

# Applying a Cycle of Evidence-Based Continuous Improvement When Selecting Interventions and Project Components to Improve Attendance

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Students who are chronically absent—missing 10 percent or more school days per year, whether excused or unexcused—are at serious risk of falling behind at school and not graduating (Bauer et al., 2018). Research shows that chronically absent preschool and kindergarten students are academically and developmentally behind their classmates who attend school regularly (Erlich et al., 2013). By third grade, chronically absent students have lower reading and math achievement (Balfanz & Byrnes, 2012). And finally, students are seven times more likely to drop out if they are chronically absent even just one year between 8th and 12th grade (University of Utah, 2012).

Given this evidence, many states, districts, and schools are developing strategies to reduce chronic absence and ensure students attend school regularly. While many proposed interventions to reduce chronic absence and support attendance exist, it is important to view them within a cycle of continuous improvement. The purpose of this resource is to support educators that are focused on reducing chronic absence by providing an example of how to apply a cycle of continuous improvement based on the [U.S. Department of Education Non-Regulatory Guidance: Using Evidence to Strengthen Education Investments](#) to select evidence-based interventions and project components, aligned with local needs, to improve student attendance. The U.S. Department of Education emphasizes the use of evidence-based activities, strategies, and interventions (collectively referred to in the non-regulatory guidance as “project components”) in the design of education programs across the education spectrum. This resource uses the terms interventions, project components, and strategies interchangeably.

# Evidence-Based Continuous Improvement Cycle

The non-regulatory guidance describes a five-step process of learning and improvement that includes: (1) identifying local needs, including the needs of the learner population being served; (2) selecting evidence-based project components that organizations have the capacity to implement, including implementing with partners; (3) planning for and then (4) supporting and refining the implementation of the project components; and (5) examining and reflecting upon how the project components are working.



Evidence-based improvement cycles, like this one, recognize that using evidence to inform decisions is a process, not a product; is continuous; is aligned with state and local goals; requires capacity building; and can improve student outcomes (see Hale et al., 2017). This resource focuses on the first two steps in the cycle: *Identify Local Needs* and *Select Relevant, Evidence-Based Project Components*.

**Identify Local Needs:** The first step in the process is to gather and consider local needs, informed by meaningful consultation with interest-holders and local data. Identifying root causes is a necessary step to better select interventions and project components to match needs. Before SEAs and LEAs can identify and select attendance interventions that match student needs and the local context, they will need to identify the root causes for students missing school. The [U.S. Department of Education Approaches to Root Cause Analysis \(2020\)](#) is a helpful tool to examine root causes.

**Select Relevant, Evidence-Based Project Components:** After identifying local needs through a root cause analysis and other examinations of relevant data, the next step is to select interventions and project components that (1) aim to address the identified needs, (2) have demonstrated effectiveness for the learners they plan to serve and their context, and (3) are feasible given their capacity and existing resources. There are several resources and tools to assist educators to locate, examine, and ultimately select interventions and project components.

### ***Locate:***

There are online repositories, guides, and websites to help educators locate evidence-based attendance interventions and project components. For example, the [Attendance Playbook](#) (Jordan, 2023)<sup>1</sup> describes attendance practices and interventions, summarizes the research on these strategies and the ESSA evidence levels<sup>2</sup> they align with, and suggests if the strategy should be used with all students or targeted to students based on their attendance. There are several federal evidence clearinghouses such as the [What Works Clearinghouse \(WWC\)](#). The WWC has a Find What Works repository and has developed several [Practice Guides](#) that may be particularly helpful in identifying project components that fit learners' needs and the local context.

Another credible repository to help educators identify interventions and project components is [Evidence for ESSA](#). This resource includes a searchable database of evidence-based attendance and other interventions and project components with an assessment of the evidence level. Educators can also access individual studies about attendance interventions and project components by searching websites such as the [Education Resources Information Center \(ERIC\)](#).

