Measuring & Improving Summer Programs

Best Practices for Data Collection

Summer Learning Series
March 2023
This best practices resource is designed to provide school and district leaders with guidance on the types of data that they should collect, as well as how to collect, analyze, and interpret the data to gain insights into the effectiveness of their summer programs.

This resource focuses on simple descriptive analyses (e.g., percentages and averages), since they are straightforward to calculate and widely understood by stakeholders. These types of analyses provide immense value to leaders and help identify areas where changes can be made to improve the effectiveness of programs and areas of success that should be replicated. Findings can also support leaders to make evidence-based decisions about program design, curriculum, and instruction.

Ultimately, collecting and examining this data can give school and district leaders a measuring stick with which to assess their progress towards their goals. It can help ensure that their summer programs are always improving and providing the best possible outcomes for students.

This resource draws on work with districts in Tennessee and Rhode Island and focuses on quantitative data measures. It is intended as a starting point. Qualitative data such as conversations with students, teachers, and families will provide further information on what the data means and how to best learn from it.
Four Areas for Summer Program Data Collection

1. **Demographics of Summer Enrollment**
   - Student demographic data and summer enrollment rosters

2. **Summer Attendance Patterns**
   - Student daily attendance in summer program

3. **Teacher, Student and Family Experiences**
   - Teacher, student, family surveys

4. **Academic Outcomes**
   - Student test scores from Spring and Fall, pre- and post-tests
Four Areas for Summer Program Data Collection

Key questions you can answer with this data:

- Are the students who are enrolling in the program the ones who would benefit the most from additional academic support and school engagement opportunities?
- Which students should we target for additional recruiting efforts?
Summer Enrollment: What to Collect

Enrollment Data:
Maintain a list for each program or site of all students who sign up, even if some of them never actually attend any days of the program

Student Information:
Link enrollment data to the district’s Student Information System (SIS) so that enrollment is connected to student-level characteristics

Research-Based Recommendation
Analyzing enrollment, apart from attendance, can help identify barriers in the participation pipeline. Capturing this information year-over-year, and tracking no-show rates, provides a clearer picture of the percentage of students who enroll in the program, and the share of those students who actually attend. This allows for more efficient program planning and staffing structures.
Enrollment and participation were highest in Grades 1 & 2 compared to Grades 3 & 4. A larger share of students in grades 3 & 4 enrolled but never actually attended any days of the program.
Work with teachers and building leaders to target grades 3 and 4. Set a goal for boosting overall attendance, and connect with families to understand barriers that hinder participation.
By linking enrollment with the district SIS, you can understand if students enrolling in the summer program are those who might benefit most from the additional academic support and school engagement opportunities. You can then use this information as a starting point to engage families and assess barriers to participation.
Four Areas for Summer Program Data Collection

Key questions you can answer with this data:

- What are the broad attendance trends over the course of the program?
- Which groups of students are attending more regularly and attending more days?
- Which students are not attending regularly and might benefit from support plans?
Summer Attendance: What to Collect

Attendance Data:
Document which program or site students attended, the program dates, and the specific dates students attended

Student Information:
Link attendance data to the district’s Student Information System (SIS) so that enrollment is connected to student-level characteristics

Research-Based Recommendation
Attendance is strongest when programs communicate the benefits of high attendance during recruiting, establish an enrollment deadline, follow-up with reminders about the program, provide transportation, and create an engaging site climate with positive adult-student relationships.
Students with lower attendance and academic performance during the school year attended fewer days of the summer program.
Develop a plan for supporting consistent attendance for students who would benefit from the connections and academic support in the program.

