



Connecting Students to the World of Work

Evaluation Mini-Guide #6: DATA ANALYSIS AND REPORTING

This mini-guide is one of a series designed to provide recipients of the OAC's Connecting Students to the World of Work grants with guidance for conducting evaluations of their funded programs. Each mini-guide offers basic information on a specific topic to help grantee organizations build capacity to implement evaluation activities.

This mini-guide briefly introduces topics relevant to data analysis and reporting and builds upon concepts presented in earlier mini-guides.

How do we analyze our data?

Before analyzing your data, you will need to “clean” them. This means reviewing your raw data for problematic values, such as typos and out-of-range responses, and recoding them as necessary. Once your data are cleaned, analysis can begin. Your strategy for analysis will depend upon your program's goals (in your logic model, see Evaluation Mini-Guide #1) and the type of data (qualitative or quantitative; see Evaluation Mini-Guide #4).

Qualitative data (e.g., stories and comments collected via interviews and focus groups) are analyzed and coded for commonalities and main emergent themes across respondents. When reviewing the responses, note common threads and repetitive themes.

Quantitative data (e.g., numeric data collected via surveys and archival records) can be analyzed in a variety of ways that largely depend on how you have collected and managed your data (see Evaluation Mini-Guides #4 and #5). Generally speaking, quantitative data analysis falls into one of two categories: descriptive and inferential.

- **Descriptive analyses** involve basic procedures that “describe” your population. This includes frequencies (i.e., how often a response is endorsed by participants) and means (i.e., average scores). This can also involve comparing these estimates across different subgroups, such as girls and boys.
 - Online survey programs, such as SurveyMonkey, feature basic data analysis and reporting tools that will compute many descriptive statistics automatically.
 - Spreadsheets, such as Excel, can also produce many descriptive statistics, but not automatically. The user must have the skills and knowledge to program and run appropriate formulas.
- **Inferential analyses** investigate relationships among variables, such as examinations of cause and effect (i.e., did the program cause the outcome?) and/or change over time (i.e., did students' ratings improve over time?). They are more sophisticated and can test the “statistical significance¹” of the relationship.
 - Most online survey programs and spreadsheets cannot compute inferential statistics. Instead, data must be exported into analytic software (e.g., SPSS or SAS), and the user must have specific skills to conduct the analyses and interpret the results.² A professional evaluator³ can be helpful.

Data analysis is a vast topic. Many resources exist to help you establish an analysis plan² and/or find a professional evaluator³ to help.

How can we report our data?

It is a good idea to organize results by program goals. This makes it easy for readers to follow and understand the program's progress toward certain outcomes. Evaluation Mini-Guide #2 shows an example of how surveys and focus groups can both measure the outcome: “Students will increase their interest in arts-related careers.”

¹ California State University, Long Beach: <http://web.csulb.edu/~msaintg/ppa696/696stsig.htm>

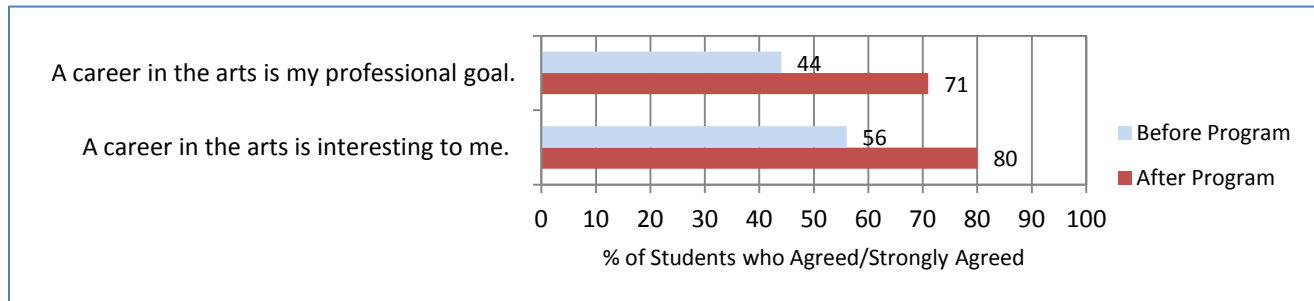
² Basic Guide to Evaluation: <http://managementhelp.org/evaluation/program-evaluation-guide.htm#anchor1316141>

³ Oregon Program Evaluators Network: <http://www.oregoneval.org>; American Evaluation Association: <http://www.eval.org>

The sample report section below continues this example by illustrating how the descriptive data analyses (described above) can be reported for this outcome. This is just one basic example; data can be presented in many ways, including tables, graphs, and charts.⁴

Evaluation Findings for the WoW Program

Survey and focus group data suggest that the WoW program has positively impacted students' interest in arts-related careers. The table below shows findings from a survey administered to all 50 students before and after program participation. As shown, the percentage of students who agreed or strongly agreed that a career in the arts is interesting and/or is their professional goal increased from before to after the program.



In addition, a focus group was conducted with eight students after program participation. During these groups, students described an increased interest in an arts-based career. When asked if they felt the program helped them think about their careers, six of the eight participants said it had. Some specific comments include:

“Because of this program, I want to become a graphic artist. I understand what I need to do to it.”

“I learned how to use computers to create art. I want to learn more so I can become a graphic artist one day.”

What findings should we report to whom? How can those findings be used?

Your findings will likely be relevant and interesting to various audiences, such as program staff/management, donors, board members, and community partners. When reporting, share with each group those findings that are relevant to their role, presented in an accessible format and on a reasonable schedule. Data that monitor and inform implementation (i.e., how the program is working) are useful to present frequently, so staff can adjust as necessary; whereas data that reflect program impact may be presented less often because more time is needed to collect sufficient responses. Some examples follow:

Example Strategies for Data Reporting and Usage

Audience	Findings	Usage
Program Staff	Presentation on key findings of implementation successes and challenges	Celebrate the successes! What components made the program successful and how can you build upon them? Discuss the challenges and what program improvements can be made. Create a plan for how the data will inform future work.
Donors	Letter highlighting a few key findings illustrating program impact	Support fundraising efforts by illustrating how donations are leading to positive change.
Board of Directors	Evaluation report (regular basis), including an executive summary	Prompt discussion about strategic planning processes, program improvement, and other implications.
Community Partners	Fact sheets listing key findings relating to population served and program impact and existing needs	Discuss how the data can inform the direction of the partnership.

⁴ Evergreen Data: This blog shares examples of how to illustrate findings: <http://stephanieevergreen.com/blog>