

## EBITE RESOURCE GUIDE

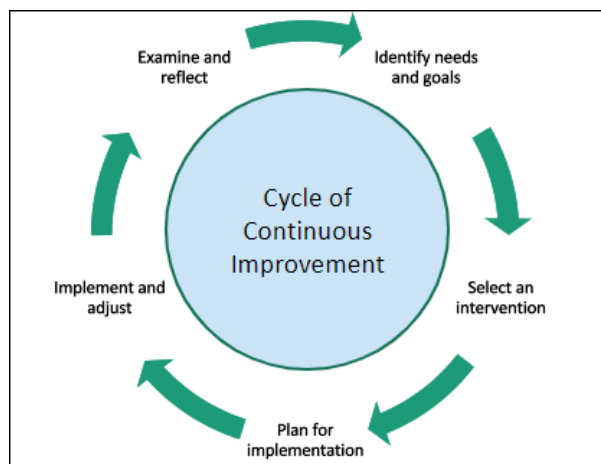
### Examine & Reflect: Outcomes and Data

#### Purpose

This guide focuses on the various ways educators can evaluate outcomes and use data to understand the impact of interventions. Specifically, various parts of the evaluation process will be discussed, from evaluation design to data-based decision-making based on intervention and program results. Resources for several evaluation toolkits are provided.

#### Examine and Reflect

The *Examine and Reflect* stage is a fundamental component of the cycle of continuous improvement process. Recall from [Resource Guide #1](#) that the cycle of continuous improvement is a systematized approach to intervention that supports educators in making data-driven decisions through learning from their experiences and continuously evaluating their methods to meet student needs. *Examine and Reflect* usually involves a process of data collection, analysis, and thoughtful reflection to inform subsequent intervention decisions.



#### Key Elements to Consider

Below are some key elements to consider when evaluating outcomes of programs and interventions.

- **Evaluation Design:** When planning for evaluation, use the *logic model* established earlier in the intervention process and the agreed upon *SMART goals* as a guide to develop the actual evaluation plan. These two intervention planning tools – the logic model and SMART goals -- help you keep in mind your initial intervention activities and desired outcomes as you develop questions to be answered during the evaluation process (e.g., did the activities specified in the logic model take place? Did the intervention promote the targeted X% increase in student engagement during circle time). Also consider other parts of the evaluation process when formulating a plan, such as who will conduct each part of the evaluation and when? How will the necessary data be collected?
- **Data Collection:** Data collected to answer evaluation questions at the end of the first cycle of continuous improvement can be either quantitative or qualitative. *Qualitative* data may include information gathered from individual or group interviews, open-ended questionnaires, administrative data such as office referral narratives, and other means. Examples of *quantitative* data sources are brief closed-ended questionnaires for students or teachers about one or more SMART Goal outcomes, questions about the acceptability and feasibility of the intervention, longer questionnaires that were used at the beginning of the cycle of improvement to identify goals, and classroom, school or state-level test and/or achievement/assessment or administrative data on academics or behavior.

The outcomes on which you seek data should be closely tied to the outcomes your selected intervention was designed to target; and, if desired, aspects of the intervention implementation itself. Data may be collected, organized, and merged, if appropriate, through a combination of googledocs, googleforms, googlesheets, or Microsoft Excel, or through systems supported at your school.

- **Data Analyses:** Your pre-specified SMART Goals included specific change goals. Evaluate your outcome data in relation to those goals. What amount of change did you seek on a particular outcome (and in what time-frame)? Do the data reflect that amount of change? For example, did the number of office referrals decrease by as much as you hoped? Did more students reach proficiency in Math? Did scores on school engagement increase by your prespecified percentage? Did reading scores of English language learners increase to the desired level? Even if you missed your change targets, is the amount of change meaningful? Do the observed change measures suggest the intervention was effective and should be continued? If little or no change occurred, consider potential barriers to the intervention’s success. Did teachers report the intervention was not feasible? Did administrative support decline over the course of the intervention? Did the intervention prove to be a poor fit for your students and context? Did students refuse to engage in the intervention?
- **Sharing Results and Data-based Decision Making:** As your improvement team examines and reflects on the results of its evaluation, results should be shared with stakeholders—for example, teachers, school leaders, and community members (e.g., parents/caregivers). Students may also be included in the examination of results. Decisions about dropping, continuing, or modifying the intervention should be made with these stakeholders. If target goals were met, the discussion of how to move forward into the next cycle of improvement will include the formulation of new goals. If target goals were missed, barriers to success that were identified will need to be addressed, if possible. Upon your examination and reflection on data from the completed intervention, it is possible that new interventions may need to be chosen for the next cycle of continuous improvement.

## Resources

### **Ohio’s Improvement Process: Step 5: Examine, Reflect, Adjust**

- [Examine, Reflect, Adjust - Ohio Improvement Process: Department of Education \(2023\)](#)
- The Ohio Department of Education’s website provides guidance for step 5 of the cycle of continuous improvement, and recommendations for implementation adjustments and planning

### **Program Evaluation Toolkit: Quick Start Guide - IES Regional Educational Laboratory (REL) – Central**

- [https://ies.ed.gov/ncee/edlabs/regions/central/pdf/REL\\_2021112.pdf](https://ies.ed.gov/ncee/edlabs/regions/central/pdf/REL_2021112.pdf)
- The Quick Start Guide outlines IES’ eight modules designed to help users understand how to assess implementation and outcomes of local, state, and federal programs. Instructions on how to access the modules, as well as module overviews, are provided. Module topics include Logic models, Evaluation questions, Evaluation design, Evaluation samples, Data quality, Data collection, Data analysis, and Dissemination approaches.

## The 2010 User-Friendly Handbook for Project Evaluation – National Science Foundation (NSF)

- <https://www.purdue.edu/research/oevprp/docs/pdf/2010NSFuser-friendlyhandbookforprojectevaluation.pdf>
- In-depth guide on evaluating programs of different contexts (e.g., classrooms, higher education, scientific research). Topics range from getting started on the evaluation process (i.e., creating a design), to selecting data collection methods, to considering multisite evaluation challenges. Guidelines for conducting evaluations through culturally responsive frameworks is also discussed.

## Evaluation Toolkit – United States Agency International Development (USAID)

- <https://usaidlearninglab.org/evaluation/evaluation-toolkit>
- USAID provides various toolkits that provide guidance on evaluating the effectiveness of a program. Topics include Impact Evaluations, designing and managing plans for progress monitoring, data collection, and evaluation, and considering stakeholder roles in the evaluation process.