### ***Examine:***

Examining evidence-based interventions and project components includes assessing the evidence level of the strategy and its potential fit in your context. This resource, [The Basics of Reviewing a Research Study](#) (2021), offers four basic elements to consider when reviewing individual studies that test the effectiveness of an intervention and project component: study source, study design, study findings, and study relevance.

The relevance, or fit, of an intervention or project component within your context depends on many factors. One resource, the [Applicability of Evidence-Based Interventions Tool](#) (2020), provides an overview of contextual factors and considerations that may affect the applicability of a strategy. This resource includes a template with potential contextual factors, key considerations, related questions, and additional resources to help guide conversations to assess the fit of a strategy.

When considering the feasibility of an intervention or project component, it is helpful to review additional information about its core components, and the outcomes the component aims to achieve. It is also important to consider staffing, technology, training, and cost requirements for implementation.

### ***Select:***

Selecting which evidence-based strategy, or strategies, will meet your needs involves weighing multiple factors. To illustrate how these decisions might be made, the following example shows how a school team might go through the selection process. This is for illustrative purposes only and is not an endorsement of any particular attendance intervention or project component.

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<sup>1</sup> This resource was not developed by the U.S. Department of Education but is widely used by educators as a resource to identify strategies to address chronic absence.

<sup>2</sup> See the non-regulatory guidance from the U.S. Department of Education: <https://www2.ed.gov/fund/grant/about/discretionary/2023-non-regulatory-guidance-evidence.pdf>

## Scenario

Imagine your school team identified a need to further engage families to encourage attendance schoolwide. Your team wants to find an evidence-based strategy that will meet this need and that you can implement relatively easily. As a team, you engage in the process to select an evidence-based strategy to engage families and encourage student attendance, including locating a strategy using a credible source and examining its potential fit.

### Locate:

- ▶ Your team uses the Attendance Playbook to look for strategies to engage families. As a team, you discuss the strategies in the playbook and which ones you are already using.
- ▶ Your team is especially intrigued by the studies about text messaging. Your team would like to know more about using this strategy to support student attendance.
- ▶ You go to the WWC website (<https://ies.ed.gov/ncee/wwc/>) and enter “texting” in the general search bar with the hope of finding studies about texting strategies you may be able to use at your school. The search yields an individual study review, “Texting Parents: Evaluation Report and Executive Summary.” It appears to align with your team’s identified need to engage families to improve attendance, so you decide to dive a little deeper into the study review.

The screenshot shows the WWC (What Works Clearinghouse) website interface. At the top, there is a navigation bar with the IES WWC logo, the text 'What Works Clearinghouse', a 'MENU' button, and a search bar with a 'Go' button. Below the navigation bar, the page title is 'WWC REVIEW OF THIS STUDY' with 'Export' and 'Print' buttons. The main content area displays the title 'Texting Parents: Evaluation Report and Executive Summary' followed by the authors 'Miller, Sarah; Davison, Jenny; Yohanis, Jamie; Sloan, Seaneen; Gildea, Aideen; Thurston, Allen (2017). Education Endowment Foundation. Retrieved from: <https://eric.ed.gov/?id=ED581121>'. Below this, it states 'RANDOMIZED CONTROLLED TRIAL EXAMINING 15,355 STUDENTS, GRADES 6-11'. A horizontal menu below the title includes 'Review Details', 'Findings', 'Sample Characteristics', and 'Study Details'. Under 'Review Details', it shows 'Reviewed: March 2017'. To the right of this are three blue boxes: 'MEETS WWC STANDARDS WITHOUT RESERVATIONS', 'AT LEAST ONE STATISTICALLY SIGNIFICANT POSITIVE FINDING', and 'TIER 1 STRONG AT LEAST ONE FINDING SHOWS STRONG EVIDENCE OF EFFECTIVENESS'. Below the 'Reviewed' section, it says 'For: Quick Review (findings for Parent Engagement Project (PEP))' and 'Using: Review of Individual Studies Review Protocol 3.0'.

