Building Survey Methodology Rigor in Education Agencies

Context

The Every Student Succeeds Act (ESSA), emphasizes the importance of data and evidence for accountability and educational decision making. For instance, ESSA specifies that states should continuously assess local needs and evaluate the effects of evidence-based interventions on student outcomes (Hale, Dunn, Filby, Rice, & Van Houten). Surveys are a common method for collecting data to assess local needs, determine how interventions are being implemented, as well as for measuring impact of interventions. Accurate data is critical to effective decision-making, and the accuracy of survey data is dependent on a well-developed and administered survey instrument. This paper shares the approach for building capacity of a state education agency to conduct high quality survey work following best practices from the field of survey methodology.

The Minnesota Department of Education (MDE) administers more than 65 surveys each year. An MDE survey team was developed to build capacity, centralize survey development, and foster interdivisional collaboration.

Purpose

The purpose of the work described in this paper is to translate best practices informed by the field of survey methodology for application to the work done in state or local education agencies. The author partnered with staff from MDE over three years through the Regional Educational Laboratory Midwest and the Midwest Comprehensive Center programs. The focus of this work was to build education agency staff capacity to create and administer high quality surveys, and to analyze and communicate survey findings to support evidence-based decision making.

This full paper will describe common challenges creating and using surveys faced by agencies, the content of the direct training provided to MDE to build their capacity, tools developed in collaboration with the MDE to support survey development and administration, and a description of how MDE has incorporated resources and processes to increase the rigor and appropriate use of surveys across their agency. The purpose of this paper is to share lessons learned and resources resulting from this partnerships that can inform the work done by others supporting rigorous survey methodology in education agencies

Setting and Participants

MDE’s Deputy Commissioner selected 12 staff members to serve on a survey team to receive training and survey development support. The team members were from a variety of divisions. Some staff had strong quantitative and research background, and all had some experience working on surveys in their divisions.

Approach and Content

The approach for building survey methodology rigor at MDE included a core survey team who, in partnership with the Comprehensive Center and REL, met bi-monthly to define their
challenges and needs, develop their expertise through direct coaching, plan and cohost agency-wide trainings, inventory current surveys across the agency, and co-develop resources and quality assurance processes for supporting their colleagues’ survey projects.

The content for the training and support are based on foundational texts and literature on survey methodology (for example, Dillman 2000, Groves 2006, Willis 2005, Converse & Presser 1986, Groves, Couper, Lepkowski, Singer, & Tourangeau 2009, Kalton 1986, Schuman & Presser 1981) and best practices recommended by the American Association of Public Opinion Research. The activities supported by the partnership responded to practical needs identified by agency leaders.

The content of the work covers best practices for planning for a survey including the consideration of whether or not a survey is the appropriate approach for a given data need (as opposed to focus groups or accessing existing data). Clarifying the survey goals and decisions that the survey data will inform are important in the planning phase to avoid overly lengthy surveys which is a common complaint. A tool was developed to help with planning as well as an example Gantt chart to plot out all the steps in a survey development project. Borrowing from existing vetted surveys and tips for writing survey items that follow evidence-based best practices were important skills developed through training and hands-on exercises. Many agency surveys were administered without any pretesting. Pretesting increases the validity and reliability of survey results by ensuring that the relevant aspects of the topics are included and that respondents understand the items as intended. Strategies and practice for conducting cognitive interviewing were incorporated into trainings. Response rates are a key consideration for survey quality and we developed examples of survey invitations and non-response follow up materials aimed at maximizing response rates. Measuring response rates correctly and detecting evidence of non-response bias is also a focus of the work of the survey team. Strategies for using random sampling and stratified random sampling were covered as well as a caution against attempting a large census. The quality of the survey depends on reducing different sources of error - error from non-coverage, sampling error, non-response error, and measurement error from poorly written survey item – and reducing error was a theme of the work.

Outcomes

The MDE survey team has established themselves as a trusted resource for agency staff members who are developing surveys. Staff initiating a new survey project are asked to fill out the survey planning tool and then meet with the team for an initial consultation. This process has resulted in one project changing to include a series of focus groups instead of a survey because quantitative results were not needed and the timeframe available was not sufficient to conduct a high quality survey. Other resources developed by the team include an inventory of all surveys which is used to evaluate redundancies and support a coherent approach across divisions, a list of survey team members and their area of expertise (for example, writing items, cognitive interviewing, or sampling) so staff can find help for particular need, a cognitive interview protocol template which has been used in two survey projects, examples of respondent communication materials, and a variety of survey methods resources references. Quality assurance processes includes a review of a survey draft by the team before administration.
Conclusions

Building survey methodology rigor in education agencies does not necessarily require hiring experienced survey methodologists. Important gains can be made through harnessing and building the skills of a team of agency staff and developing resources and quality assurance processes to support the work.

References


