

Research Customization Guidelines



Why Customize?

The Standard Research Design and Toolkit has been developed to support a broad range of integration types and research efforts. Although the broad research questions and approaches are the same across research contexts, our goal is to ensure that the overall research design and instruments serve the specific needs of local researchers studying the integration of technology solutions in a wide range of settings, and their varying research goals.

What Is Involved?

The Research Customization Guidelines are intended to support local research teams in making customization decisions that help calibrate the research design, data collection activities, and instruments to the local contexts and research goals before going into the field. We have identified six dimensions of local integration

research that inform the customization process. We assume that researchers come to this task with knowledge about their integration and their research goals. In the customization step, researchers will situate their integration research project within the Standard Research Design and Toolkit and select research components, instruments, and items as appropriate for their needs and goals.

Customization Steps

1. As you read the dimensions of customization listed in the next section, select the protocols that are most appropriate for your research context. For these protocols, note the revisions you decide are necessary for each instrument or resource you will use in your research. The table below can be used to structure your notes.

Data Collection Instrument/Resources	Describe Customization Planned Here
Research Design	
Integration History Interview Protocol	
School Leader Interview Protocol	
IT Coordinator Interview Protocol	
Community Learning Center Staff Protocol	
Teacher Interview Protocol	
Classroom Observation Protocol	
Student Interview Protocol	
Home Use Interview Protocol	

2. Review the protocols and make the revisions you noted above. Add probing questions as appropriate according to the needs identified above. Wherever possible, insert additional questions as probes rather than modifying the topics in the existing interview protocol. This allows for data that include both the locally relevant specifics and responses to questions that are comparable across integration efforts in different contexts.
3. Substitute general language in the instruments for precise terminology used in your context. Translate documents if required.

Dimensions of Customization

For your research, consider which of these dimensions is central to the integration effort or reform program designers and which are essential in the community. These considerations may influence your decisions about items to omit from protocols or additional probing questions to consider. Integration efforts may be designed to address goals not listed here. These should also be noted as part of the customization process.

4. Goals of the local integration effort

Each integration effort will be organized to meet different sets of institutional and local goals. Generally, these kinds of devices are adopted on a large scale in hopes of improving one or more of the following education system quality dimensions:

- Educational transformation
- Enhancing access to ICT
- Economic development

5. Integration research sponsorship and goals

The Standard Research Design and Toolkit can be used in integration research projects with somewhat different emphases, goals, and budgetary constraints. An understanding of how these factors shape research priorities is useful in selecting research tasks, editing protocols, and informing real-time decisions during data collection.

Consider the research questions below as you customize to meet research goals.

- How is the technology being used in and across settings?
- What supports and contextual factors shape the rollout?
- What can we say about the value of this particular technology integration effort in this setting?
- What best practices are evident in the field and at the policy level?
- What course corrections might address the greatest challenges for this integration?
- How do the design characteristics of the device enable or constrain productive use?

6. Length and timing of integration research

Some integration research projects will focus on new technology integration efforts, capturing issues associated with start-up, whereas others will study mature programs, examining how patterns of use evolve across time. Consider whether the focus of

your project includes start-up as well as evolution of usage and change or whether one point in time should be used for data collection. This decision will be based on the goals of the research sponsors, the characteristics of the local rollout, and the research budget. Once you have decided on the timing and number of rounds of data collection required, revising the protocols may be necessary to suit the needs and the timing of your data collection. For example, background information can be eliminated in repeat interviews with the same participants, while asking participants to reflect on prior responses may be included.

7. Local opportunities

Most integration efforts will have something new to offer researchers meriting special attention for improving our understanding of 1:1 technology initiatives. If integration in your setting is in some way the first of its kind or distinct in the field (for example, serving a new age group or distributed with a new reform package), there may be an interest in highlighting this aspect of the integration in the research questions and data collection. This decision should be made with the support of research sponsor(s). In cases where special local circumstances shape the overall research goals, researchers should consider the addition of probing questions within the existing protocols.

8. Institutional context and research participants

Often, technology solutions will be deployed in school contexts, but there will also be instances where the primary device distribution and support take place in out-of-school settings, other institutional environments like community centers, or outside institutional settings entirely. In these cases, protocols designed for school technology leaders and teachers will need to be modified.

When teachers are not present in the rollout context, teacher interviews can be substituted for interviews with the professionals who spend the most time in direct contact with the children or youth. To maintain the nested character of the sampling, children and youth should be recruited from within each participating professional's daily practice. Leaders and technology coordinators should also be identified from within the same institutional setting.

9. Role of the device in the broader education context

The integration research toolkit was designed to investigate the factors associated with the success of 1:1 technology rollouts within their context. In some cases, the entire rollout will be a program of distributing devices; in others, the devices will be part of larger education reform initiative, including additional elements such as teacher professional development, improved infrastructure such as Internet access programs, and parent services.

When device distribution is a part of a larger education reform effort, it is important that the integration research investigate the entire reform effort, with special attention to the role of the device within the reform. It is not sufficient to focus data collection efforts on the device itself without building an understanding of the reform context or the goals for educational transformation. In these instances, the language of the protocols may need to be revised with names and references to other components of the local reform initiatives to remind research participants of the scope of the research and to ensure that data informs our understanding of the role of the technology solution within the broader educational reform context.