

21. Can I look at multiple outcomes?

The RCE Coach is currently designed to analyze one outcome at a time. However, you can easily select one outcome, get results, produce a findings brief and then repeat that process for a second outcome. If this is a feature you would like to see, please let us know at EdTechRCE@mathematica-mpr.com.

22. Do I need to use the same pretest and posttest to measure the outcome?

No, you do not need to use the same pretest and posttest. The “effect” of the technology is based on the comparison of two groups, not on pretest versus posttest measures. The Coach uses the pretest scores to create similar groups (in the case of a matched comparison design) or to check that both groups are equivalent (in the case of a randomized pilot). The Coach also accounts for pretest scores in the final analysis. Whenever possible, the pretest should measure the same thing as the posttest. For example, if you are interested in student math achievement, the Coach recommends that you use a math test for the pretest and the posttest, but it does not have to be the same math test.



Questions about information sharing

23. How can I share the results of my evaluations?

The RCE Coach allows you to generate a PDF of your findings or print the results from any web browser. We recommend that you follow your existing protocols for sharing results in your district or organization.

24. How is student information handled in the RCE Coach?

The RCE Coach does not require personally identifiable student information in the dataset you will need to upload (called User Data Files in the Privacy Policy) to use the tool. The RCE Coach provides guidelines on how to prepare and upload data sets (User Data Files), including specific measures for de-identifying students and avoiding personally identifiable information (PII). However, the RCE Coach cannot prevent you from uploading datasets that include PII. Also, as you are preparing to create your evaluation report or brief you will be asked to type in information (this is called User Input in the Privacy Policy). The RCE Coach will provide you tips along the way to help avoid inadvertently typing in PII. Finally, the evaluation reports or briefs that the tool produces (called User Output in the Privacy Policy) will only contain student information that is sufficiently aggregated so that it is non-identifiable.

25. How does the RCE Coach handle privacy and FERPA?

The RCE Coach does not require personally identifiable student information to use the tool or create evaluation reports or briefs that contain PII. When you follow the instructions provided by the tool carefully, your use of the tool is compliant with FERPA. The RCE Coach includes a [Privacy Policy](#) and [Terms of Use](#) for users to acknowledge when setting up an account. Please visit our [Privacy Policy](#) and [Terms of Use](#) for more information.

26. What happens to the data files that I upload into the RCE Coach?

The datasets or data files you upload (called User Data Files in the Privacy Policy) are stored exclusively in a temporary cache. They are not stored permanently anywhere in the tool. The data contained in your User Data Files will only be used to produce the analysis, brief or report that you requested. The User Data Files are not used for any other purpose. Once you are finished and leave that page, your User Data Files are permanently erased from the temporary cache.

27. What happens to reports after the evaluation? Who owns the information?

You always own all of the information that you put into the RCE Coach and all of the information that comes out of your use of the RCE Coach. However, the Terms of Use and Privacy Policy provide that you are giving Mathematica the right to use, so long as it is aggregated and/or de-identified, the information you typed into the RCE Coach (the Privacy Policy calls this your User Input) and the evaluation reports and briefs created by RCE Coach (the Privacy Policy calls this your User Output) for educational, academic and research purposes and to help other users or to promote research and development of technology like the Ed Tech RCE Coach. Your User Input (information you typed in) and User Output (your evaluation reports and briefs) are stored permanently on Amazon Web Services under your RCE Coach account. Remember, your dataset or data files you uploaded (the Privacy Policy calls these your User Data Files) are not stored anywhere, but are deleted as soon as you finish using the RCE Coach. Also, your evaluation



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reports and briefs may be reviewed by the What Works Clearinghouse if the evaluation meets their screening criteria and could be included in the [WWC | Find What Works](#) database. Please visit our [Privacy Policy](#) and [Terms of Use](#) for more details.

Questions about getting additional assistance

28. I want to know what I am getting into. Is there an overview of all of the steps?

Check out [What You'll Need to Get Started](#) for an overview of the skills and data you will need to conduct a successful evaluation. You can also find a list of all of the tools under [Preview Tools](#).