Next Step

**Summer Attendance: What you might do**

Average Days Attended by 21-22 School Year Category

- Low Absenteeism: 20
- High Absenteeism: 15
- At Grade Level on Math: 20
- Below Level on Math: 15

21-22 School Year Category
By tracking daily attendance and connecting student characteristics with summer attendance, you can examine students’ summer attendance by differences in school year achievement or school year attendance. This will allow you to develop targeted attendance interventions to support the students who need it most.
Four Areas for Summer Program Data Collection

Key questions you can answer with this data:

- Did students have positive experiences in the program?
- Do students report higher levels of non-academic outcomes (self-efficacy, connection etc.) at the end of the program?
- How do teachers and parents view the quality of the program?
- What do parents and teachers see as strengths and areas for growth for the program?
Surveys: What to Collect

**Student Surveys:**
Administer pre- and post-program surveys to see changes over time, or administer post-program surveys to see retrospective insight on the program

**Teacher & Family Surveys:**
Administer after the program to get feedback on teacher and family experiences; ensure that the survey is accessible for families

**Research-Based Recommendation**
Consider sending a survey to non-participant families to gain a better understanding of what types of activities and opportunities your families are looking for when it comes to summer programming. This can also allow you to compare responses for families who attended summer programming and those who did not.
Teachers and students were mostly aligned on program outcomes, but a lower percentage of students thought the program helped build relationships.
Create opportunities to more explicitly work on relationship building during the course of the summer

Surveys: What you might do
Robust surveying allows districts to measure and assess program impacts and experiences beyond test scores. Accurately capturing these experiences allows for better planning and ultimately creates stronger programs that align with the needs of students, families, and teachers.
Key questions you can answer with this data:

- Did students attending the program improve on targeted academic skills?
- Did students who attended the program longer see more academic improvement?
- Did summer program participants perform better on benchmark exams compared with non-participants?
Academic Outcomes: What to Collect

Achievement Data:
Leverage available data sources, including current benchmark exams, pre- and post-testing and prior achievement data

Student Information:
Link achievement data to attendance data, and the student-level characteristics in order to analyze achievement in more detail

Research-Based Recommendation
In order see academic benefits for the most students, programs should be structured so that the majority of participants are able to experience at least 20 days of instruction, with 25 total hours of math, and 34 total hours of ELA in a summer.
A greater percentage of summer participants in grades 1 and 2 improved their Reading scores from Spring to Fall compared with non-participants.
Examine the instruction, curriculum, and student attendance for grades 3 and 4 to better understand why grades 3 and 4 see lower improvement than grades 1 and 2.
While many analyses of academic outcomes should not be considered causal estimates of differences in the efficacy of summer school participation across subgroups of students, they can provide preliminary, and helpful, evidence for the purposes of continuous improvement.
By collecting and analyzing their data, school and district leaders can ensure that their summer programs are always improving and providing the best possible outcomes for their students.

Four Areas for Summer Program Data Collection

1. Demographics of Summer Enrollment
2. Summer Attendance Patterns
3. Teacher, Student and Family Experiences
4. Academic Outcomes
Resources to Get Started

- **Research Brief:** [Advancing Student Learning and Opportunity through Voluntary Academic Summer Learning Programs](#)
- **EdResearch for Recovery’s Summer Learning Toolkit**
- **Example Surveys:**
  - [Rhode Island Student Survey](#)
  - [Rhode Island Teacher Survey](#)
  - [Rhode Island Family Survey](#)
  - [Tennessee Teacher Survey](#)
- **Still have questions? [Click here](#) to contact EdResearch.**
This is one document in a series produced by EdResearch for Recovery on summer learning programs aimed at providing K-12 education decision-makers and advocates with an evidence base to ground discussions about how to best serve students during and following the novel coronavirus pandemic.

The EdResearch for Recovery initiative is a joint project of the Annenberg Institute at Brown University and Results for America. These program profiles were a collaboration between EdResearch for Recovery and the Tennessee Education Research Alliance (TERA).

Click here to learn more about the EdResearch for Recovery Project and view the set of COVID-19 response and recovery topic areas and practitioner-generated questions. To receive updates and the latest briefs, sign up here.