

**ZMATH 2016d.00809**

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**Engaging students in survey design and data collection.**

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Summary: Every day, people use data to make decisions that affect their personal and professional lives, trusting that the data are correct. Many times, however, the data are inaccurate, as a result of a flaw in the design or methodology of the survey used to collect the data. Researchers agree that only questions that are clearly worded, unambiguous, free of bias, and worded in such a way that respondents are motivated to answer truthfully produce credible results. However, many students seem not to fully understand or appreciate this fact. This may be because question construction and data collection are often not part of the content covered in introductory mathematics classes. However, students need to have the opportunity to form research questions and collect data that will be used to answer those questions. Affording students the opportunity to design and pilot survey questions and generate data helps clarify the misconception that these steps are of little consequence. To help clear up these misunderstandings, the lesson described in this article focused on developing students' abilities to pose, pilot, and critique survey questions and to understand how data are collected and used. (ERIC)

*Classification:* K40 M90 D70

*Keywords:* survey design; collection of data; data analysis; statistics; misconceptions; modeling

<http://www.nctm.org/Publications/Mathematics-Teacher/2015/Vol109/Issue5/Engaging-Students-in-Survey-Design-and-Data-Collection/>