29. A lot of terms are unfamiliar to me. Is there a printable glossary that I can use as a reference?

Yes. The RCE Coach only uses technical terms when absolutely necessary. In these cases there is often a definition that you can view by placing your cursor over the word. For more extensive definitions you can view our [printable glossary](#). The technical vocabulary is commonly used in educational research, and becoming familiar with these terms will help you understand other research as well.

30. I don't have the answers to all of the questions.

a. Are there some responses that are required and others that are not?

Yes. Answering all of the questions will allow you to produce the most complete Findings Brief, but only some questions are required to complete the analysis. Some tools will be locked (and allow you only to “peek” at the contents) until you answer required questions. However, if you skip many questions, it will likely be difficult to interpret and share your findings.

b. Can I skip a question and return later?

Yes. The RCE Coach is designed for you to be able to move through and answer questions as you have answers.

c. Will the RCE Coach remember which questions still need to be completed?

Yes. The RCE Coach keeps track of what tools have been completed and prompts you for key information when it is required.

31. Who do I contact if I need help with using the tool?

You may leave questions and your contact information in the Feedback tab on the right margin of each page and someone from the RCE project team will be in touch with you. You may also periodically check the FAQ for updated Q&A.

32. How can I pilot the RCE Coach and receive technical assistance?

The RCE Coach is freely available for anyone to use. Resources are available to support a number of districts during 2017 in conducting RCEs with the RCE Coach. If you are interested in receiving technical assistance to help you get started, please complete the [Ed Tech RCE Pilot Project Form](#) to share some preliminary information with the RCE Project Team. We will release a request for proposals in the near future for winter and spring pilots. We are particularly interested in forward-looking pilots that can take advantage of the new features released in January 2017. In addition, we would like to support districts that wish to test educational technologies with a



variety of goals, such as teacher productivity and teacher professional development, as well as student achievement.

Questions about being a pilot partner

33. What are the criteria for being selected as a pilot partner?

Your district would be a strong candidate if you:

Are considering piloting a new technology and are open to using a lottery-based approach to assign use of the technology;

Have implemented a technology in some schools or classes but not others, providing opportunities to compare outcomes for similar students or teachers who have access to the technology with others who don't;

OR

Are interested in testing different approaches to implementation of a technology, such as different teacher training programs or different communication strategies.

34. What kinds of software applications are being considered?

We are interested in evaluating technologies that are relatively untested and can provide high quality data on whatever outcomes the technology aims to impact. Technologies can be aimed at student achievement, social-emotional learning, teacher professional development, teacher productivity, or another district goal.

35. What does participation entail?

Participating districts will work with our research partners to conduct one or more technology evaluations for your school(s). We will seek your input on the toolkit being developed to support RCEs, giving you an opportunity to help shape this important national initiative. Your staff may participate in teleconferences with developers and build capacity to obtain and interpret system data generated by technologies. Findings from the RCEs will be summarized in short reports and made publicly available.

FAQ from Ed Tech Companies

1. Can my company use the RCE Coach to evaluate our ed tech product?

Yes, the RCE Coach is free and available for anyone to use. However, it is specifically designed for educators (school districts, educational leaders, and individual educators). We encourage companies to partner with school clients who are willing to evaluate your product using the RCE Coach.

2. As an ed tech company, what can I expect from school clients who use the RCE Coach to evaluate my product?

School clients will likely request specific usage data that they need to create the data sets that they will upload into the tool. Based on results of evaluations, some school clients may make suggestions for modifications to your technology to improve intended outcomes.

3. What schools and companies are currently participating?



We are unable to release this information publicly. However, some participating schools/school districts and products are identified in our [Shared Evaluations](#).

4. When and where are evaluations published for public viewing?

Evaluations from our summer and fall pilots will be available in January 2017 and more evaluations will be added as they are completed. Users can opt in or out of sharing evaluations publicly.

5. Why should vendors participate in the RCE pilot process?

The field is moving in the direction of evidence-based decision making.

The ESEA, as amended by [ESSA](#), is putting increased emphasis on evidence, and an increasing number of schools will be making evidence-based decisions for educational technology acquisitions.

The RCE process will help you to implement more efficient pilots.

You can give us feedback to improve the tool, implementation, and pilot process.

There is no cost for you to participate.

You will receive valuable information that you can use to inform product development.