**Graphic Source:** <https://www.evidenceforessa.org/program/everyday-intervention-formerly-inclass-today-and-everyday-labs/>

### Examine:

- ▶ The evidence level for this intervention assigned by WWC is the highest level, Strong. This is because the study had a randomized controlled trial (RCT) study design, which is the most rigorous study design.
- ▶ As described in the Study Details tab, the peer-reviewed study was conducted with over 15,000 students and, in the Findings tab, you see that one of the outcomes—number of days present—was relevant to the intervention.

- ▶ Your team is intrigued and wants to think about how the strategy might fit in your school and your context. Your team decides to use the [Applicability of Evidence-Based Interventions Tool](#).
  - ▷ You know you need to consider how closely the population of students in the study matches your student population, and how closely the strategy matches your identified needs.
    - » The Sample Characteristics tab and Study Details tab provides you with some information to consider.
    - » You use the first contextual factor on the Applicability of Evidence-Based Interventions tool, “Research alignment of outcome of interest and student population,” to discuss this aspect of fit.
    - » Your school is medium-sized, located on the edge of a major city, and with a diverse student population. The study sample had a similar profile in terms of free and reduced-price lunch and multilingual learners, though the sample is less racially and ethnically diverse than your student population. The study sample was in grades 6-11 in England. Your student population is K-12 in the United States. Though there are some differences, overall, you feel comfortable with the intervention’s potential fit in terms of your student population.
    - » The third outcome that was measured, student attendance, is aligned with the outcome you want to improve.
  - ▷ You know you need to consider how easily your school could implement this strategy, and staffing and costs are key aspects of that.
    - » Your team looks at “Support for implementation” in the Study Details tab and notes that the strategy is intended to be used with the existing school information management systems and that there was training and support for schools and teachers during the study.
    - » You are unsure how much time the strategy would take to implement, so you look for some additional resources to help you assess the feasibility of this strategy for your context. You go to [eric.ed.gov](http://eric.ed.gov) and type in “texting parents to support attendance.” You find a [toolkit](#), *How to Text Message Parents to Reduce Chronic Absence Using an Evidence-Based Approach* (Kurki et al., 2022), that discusses several aspects of the feasibility of this strategy, including technology and staffing needs.
    - » The estimates in the toolkit for staff time, technology, and related costs for the texting strategy fit within your resources and school budget. With some support from the district, such as an SMS vendor platform, you are confident your school can carry out this strategy.

### **Select:**

This strategy seems to be a good potential fit to add to your set of whole-school attendance support strategies. Your team decides to select the strategy of texting parents to support student attendance. Using the evidence-based continuous improvement cycle, your team commits to coming together on a regular basis to plan for implementation, implement, and examine and reflect on the effectiveness of this strategy in your context.

## Conclusion

In order to effectively address chronic absenteeism, schools should use a continuous improvement cycle to select interventions and project components that are applicable to their local context. The [non-regulatory guidance](#) provides several key questions for teams to consider at each step of the cycle. Additional key questions for schools to consider in this process are:

- ▶ **Identify Local Needs:** What are our needs related to chronic absence? For example, do we need strategies to improve our overall approach to attendance or do we need strategies for students who have the most attendance issues? What are the root causes of our issues and what strategies will directly address them? What strategies are we already using?
- ▶ **Select Relevant Evidence-Based Project Components:** What are our needs related to chronic absence? For example, do we need strategies to improve our overall approach to attendance or do we need strategies for students who have the most attendance issues? What are the root causes of our issues and what strategies will directly address them? What strategies are we already using?
- ▶ **Plan for Implementation:** Which strategies would be viable for us to use and fit our context and constraints? For example, do we have the number of staff needed and the time needed to implement the strategy? If not, do we have the budget to be able to hire staff to carry out the strategy or partnerships with organizations who could help us? What will we need to have in place to successfully implement the strategies? How do we ensure we have it in place before we begin implementation?
- ▶ **Implement:** Are we implementing the core features of the strategies with fidelity? What adjustments do we need to make to how we are implementing these strategies to get the best results possible?
- ▶ **Examine and Reflect:** What data do we need to examine to see if our strategies to address chronic absence are working? What will we do if these strategies are not helping us improve our chronic absence issues?

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