Uncommon Measures: Student Surveys and Their Use in Measuring Teaching Effectiveness

David English, Jackie Burniske, Debra Meibaum, and Lisa Lachlan-Haché, Ed.D.

American Institutes for Research
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*American Institutes for Research*
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In an effort to develop a balanced and valid system, states and districts increasingly have moved toward using multiple measures in educator evaluation. Certain measures, such as classroom observations and value-added models, are more commonly used or considered than others. To support innovation and build collective knowledge, this series provides guidance on alternative measures of teacher effectiveness and highlights district and state contexts where these methods are used.

This document provides guidance regarding the use of student surveys, including benefits and limitations of their use, summaries of vendor-developed student surveys and how they have been used in other contexts, and guidance around implementing surveys and using student perception data effectively.

Background

Solicitation of student perceptions regarding teachers has a long history in the United States. In 1896, students in Grades 2–8 in Sioux City, Iowa provided input on effective teacher characteristics (Follman, 1995). In addition, students spend more time observing classroom learning conditions than any outside observer (MET Project, 2012). It might not be counterintuitive then that, as of 2015, at least 23 states required or encouraged the use of student perception surveys as one of multiple measures of teacher performance (Center on Great Teachers and Leaders, 2015).

In reviewing 154 articles written over a 74-year time period, Aleamoni (1999) identified 16 myths regarding students’ ratings of their instructors. Important findings reinforced across multiple studies included the following:

- Student ratings demonstrate consistency across school years for the same instructor.
- Students do not automatically rate instructional skills highly for those teachers who also scored highly on constructs associated with “popularity,” such as demeanor with student.
- Student ratings are not highly correlated with grades received from respective teachers.

Follman (1992, 1995) conducted a literature review of teacher effectiveness ratings in public schools and concluded that student surveys are reliable, that students are able to discriminate between effective and ineffective teaching, and that teacher ratings by students are no more impacted by “halo effects,” or lenience toward teachers, than ratings by adult observers.

Goe, Bell, and Little (2008), in a later review of the literature, concluded that existing studies “provide convincing evidence that student ratings of teaching are worth considering for inclusion in teacher evaluation systems” (p. 40). They cautioned, however, that “the reliability and validity of the student survey depends to some extent on the instrument used, how it is developed, how it is administered, and the level of detail it attempts to measure” (p. 40).

Recent results from the rigorous Measures of Effective Teaching (MET) Project lend additional credibility to the use of student perception data, concluding that student ratings are predictive of achievement results and that results are reliable to the extent that the instrument is well constructed and purposeful sampling methods are used (MET Project, 2012).
Marzano and Toth (2013), in considering the results of the MET project and preceding research, resolutely concluded that student perception surveys “can and should” (p. 75) be used as one of multiple measures in teacher evaluation.

**Benefits and Limitations Regarding the Use of Student Surveys in Teacher Evaluation**

Research indicates that there are both benefits and limitations to using student surveys in teacher evaluations, as is true with many evaluation measures. In Table 1, findings from research on using student surveys as a measure of teacher effectiveness are grouped into five major categories: (1) use of students as raters, (2) reliability and validity of student ratings, (3) predictability of student achievement results, (4) impact of student demographics, and (5) implementation issues. In making decisions on the use of student surveys as a component of a comprehensive teacher evaluation system, policymakers may benefit from considering both the benefits and limitations.
Table 1. Benefits and Limitations of Student Surveys

