



DATA ANALYSIS

DROPOUT PREVENTION AND RE-ENGAGEMENT SERVICES

WHAT IS DATA ANALYSIS?

Data analysis is a process for organizing and analyzing student data to help schools make informed decisions. Analyzing and understanding student data is crucial to understanding why some students disengage and eventually drop out of school.

Data analysis is an essential element of dropout prevention and re-engagement services. It is crucial in guiding the identification of at-risk students, school level changes, and interventions, and is a tool to evaluate the effectiveness of programs and services.

WHY FOCUS ON DATA ANALYSIS?

Data analysis is a key component of:

- Providing student support
- Monitoring student progress
- Evaluating impact of services and support
- Making decisions about school changes and improvements
- The school improvement cycle for Colorado schools and districts under Unified Improvement Planning or UIP.

Strategies to support the effectiveness of interventions include the collection and analysis of the same data both before (pre-test) and after (post-test) the intervention. Using the same data year after year provides the opportunity to identify and communicate trends, gaps and areas for improvement.

WHAT DOES THE RESEARCH SAY?

Developing data analysis systems, simple or sophisticated, to track student progress is necessary to promote success. Key data points that will help schools and districts analyze their challenge areas, identify appropriate interventions, and determine what methods have worked include:

1. The ABC's
 - a) Attendance (i.e., total, unexcused, and excused)
 - b) Behavior (i.e., suspensions, office referrals)
 - c) Course grades (i.e., including intermediate outcomes such as failing tests or missing assignments).

Colorado Data Analysis Facts and Figures

- In 2016, the Colorado absenteeism rate was 6.7%, which includes unexcused and excused absences.
- In 2016 the Colorado truancy rate was 2.5%, which only includes unexcused absences. This represents a slight increase (i.e., worsening) compared to the previous year.
- In 2016, there were 106,362 habitually truant students in Colorado schools, a decrease from the previous year.
- In 2016, over 160,000 students missed more than 10% of school (defined as chronically absent).



2. Standardized assessment and intervention practices related to substance use and mental health, which should include:
 - a) Identifying and training responsible personnel;
 - b) Utilizing reliable measures to detect problems and understanding how often to administer such measures; and
 - c) Developing individualized action plans on the basis of ongoing assessment results.
3. The dropout recidivism rate
 - Students who have previously dropped out are more at-risk of leaving school again. Out-of-school youth who re-enroll in school need more attention to re-engage and succeed in their educational pursuits.
4. Attendance and Truancy Continued:
 - At the school level data analysis methods will assist in the identification, early outreach, support and interventions. For example, examination of students missing more than 10% of the school year at benchmarks throughout the year or, mapping attendance gaps by grade, classroom, neighborhood, poverty rates, and racial and ethnic groups may assist in better identifying the necessary support.
 - At the district level comparisons can be studied between schools with an unusually large number of chronically absent students and those with good attendance despite challenging conditions.
5. Student performance data helps schools determine which interventions are working. Partnering with an [Early Warning System](#), measuring student progress can help schools evaluate how well programs and policies are meeting student needs. Key student indicators to track include:
 - a) The interventions prescribed for the student;
 - b) How often the student participates in each intervention; and
 - c) The student's performance in the intervention.

Developing and maintaining data analysis systems with unique student identifiers allow for comprehensive longitudinal tracking of individual students. Systems that allow schools to check-in at certain benchmarks, sometimes as early as fourth grade, for student absences, grade retention, academic achievement, and disengagement from school allow teachers, staff and administrators to address these factors early for greater student success.

Data Analysis References and Materials:

[Dropout Prevention Best Practice Guide References](#)

[Dropout Prevention Resources](#)

<http://www.cde.state.co.us/dropoutprevention/dataanalysis>