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EDUCATION



Data 101:

An Introduction to Using Data for Afterschool Programming Success

Get started using attendance and survey data to increase student and family engagement, strengthen employee retention, and improve your program quality.

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Introduction

Data is everywhere, whether we choose to collect and analyze it or not. Often we make decisions based on our own unconsciously collected data—information we've mentally collected about our students, parents, staff, programs, and communities. But data's real power is unlocked only when we intentionally set out to collect, analyze, and share it.

Developing your own data-driven strategy can be a valuable approach to improving the way your afterschool program operates, and ultimately helping students succeed.

Data can be used to inform everything from curriculum choices and day-to-day programming decisions to staffing and hiring practices. It can help improve student and family engagement; help retain staff and increase job satisfaction; and even open the door to new funding and grant opportunities. And, data can serve as an indispensable tool for setting goals and measuring your program's impact.

This guide will walk you through the basics of using data for afterschool programming success: Isolating which data to collect and analyze; how to efficiently collect that data; and how to apply data analysis to improve the quality of your afterschool program.

Why collect data?

In recent years data collection and analysis has become a major initiative for organizations across virtually every industry. Social science has long used data collection and analysis to shed light on important issues such as gender and racial inequality, income disparity, climate change, and education. Now, schools and afterschool programs are creating systems for collecting and sharing data to gain a clearer picture of the children and communities they serve.

As one educator said, “data can serve as a magnet to draw people together under the shared understanding of what needs to be done.”

Data already plays an important role in illustrating the value of afterschool programs. Research (and its resulting data) continually shows us that students who regularly attend afterschool programs engage in fewer negative behaviors; score higher on standardized tests in math and reading; and are more likely to graduate.[1],[2] And on the flip side, research tells us that kids who don’t attend after school programs can really struggle.[3]

A meta-analysis of 68 studies found that students participating in an afterschool program improved their school day attendance and saw reductions in drug use and problem behavior.

Source: The Afterschool Alliance 2014 *America After 3PM* report.

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[1] Vandell, D. L., Reisner, E. R., & Pierce, K. M. (2007). Outcomes Linked to High-Quality Afterschool Programs: Longitudinal Findings from the Study of Promising Afterschool Programs. Report to the Charles Stewart Mott Foundation.

[2] Durlak, J. A., Weissberg, R. P., & Pachan, M. (2010). A Meta-Analysis of After-School Programs That Seek to Promote Personal and Social Skills in Children and Adolescents. American Journal of Community Psychology. 45:294-309.

[3] American Institutes for Research. (2016). Texas 21st Century Community Learning Centers: 2014-15 Evaluation Report. Retrieved from http://www.tea.state.tx.us/index2. American Institutes for Research. (2013). Texas 21st Century Community Learning Centers: Year 2 Evaluation Report. Retrieved from http://www.tea.state.tx.us/index2.aspx?id=3546&menu_id=814

Data analysis: How students (and afterschool programs) benefit

Data collection and analysis can also serve as a valuable tool for improving job satisfaction, reducing employee turnover, and improving overall programming quality.

- Employees in data-driven afterschool programs report higher job satisfaction; more opportunities for professional development; and more meaningful interactions with the children in the program.

- Data-driven afterschool programs can help you attract and retain students, which helps students perform better in school.

- Data can help you choose the curriculum, programming practices, and professional development that best serve your student demographics. Data is also great for demonstrating your program's value to parents, and increasing parent involvement.

- Data can help you build strong relationships with your local school sites and school district. Sharing data (with parents' permission) can also help you identify individual students who may need extra academic help.

- Becoming a data driven program can help you apply for grants and special funding.

When kids have no place to go after school, they miss out on valuable learning opportunities, parents lose 8 days of work, and businesses lose up to $300 billion a year.

Source: This is Afterschool 2018

Identifying your data-driven goals

It's a good idea to identify your goals as an organization before you get started collecting and analyzing data. That way you can better pinpoint what types of data you need to collect. Goal setting often starts with first identifying your pain points. What are the biggest challenges your program is facing now? Some examples might include:

- Improving student literacy / academic achievement
- Engaging and involving both students and their parents
- Retaining and training program staff
- Increasing program funding
- Maintain compliance / accountability

You might also consider forming a committee or working group to oversee your data initiatives. In addition to setting policies and practices for data access and effective data handling, your data initiatives working group can gather input from other staff to form and prioritize a list of goals for your program.

Before you start:

1) Form a committee or working group to manage data initiatives.

2) Set policies and practices for collecting and accessing data.

3) Define and prioritize data-driven goals for your program.

"A common element [of successful afterschool] programs... is that staff at all levels are able to articulate the program's goals."

Source: Supporting Success: Why and How to Improve Quality in After-School Programs.

Tracking attendance data

Attendance data is one of the most obvious data points to track. It can play a big role in helping students succeed academically, and improving the quality of your afterschool program. Students who are chronically absent, for example, can indicate a lack of interest in scheduled activities and programming. Chronic absence also puts students at a higher risk for dropping out of school.[1] By tracking attendance data over time, afterschool programs can better gauge overall student interest in afterschool curriculum, and identify those students who may need help with academic, social, or family issues.