<table>
<thead>
<tr>
<th>Category</th>
<th>Benefits</th>
<th>Limitations</th>
</tr>
</thead>
</table>
| Use of students as raters      | Students have extensive daily contact with teachers, resulting in unique perspectives and ratings of teacher behaviors (Follman 1992, 1995; Peterson, Wahlquist, & Bone, 2000; Worrell & Kuterbach, 2001).  
Students are the direct recipients of instruction and have more experience with their teachers than other evaluators (Follman, 1992).  
Student ratings are consistent from year to year (Aleamoni, 1999).  
Students discriminate between effective teaching behaviors and warm, caring, supportive teacher-student interactions (Peterson et al., 2000; Aleamoni, 1999).  
Secondary students can discriminate between effective and ineffective teachers (Follman, 1992; Worrell & Kuterbach, 2001).  
Student responses distinguish between teachers; students may rate one teacher high and another low, based on the quality of teaching that the student experiences (Ferguson, 2010; MET Project, 2012). | Student raters have a lack of knowledge of the full range of teaching requirements and responsibilities, such as curriculum, classroom management, content knowledge, and professional responsibilities (Follman, 1992, 1995; Worrell & Kuterbach, 2001; Goe et al., 2008).  
Students will respond with candid judgments only when they can be assured that survey results are anonymous and, to that end, surveys should not contain comment boxes, per students' belief that their handwriting will be recognized (Popham, 2013). |
<table>
<thead>
<tr>
<th>Category</th>
<th>Benefits</th>
<th>Limitations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reliability and validity of student ratings</td>
<td>Student ratings are a valid and reliable data source (Peterson et al., 2000; Worrell &amp; Kuterbach, 2001). Elementary and secondary student raters are no more impacted by validity concerns, such as halo and leniency effects, than adult raters (Follman, 1992, 1995). Elementary and secondary students are as reliable as older, adult raters in rating teaching behaviors (Follman, 1992, 1995; Worrell &amp; Kuterbach, 2001). Elementary students, including preschoolers as young as 4 years old, can rate reliably (Follman, 1995). Appropriately administered, well-constructed instruments yield high-reliability results; subjective and correlational studies indicate positive validity of student rating results (Aleamoni, 1999). Secondary and older primary education students provide ratings of teacher behavior that are stable, reliable, valid, and predictive for teacher evaluation (den Brok, Brekelmans, &amp; Wubbels, 2004). Student responses [in the Tripod survey] are reliable, valid, and stable over time at the classroom level (Ferguson, 2010). Student survey results [in the Tripod survey] are more likely to demonstrate consistency than classroom observations or achievement gain measures (MET Project, 2012).</td>
<td>Reliability and validity of student ratings depend on the content, construction, and administration of student rating instruments (Popham, 2013; Goe et al., 2008; Little, Goe, &amp; Bell, 2009; Kyriakides, 2005; Aleamoni, 1999). Potential student rater bias may affect teacher ratings (Follman, 1992—citing Eastridge, 1976). The earliest age by which students can adequately rate their teachers is unresolved, and that must be considered when applying ratings by students who are below Grade 3 (Follman, 1995). In order to ensure reliability of a student survey, enough items must be included for each teaching construct measured and a representative sampling of classes and students must be surveyed (MET Project, 2012).</td>
</tr>
<tr>
<td>Category</td>
<td>Benefits</td>
<td>Limitations</td>
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<td>----------------------------------</td>
<td>--------------------------------------------------------------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Predictability of student</td>
<td>Student ratings are more highly correlated with student achievement</td>
<td>Student ratings are a moderate predictor of student achievement (Worrell &amp; Kuterbach, 2001).</td>
</tr>
<tr>
<td>achievement results</td>
<td>than principal ratings and teacher self-ratings (Kyriakides, 2005;</td>
<td>Student ratings should not be the primary teacher evaluation instrument, but should be included in a comprehensive teacher evaluation process (Goe et al., 2008; Little et al., 2009; Peterson et al., 2000; Follman, 1992, 1995).</td>
</tr>
<tr>
<td></td>
<td>Wilkerson, Manatt, Rogers, &amp; Maughan, 2000).</td>
<td>For any teacher, survey data should be collected over multiple classrooms and across multiple school years before being used for high-stakes decisions (Ramsdell, 2011).</td>
</tr>
<tr>
<td></td>
<td>On average, teachers who get the most favorable survey responses are</td>
<td></td>
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<tr>
<td></td>
<td>those with students who demonstrate the most gains in achievement scores</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(MET Project, 2012).</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Student ratings of teachers align with student achievement; teachers</td>
<td></td>
</tr>
<tr>
<td></td>
<td>rated higher by students in instructional effectiveness align with</td>
<td></td>
</tr>
<tr>
<td></td>
<td>students achieving at higher levels in that teacher’s class (MET Project,</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2010; Crow, 2011).</td>
<td></td>
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<tr>
<td></td>
<td>The students of teachers ranking in the top 25th percentile, based on</td>
<td></td>
</tr>
<tr>
<td></td>
<td>student survey [Tripod] results, learned the equivalent of about 4.6</td>
<td></td>
</tr>
<tr>
<td></td>
<td>months of schooling more in math, over a school year, than students of</td>
<td></td>
</tr>
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<td></td>
<td>teachers whose survey results were in the bottom 25th percentile (MET</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Project, 2012).</td>
<td></td>
</tr>
<tr>
<td>Impact of student demographics</td>
<td>Student rater demographic characteristics (e.g., expected or obtained</td>
<td>Student rater demographics and personality traits have a perceived significant influence on student ratings (Follman 1992—citing Eastridge, 1976).</td>
</tr>
<tr>
<td></td>
<td>course grade, pupil and/or student gender, grade point average, subject</td>
<td>Student rating research includes widely inconsistent results regarding the correlation between student grades and instructor ratings (Aleamoni, 1999).</td>
</tr>
<tr>
<td></td>
<td>matter) did not influence teacher ratings (Follman, 1992—citing Thompson,</td>
<td></td>
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<tr>
<td>Category</td>
<td>Benefits</td>
<td>Limitations</td>
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<td>------------------------------</td>
<td>---------------------------------------------------------------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Implementation issues</td>
<td>Appropriate use of student ratings feedback by the teacher can result in an improved teaching and learning environment (Follman, 1992, 1995; Aleamoni, 1999).</td>
<td>Confidentiality concerns in regard to protecting the anonymity of student raters must be addressed (Popham, 2013; McQueen, 2001).</td>
</tr>
<tr>
<td></td>
<td>Student surveys present timely and specific feedback in ways that other measures, such as achievement results, do not. (MET Project, 2012).</td>
<td>Results of students’ ratings may be misinterpreted and misused (Kyriakides, 2005; Aleamoni, 1999).</td>
</tr>
<tr>
<td></td>
<td>Relevance and use can be expanded to nontested grades and subjects relatively easily (MET Project, 2012).</td>
<td>Use of data by administrators for punitive purposes could result in teachers’ lack of support for the student ratings (Aleamoni, 1999).</td>
</tr>
<tr>
<td></td>
<td>Results of student ratings can be collected anonymously (Little et al., 2009; Worrell &amp; Kuterbach, 2001).</td>
<td>In order for results to be meaningful to teachers, training should ensure that they understand each item and how their scores compare with other teachers (MET Project, 2012).</td>
</tr>
<tr>
<td></td>
<td>Student ratings require minimal training and are both cost- and time-efficient (Little et al., 2009; Worrell &amp; Kuterbach, 2001).</td>
<td></td>
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</tbody>
</table>

