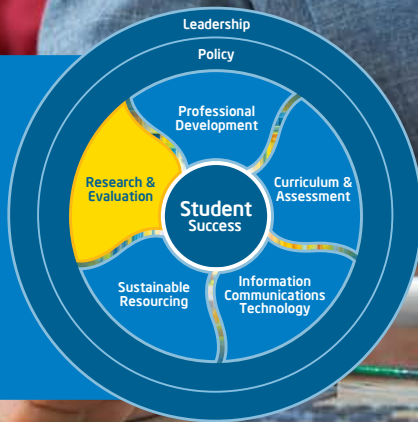




Chapter 5

Research and Evaluation



To address 21st century educational needs, it is important to research and evaluate your current environment. A number of tools can be used to evaluate the existing status. [The Project RED Readiness Rubric](#) can provide valuable information to inform your next steps.

[A SWOT \(Strengths, Weaknesses, Opportunities, and Threats\) analysis](#) can also help pinpoint areas that need attention. Strengths and weaknesses are internal to the district. Opportunities and threats are external factors. Your analysis should focus on successes and resources; note areas that need improvement; capitalize on new strategies that can come from changes in such things as technology, local policies, and funding sources and flexibility; and determine how to avoid pitfalls. An educational SWOT analysis can help planners decide where the organization stands and what it needs to do to reach its goals.

Another early step in planning a 1:1 program is to research the best practices that will lead to a successful implementation. [One-to-One Institute](#), [Project RED](#), and [Intel's Education web site](#) provide research, case studies, models, and tools that will be valuable for your planning and implementation. These sites also showcase successful 1:1 implementations where program leaders can see success in action. This initial investigation will provide the research-based foundation upon which your program can be designed.

The next step is to define your goals and the metrics that will be used to evaluate the program's success. Key milestones need to be identified for each goal, and a process established to assess the effectiveness of your strategy in achieving the milestones. Finally, a tool to evaluate your success at each milestone also needs to be implemented.

Throughout the planning and implementation phases, you should continue to research the latest trends, technologies, curriculum, and digital content. Based on new developments in the field, it may be necessary to modify your original goals and/or create new metrics to measure success.

Program Assessment and Independent External Evaluation

To ensure that a technology implementation will be successful over the long-term, Project RED found it essential to institute internal assessments and an independent external evaluation.

Just as formative assessments provide ongoing feedback that guides practice, internal program assessments provide program leaders with data they can use to make continuous improvements to the program. An independent external evaluation is similar to the summative assessments above, in that they provide a larger picture of the program as a whole, and determine if the program is meeting its goals.

Program assessments and independent external evaluations are both key to the success of a technology implementation.

It is important during the budgeting process to include funds for evaluation work. In the United States, most grant programs require the recipient to allocate 5 to 10 percent of the total budget to an external evaluation. These metrics provide a good guideline when anticipating the total cost of evaluating the effectiveness of your program.

Turning Research into Practice Recommendations: Research and Evaluation

Research and Evaluation Recommendations for Centralized Education Systems

1. Create a national online assessment portal (formative and summative).
2. Move national high-stakes testing online.
3. Create and use common end-of-unit summative tests.



To download this global toolkit, resources, and learn more about Intel's support of the Project RED work, please visit intel.com/projectred

4. Provide schools with formative assessment resources.
5. Create and implement internal program assessments for each key implementation component.
6. Hire an independent researcher to conduct a national program evaluation.

Research and Evaluation Recommendations for Decentralized Education Systems

1. Purchase an online assessment portal (formative and summative); consider partnering with the government or creating a consortium of schools that share the platform.
2. Create and use common end-of-unit summative tests.
3. Provide teachers with formative assessment resources.
4. Create and implement internal program assessments for each key implementation components.
5. Hire an independent researcher to conduct a program evaluation; consider partnering with the government or similar schools to reduce the burden on an individual school.