"Tracking attendance is one of our primary indicators of youth engagement."
Source: Connecting the Dots: Data Use in Afterschool Systems

To get started tracking attendance data, you'll first want to create a spreadsheet to isolate the specific data points you want to collect. The following are data points recommended in The After School Project's Guide to Monitoring Attendance in Afterschool Programs:

- Student ID (names or assigned student numbers)
- Program name (if more than one)
- Total number of students enrolled (by month, semester, or year)
- Total headcount (per day, week, or month)
- Length of enrollment (first and last dates of enrollment)
- Student demographics (age, grade, activities or programs)

Collecting this data over time can allow you to report on your average daily attendance (ADA), as well as your:

- Average length of enrollment
- Student demographics
- Desired activities

Whether you collect your raw data using paper forms or a web-based mobile app, you'll want to standardize on one method for your program site(s) to minimize data discrepancies. As The Afterschool Project's guide suggests, keep it simple and efficient.

[1] High School Dropout, Graduation, and Completion Rates: Better Data, Better Measures, Better Decisions. A 2011 consensus report from The National Academies of Science, Engineering, & Medicine; pg.61.

Surveying students and parents

In addition to collecting baseline demographics, surveys can be a powerful tools for gauging program expectations, activity preferences, parent concerns, and more. Surveys can give you great insight into how students and parents perceive your program, and can be used to inform how your program evolves.

In Rhode Island, for example, parent surveys showed that more students weren't participating in afterschool programs because of a lack of safe transportation both to and from the afterschool program site. In another example, parent surveys uncovered a preference for alternate afterschool activities (as opposed to cost) as the primary reason for student non-enrollment. It's not hard to imagine how afteschool programs might make changes in response to such data to better serve their communities.

Although open-ended questions can be a great way to gather detailed insight, it's important to ask questions for data collection in a format that is easily recorded and tracked (i.e., multiple choice or scales of measurement/agreement). As a best practice, make sure at the outset to explain your objectives to those people you plan to survey.

Survey data to collect

- Student demographics (age, grade, school, gender)
- Household demographics (languages spoken, siblings, parents/guardians, city of residence)
- Parent demographics (working full or part-time; preferred language; contact info; preferred methods for receiving school updates)

Survey questions

In particular, collecting student and parent demographics can help encourage parent and family involvement afterschool. Research shows that when parents are involved in school activities, students attend school more regularly and perform better academically. Some afterschool programs have use surveys to identify resources and enrichment activities specifically for parents, such as free translation services and benefits enrollment support. At one afterschool program in New York City, workshops and classes are offered based on parent surveys that identify adult topics of interest, such as cooking and sewing.

The Afterschool Alliance offers sample survey questions on its website; these questions can be useful in creating your own surveys for collecting data. Another good parent survey example is one from the Tulare County Office of Education in Visalia, Calif. Tulare County's survey mixes a variety of question formats in a way that supports long-term data collection and analysis. A third example of a parent survey that can serve as a

helpful model comes from a community center in Dover, New Hampshire. Most notably, the community center uses a web-based survey format to collect its data, and also offers a gift card raffle to incentivize parents to complete the survey.

Parent survey examples:

After School Alliance Sample Polling Questions
Tulare County Office of Education Afterschool Survey
Seymour Osman Community Center Afterschool Needs Assessment

Surveying staff and school administrators

In addition to surveying students and parents you'll want to survey your teachers and staff, and even the administrators at the schools your program serves. Surveying teachers and staff, in particular, can be a great way to assess how your program functions on a day-to-day level. Staff surveys can address sensitive issues such as satisfaction with job duties, pay, and professional development opportunities. They can give you information about student's learning preferences and habits, and indicate programming areas where process improvement is needed.

Ideally, staff and teacher surveys should be circulated at the end of each school year or term. As with parent and student surveys, questions should be created using data collection in mind: Multiple choice, agreement with statements on a scale of 1 to 5, etc.) Survey collection (either electronically or via a form dropbox) should also be anonymous.

Surveying school administrators is a great way to gather feedback and gain insight into the perceived effectiveness of your program. Here, the need for anonymity isn't as great. In fact, an open and honest dialog with school administrators will likely improve your abilities to work together in meeting students' needs. Survey questions for administrators might include questions about how well your program is meeting state requirements for physical activity, and nutrition, for example, and questions about demand for parent and family resources.

Staff survey examples:

4H Afterschool Program Staff Survey
Out-of-School Time Program Evaluation
TCOE After School Program Classroom Teachers' Survey
Afterschool Outcome Measures Online Toolbox

Analyzing attendance data

Attendance data can be analyzed in a number of ways. Once you've collected daily attendance data for a month or more, you can begin to calculate your Average Daily Enrollment (ADA), as well as enrollment for specific programs, activities, and patterns of attendance for individual students. You'll want to look at how and when enrollment numbers fluctuate, so that you understand the dynamics behind those fluctuations.