Using Student Surveys as a Measure of Teaching Effectiveness—6
Considering Locally Developed and Vendor-Developed Surveys

A state or local education agency opting to develop its own survey might consider the following criteria for approval:

• Whether the survey is aligned with relevant standards for teaching
• Whether the survey content is grounded in research about teaching and designed to provide evidence of effectiveness of teachers’ practice for formative and/or summative purposes
• Whether the survey meets appropriate standards of validity
• Whether the survey meets appropriate standards of reliability

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<table>
<thead>
<tr>
<th>Survey Item</th>
<th>High School</th>
<th>Elementary</th>
<th>K–2</th>
</tr>
</thead>
<tbody>
<tr>
<td>I learn new things in this class.</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>My class is a good place for learning.</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>This teacher treats me with care and respect.</td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>This is a good teacher.</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>I know what I am supposed to do in this class.</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>I understand the class rules.</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>This teacher treats me fairly.</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I know how well I am doing in this class.</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>I usually understand how to do my assignments.</td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>This teacher maintains class discipline.</td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>I like to come to this class.</td>
<td></td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>

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District-Created Student Perception Surveys in Davis (Utah) School District

In Davis (Utah) School District, the educator assessment committee created student perception surveys at the K–2, 3–6, and 7–12 grade bands, consisting of seven to 10 questions each—considerably shorter than most off-the-shelf products. Schools are required to administer surveys at least for informational purposes and also may use them toward final teacher evaluation scores. Teachers are advised to use survey results to help create their professional development plan and inform goal setting. Results also are made available to supervisors who are instructed to incorporate results into end-of-year conferences. Prompts for the discussion of survey results are built into “preconference” forms.

Respondents rate teachers on a scale of “no,” “sometimes,” or “yes” (or [sad face], [straight mouth face], [smiley face] for Grades K–2) on the following items (Hanover Research, 2013). Table 2 lists the items used for each grade-level version of the survey.

Table 2. Items From Davis School District Student Perception Surveys
Alternatively, off-the-shelf surveys, such as the ones summarized later in this report, are available. All vendors offer online and paper-and-pencil versions of the surveys except where noted.

