

Evaluating a Proof of Concept

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A Proof of Concept (POC) should involve enough participants to capture statistically valid, representative data from users. Participating schools and classes—representing a diverse cross-section of user needs—should be selected for their willingness to support the program as well as their connectivity. In order for the POC phase to be successful, strong local support (e.g., school boards, school administrators, teachers, students, and parents) is often essential. A balance of financial support should be sought from private donors and federal grants, if possible.

But testing an initiative or technology is one thing. Evaluating its overall success in a meaningful manner is quite another. Evaluation requires a rigorous method for ascertaining effectiveness grounded in observational data, as well as an orchestration process driven by the context in which your POC operates. This method should also be dynamically self-configured to support the current school environment. During the entire pilot—not just at its conclusion—all information should be collected, analyzed, organized, and critically evaluated.

The first step in designing a sound POC is determining the educational need (i.e., how will your program or initiative be used educationally). Any technology utilized must be informed by its potential value to learning and teaching or the associated business processes that support that mission. Do some needs assessments and have an open dialogue about what the program may look like for a particular school or district. A district wants to ensure the program fits with its own initiatives and is not competitive

or in opposition to what it is already doing. If the program includes a statewide external evaluator, it is valuable to provide information back to the districts to help inform and scale their program and for use in communicating the success. It is also important to make research available to districts.

Using a phased, small-scale approach for your POC is key to showing value while making success evaluation more manageable. By beginning on a small scale, you can better concentrate on delivering rewarding experience to participants while field-testing implementation strategies, policy options, organizational structures, and funding ideas.

The POC phase should run for a specific, previously agreed allotment of time. Throughout this time period, it should be evaluated on a host of criteria, including (but not limited to):

- Level of use and satisfaction of users (students, teachers, parents, and administrators)
- Costs
- Technical support needs
- The ability to meet both student academic goals and teacher professional development needs.

During this initial phase, feedback should be continually analyzed so that the initiative and its delivery can be improved and refined.

A phased calendar with implementation criteria and expectations based on that point of the experiment helps to keep ongoing evaluation on track. The phases should allot for device distribution and management, and allow for device or system learning and a thoughtful rollout, if devices are to be utilized in multiple grades and schools.

Your pilot's progress needs to be examined for the quantity and quality of both the activities that you are providing as well as the outcomes that your program has achieved. Quantity measures are used to evaluate both process and outcome indicators. Quality measures determine and document the effectiveness of the program's activities and services. These measures allow you to make informed adjustments in program implementation.

Data fueling an evaluation can be gathered from facilitators, coaches, collaborating teachers, school administrators, technical support staff, and students using mixed methods. These methods could include surveys and pre-post measures of technology integration skills for quantitative data, as well as open-ended responses, document review, and site visits and observations for qualitative data. Evaluating your POC provides valuable input that will expand future stages of your proposed initiative. In addition to questions regarding impact on student learning and teaching practice, a POC evaluation should take into account the implementation and usefulness of training sessions and peer coaching (if any), and the extent that resources were utilized.

During the POC period, your team should undertake a mixed-methods evaluation incorporating surveys, interviews, and a number of small qualitative research assessments. Bring together all relevant stakeholders and ask them to affirm what the intended outcome of the pilot is: its goals, its timeframe, specific milestones in realizing its goals, and what progress will look like when reaching these goals.

These discussions will define the purpose of your POC, how success will be measured and achieved, as well as uniting stakeholders through a general consensus. During the evaluation period, a more comprehensive interview session should be organized, where program stakeholders are asked to provide specific examples of how the pilot has

proved both successful and challenging, as well as what was gained as a result of their participation in the pilot. These questions naturally lead to suggestions for how the POC could be improved in the future.

A series of short reports should be published that present the findings from these individual research projects. An annual evaluation report can ultimately be published, synthesizing findings from the individual reports.

At the end of the POC's testing period, your team should have a thorough understanding of the pilot's results and assess the viability of the initiative with a clear evidence rating:

- **Strong:** The results of the evaluation(s) show consistent direct evidence of the effectiveness of the innovation in improving the targeted educational outcomes and/or processes.
- **Moderate:** The results of the evaluation(s) show consistent direct or indirect evidence of the effectiveness of the innovation in improving targeted educational outcomes and/or processes.
- **Suggestive:** This evidence may include non-comparative case studies, correlation analysis, or anecdotal reports.

Your results should provide a clear list of best practices, proven techniques and methodologies, as well as areas of improvement.

Just before the end of the planned POC, your organization should begin developing a plan for long-term operation that addresses rollout issues, funding, fees, and sustainability. After all data and feedback have been evaluated from the POC's field-testing, a full launch—if the initiative is still deemed worthy—should be possible.

A POC is refined through an ongoing evaluation process involving staff, students, and objective data. Without this process, then valuable work, resources, funding, and experience is all for naught. Districts want proof that a program has value. With a strong research foundation and formative and summative evaluation, you should be able to share the potential impact and success of your initiative through a carefully evaluated POC.