Start by creating reports that compare ADA for specific months or times of the year. Use your attendance data to see which age groups spend the most time in your programs, and which age groups spend the least. You can also compare attendance data with students' academic progress, if available, to draw insights about the value of your afterschool program. Other useful analyses include:

- Maximum and minimum numbers of students served on any given day
- Average duration of enrollment (per year and year-over-year)
- Average number of daily program hours per student
- Total number of absences per student

Reviewing ADA data and trends in your staff meetings provides an important foundation for making data-driven program decisions. Your staff will be the first people to understand the unique factors and dynamics driving attendance, so work with them to review the data, and solve attendance issues. For example: If your data reflects a pattern of absenteeism among a certain cluster of students, connect with the school to see if those same children are absent during school hours as well. You may be able to coordinate a family outreach effort to improve attendance and thus increase those students' chances to graduate.

"In addition to providing good programming, afterschool leaders can help schools partner with parents and build good attendance habits."

Source: Building a Culture of Attendance, The Expanded Learning Project

Analyzing survey data

To get started analyzing data collected through surveys, you'll first want to gather your data all in one place. The easiest approach (if your survey responses aren't collected digitally) is to enter your survey responses into a spreadsheet. Using survey tools such as Google Forms or Survey Monkey can simplify the process of data entry for you, and automatically save your survey data in a spreadsheet.

Once you've entered your survey data in a spreadsheet you can start to use graphs to make your data visual. Google Sheets and Microsoft Excel, for example, both offer functionality to create graphs based on your data. Looking at data with graphs and other visual aids will make differences in survey responses—which are often measured in percentages—immediately clear. Other observations gleaned from surveys may be much more nuanced and require some thoughtful interpretation.

1) Gather survey data in a spreadsheet.
2) Use graphs and visual aids to interpret data visually.
3) Create reports to summarize and share your findings.

Training staff to interpret data and create create reports and summaries based on collected surveys is an investment that will pay off in the long run. Note that your survey results aren't going to be of much use unless you can share them in a way that is easy for everyone involved in your decision-making processes to understand.

"Many program leaders... rely on anecdotes from a few staff members or occasional glances into classrooms to stay informed of program quality. While these informal practices are important for staying in touch with staff, they can easily mislead management about a program's successes and needs if they are not accompanied by consistent data collection."

Source: Supporting Success: Why and How to Improve Quality in After-School Programs.

Sharing your results

- **Plan to regularly share attendance data** and survey results with parents, teachers, and school leadership to explain your programming changes and goals. Newsletters, email, and social media updates are all good ways to share data-driven insights with students and parents.

- **Meet regularly with your staff to review both your data and goals**, and as much as possible, infuse curriculum planning sessions and other staff meetings with data so that it becomes actionable. Actively engaging staff in discussions about your data findings will not only lead to creative problem solving and effective program changes, but to higher job satisfaction for teachers and staff.[2]

- **Gain permission to share information with your school site** so that you can more readily identify children who need specific supports. You can do this by appealing directly to parents for permission to share data with the school site during the afterschool program sign up process.

- **Create baseline reports summarizing average daily attendance (ADA)** and non-identifying demographics data (race, gender, age, grade, etc) to use for applying for grants and special funding. Search the Afterschool Alliance funding database for program and submission requirements.

[2] Smith, C., Akiva, T., Sugar, S., Lo, Y. J., Frank, K. A., Peck, S. C., Cortina, K. S., & Devaney, T. (2012). Continuous quality improvement in afterschool settings: Impact findings from the Youth Program Quality Intervention study. Washington, DC: The Forum for Youth Investment; Pg. 8.

Conclusion and resources

Merely attending an afterschool program is a good indicator that children will perform better academically and socially throughout their K-12 years. But when an afterschool program uses data to guide its curriculum and programming choices, students, staff, and schools can all benefit greatly:

- Data-driven curriculum and activity changes result in a high-quality programming that students enjoy and look forward to attending.
- Staff feel more empowered and have opportunities for professional development that are aligned with their interests.
- Relationships with schools and community organizations are deepened as data is used to improve collaboration.
- Grants and funding opportunities are easier to identify and apply for using easily accessible data about your program.

You'll find that the more you use data to improve your program, the more important it becomes that you decide how you plan to collect, store, and manage your data. And, the more important it becomes to put people and processes in place to support your data-driven strategy.

Adding data to your organization is no small undertaking, but it is something that you can start doing immediately. Remember that it isn't a cookie cutter process, and your data-driven strategy will be unique to your program. Use this guide to get started, keep your end goals in mind, and make adjustments as you go.

For free tools to help you integrate data into your after school program, visit Mizzen at after.school.

More online resources

Wallace Foundation: Six tip sheets offer an easy way to learn about using data to boost afterschool programming.

Wallace Foundation: Connecting the Dots: Data Use in Afterschool Systems

Wallace Foundation: From Good to Great: Using Data to Assess and Improve Quality

The James Irvine Foundation After School Toolkit

After School Alliance: America After 3PM

Making After School Programs Better

MetLife Foundation: Looking at the Data: Afterschool Programs Using Data to Better Serve Student

Using Research to Continuously Improve Afterschool Programs: Helping Students to Become 21st Century Lifelong Learners