**Tripod.** During the past decade, the Tripod Project ([www.tripodproject.org](http://www.tripodproject.org)) has worked with more than 300,000 students in the United States, Canada, and China. Seven urban school districts used the Tripod survey instrument, developed by Harvard researcher Ron Ferguson, as part of the MET project funded by the Bill & Melinda Gates Foundation: Dallas Independent School District (Texas), Charlotte-Mecklenburg Schools (North Carolina), Denver Public Schools (Colorado), Hillsborough County Public Schools (Florida), Memphis Community Schools (Tennessee), Pittsburgh Public Schools (Pennsylvania), and New York City Public Schools (New York). Different versions are available for Grades K–2, 3–5, and 6–12. Students respond to statements categorized under each of the “7 Cs”: care, control, clarify, challenge, captivate, confer, and consolidate. During multiple administrations, the survey items have been validated and refined to capture the essential elements of classroom-level teaching and learning. Both initial and recent findings of the MET project demonstrate that student perceptions as measured by the Tripod survey can be one of multiple measures that reliably contribute to a balanced view of teacher performance and effectiveness (Ferguson, 2010; MET Project, 2012). In addition to the student survey used in the MET project, Tripod includes optional parent and teacher surveys. See more details [here](http://www.tripodproject.org).

### Highly Predictive Survey Items From the MET Project

In 2012, the MET project found that student surveys were more predictive of student achievement scores than classroom observations (MET Project, 2012). For the Tripod survey, students indicated their level of agreement with 36 descriptive items. The following five items most closely correlated with student achievement covered instructional and classroom management dimensions of teaching practice:

- Students in this class treat the teacher with respect.
- My classmates behave the way my teacher wants them to.
- Our class stays busy and doesn’t waste time.
- In this class, we learn a lot almost every day.
- In this class, we learn to correct our mistakes.

**Survey of Teacher Practices.** The Survey of Teacher Practice (STeP), distributed by My Student Survey ([http://mystudentsurvey.com/](http://mystudentsurvey.com/)), was developed by researchers at Vanderbilt University and was initially validated using results from approximately 12,000 students across seven school districts, as part of the Georgia Race to the Top program in spring 2011. Developer-provided data demonstrate a high level of reliability and validity (Voight & Hanson, 2012),
although no independent studies of the survey are available. Versions are available for Grades 4–5 and 6–12. The instrument consists of 55–60 questions that measure teacher performance along six constructs: presenter, manager, counselor, coach, motivational speaker, and content expert. See more details for Grades 3–5 here and Grades 6–12 here.

**iKnowMyClass.** The iKnowMyClass survey was developed by Russell Quaglia at the Quaglia Institute for Student Aspirations (QISA) and is distributed by Sage Publications. Versions of the survey are offered for Grades 3–5 (27 items) and Grades 6–12 (20–50 items) and measure student perceptions along the following constructs: engagement, relevance, relationships, class efficacy, cooperative learning environment, critical thinking, positive pedagogy, and discipline problems. Validation studies have been developer-led so far, thus no independent studies are available at its website. This survey is administered online only—there is no paper-and-pencil format. See more details here.

**Panorama Student Survey.** The Panorama Student Survey, developed in collaboration with the Harvard Graduate School of Education under the leadership of Dr. Hunter Gehlbach, measures student perceptions of teaching and learning as well as perceptions of school climate and students’ own strengths and weaknesses. The Panorama website (www.panoramaed.com) notes that it is a free, open-source survey. Student perceptions about the classroom and teaching are measured in two versions, for Grades 3–5 and 6–12, along the following scales: interest in subject, teacher press, expectations and rigor, supportive relationships, student engagement, classroom environment, and pedagogical effectiveness. The survey also includes open-ended responses. Panorama's website includes a report on its piloting methods to establish its validity. There appear to be no independent studies confirming its validity at this time. See more details here.

