

Evidence vs. Data

Data use for educational improvement is studied under many guises (e.g., data use, data-driven decision-making, evidence use), all with the same intention: providing districts, schools, and educators with better information that can ensure that students learn. If offered in a useful form, such data can help teachers, principals and other educational personnel learn more about their students, improve their teaching craft, and ultimately impact a variety of educational outcomes.

Evidence Use

Direct evidence is actual student work showing student knowledge and skills. Examples might include embedded assignments, portfolios, senior thesis projects, or observations of presentations.

Indirect evidence is student or faculty perceptions of student performance. Examples might include surveys, exit interviews, focus groups, or student self-assessment.

These types of evidence are meant to be combined to more fully understand a learning outcome.

Data Use

Data driven decision-making is a subset of evidence-based decision making. Use of data involves a carefully organized set of evidence – ideally a combination of direct and indirect evidence that provides a rich display of information regarding the question at hand: "Are the students as a whole achieving the particular learning target at the desired level(s) of performance?"

Data should meet these criteria:

- 1. Systematically collected (not anecdotal: "I got 3 calls this week from parents who want more rigor")
- 2. Has been organized to aid its analysis, is not still in raw form
- 3. Based on a valid and reliable assessment

As much as a location in space cannot be determined without three reference points, drawing a conclusion about student learning based on a single line of evidence does not lead to a fully accurate conclusion. Organizing multiple lines of evidence, direct and indirect, into a data set, enhances the reliability of conclusions and is scholarly practice.