**Implementation of Student Surveys**

For student perceptions to be used meaningfully in high-stakes teacher evaluation, they must be one of multiple measures. It is important that districts ensure they are measuring aspects of instruction embedded in their particular teaching model by engaging appropriate expertise in writing, testing, and implementing surveys (National Council on Teacher Quality, 2013). Including teachers in survey and item selection will allow them to see how items are aligned with the district’s teaching framework and help assuage concerns that student surveys are otherwise “popularity contests.” This is the case for both district-developed and off-the-shelf surveys, from which a number of survey items might be chosen. Districts should consider the trade-offs between increasing the number of questions in any one teaching construct covered by the survey, in order to improve reliability, and developing a shorter survey to encourage a reasonable completion time and less respondent fatigue. In fact, fewer questions will lead to more thoughtful ratings by students (Popham, 2013). Reliability also must be ensured by surveying an adequate number of students, including multiple classrooms, for applicable teachers (MET Project, 2012; Ramsdell, 2011). Accommodations also should be considered for special populations of students to ensure accurate responses (MET Project, 2012).
Gradual Implementation of Student Surveys in Pittsburgh Public Schools

As one of six school districts hosting the MET project, Pittsburgh Public Schools (PPS) began exploring the use of student surveys in 2009–10 through a gradual implementation process and in close consultation with the Pittsburgh Federation of Teachers. The process was as follows:

- 2010–11: Tripod survey piloted for 50 teachers in PPS’s Promise-Readiness Corps.
- 2011–12: Tripod survey administered districtwide for the first time, twice to students in more than 3,400 classrooms. Some teachers received results reports for the first time.
- 2012–13: 1,300 teachers received no-stakes-attached reports on student survey results. Along with the reports, teachers received suggested professional development steps according to performance level and resource listings. Principals received training on using report results to support teachers.
- 2013–14: Evaluations formally included student survey results for the first time, weighted at 15 percent of the overall rating. Personnel decisions were required to be based on multiple years of evaluation data. An independent study prepared for the Institute of Education Sciences in August 2014 concluded that classroom observations, value-added achievement measures, and Tripod scores were valid and captured teacher performance data in complementary ways.

Administrators should remember that few students have ever completed evaluative surveys and that significant attention should be paid to the verbal and written instructions provided to student raters concerning the following areas (Popham, 2013):

- **How the ratings will be used.** Language should be included about the survey’s role for both evaluation and professional development of teachers. Students will provide more honest answers if they recognize that teachers are encouraged to integrate feedback into their practice.

- **Meaning of the survey items.** Administrators of the survey should expound further on the dimensions of the survey to provide clarity.

- **How to use the rating scale.** Whether it contains descriptive categories or numbers, the rating scale should be explicitly explained to students.

- **The importance of honesty.** In order to ensure honesty in responses, it is critical that students trust that their responses will be kept confidential. Security protocols should be described to students.

Consistently applied protocols that exclude teacher access to completed surveys should be instituted. Districts should include teachers in discussions of survey administration protocols, especially regarding ensuring that results are paired with the proper teachers in data collection systems.

**Using Student Perception Data Effectively**

An important benefit of student surveys, beyond their evaluative utility, is their potential to inform professional learning for teachers. The MET project noted that student ratings yield timely and specific feedback for teachers in contexts that other evaluation measures cannot (MET Project, 2010, 2012). Districts may consider collecting student survey data more than once during the school year in order to facilitate ongoing adjustments to teaching practice. Providing a crosswalk between survey items and elements of the district’s teaching framework can increase
the usefulness of results to teachers. Training for teachers should include ensuring understanding of the student survey items, the meaning of survey scores compared with those of other teachers, and the actual survey administration process (MET Project, 2012). The data from the surveys can be used by districts to look across their schools, by schools to look across their classrooms, and by classroom teachers to look across their students. Results can provide rich data with which to target instructional professional development and monitor teacher growth (Ramsdell, 2011; Crow, 2011).

Summary

Student survey instruments can provide valuable insight into the teaching and learning environment of a classroom when used as one of multiple measures of educator effectiveness. Students have the “deepest, broadest, and most veridical perception of their teacher” (Follman, 1992, p. 176) and as such, student survey instruments can be a valuable component when designing a comprehensive teacher evaluation system.

References


Marzano, R. J., & Toth, M. (2013). *Teacher evaluation that makes a difference.* Alexandria, VA: ASCD.


**Additional Resources**

The reader may find the resources listed below to be of value in examining the evaluation of teacher effectiveness.


ABOUT AMERICAN INSTITUTES FOR RESEARCH

Established in 1946, with headquarters in Washington, D.C., American Institutes for Research (AIR) is an independent, nonpartisan, not-for-profit organization that conducts behavioral and social science research and delivers technical assistance both domestically and internationally. As one of the largest behavioral and social science research organizations in the world, AIR is committed to empowering communities and institutions with innovative solutions to the most critical challenges in education, health, workforce, and international development.

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