How do I know that the survey is valid?

The Colorado Education Initiative (CEI) developed <u>Colorado's Student Perception Survey</u> (SPS) in 2012 to provide teachers with actionable student feedback. One of the most common questions from educators is: How do I know that the survey is valid?

Colorado's SPS is designed to provide teachers with actionable feedback from students and to better understand educator effectiveness. Validity is determined by how successful a survey is in measuring what it was designed to measure.

Survey development process

The SPS went through a rigorous development process, which included items developed by content experts, survey pilots in 16 Colorado districts, and extensive feedback from <u>students</u> and <u>teachers</u>.

Survey pilot results

Pilot results confirmed that each item is performing well and related to the other items on the survey, and that the structure of the survey (e.g., clustering of items into categories) is statistically defensible. For more information about pilot results, see the complete <u>technical report</u> and explore our interactive tools that show how the questions are related to each other for grades 3-5 and 6-12 surveys.

Correlation with other measures of educator effectiveness

Another way to look at validity is to examine whether the results of the survey are correlated to other reputable measures that get at a similar construct — in other words, taking a known measure of educator effectiveness and examining whether student survey results are related to that measure. To test the SPS, CEI looked at the correlation between

Survey Validity

The validity of a survey is determined by how well it measures the concept or idea it is intended to measure. *How can we test the validity of the SPS?*

- Ensure the survey underwent a robust development process, including input from a variety of content experts.
- Examine results from the survey to ensure each item is performing well and related to the other items on the survey, and that the structure of the survey is statistically defensible.
- Examine how SPS results compare with other measures of educator effectiveness.
- Examine student responses on an open-ended question to ensure that students were thinking critically about the survey and providing actionable feedback to their teachers.

two widely used educator evaluation measures: teacher ratings on the <u>Rubric for Evaluating Colorado Teachers</u> and their students' Transitional Colorado Assessment Program (TCAP) results. CEI anticipated that higher-scoring teachers would also score higher on the state rubric and would have students scoring higher on measures of their achievement and growth. The results are quite positive, with statistically significant correlations seen between teachers' SPS scores, their performance ratings, and their students' growth on TCAP reading, writing, and mathematics, as shown in the following tables.

Relationships between SPS Scores and Teacher Performance Ratings: Grades 3-5

	Standard I – Know Content	Standard II – Establish Environment	Standard III – Facilitate Learning	Combined Overall Rating
Overall SPS			Ø	Ø
Student Learning	Ø	Ø	Ø	Ø
Student-centered Environment	Ø	Ø	ø	Ø
Classroom Community	Ø	đ	Ø	Ø
Classroom Management	Ø	Ø	Ì	Ø



Indicates a statistically significant relationship at the .001 level

Indicates a statistically significant relationship at the .01 level

Indicates a statistically significant relationship at the .05 level

Relationships between SPS Scores and Teacher Performance Ratings: Grades 6-12

	Standard I – Know Content	Standard II – Establish Environment	Standard III – Facilitate Learning	Combined Overall Rating
Overall SPS	Ø	Ø		Ø
Student Learning	Ø	Ø	Ø	Ø
Student-centered Environment	Ø	Ĩ		Ø
Classroom Community	Ø	Ø		
Classroom Management	Ø	Ś	Ø	Ø
Indicates a	statistically significant	Indicates a statistically signific	cant 🕢 Indicates a statistic	ally significant

relationship at the .001 level

relationship at the .01 level

relationship at the .05 level

Relationships between SPS Scores and Students' TCAP Growth

	Grade 3-5 Median Growth Percentiles			Grade 6-12 Median Growth Percentiles		
	TCAP Math	TCAP Reading	TCAP Writing	TCAP Math	TCAP Reading	TCAP Writing
Overall SPS	ø	Ø			Ø	Ø
Student Learning	V	Ø				Ø
Student-centered Environment						ø
Classroom Community		ø	Ø			
Classroom Management	Ø	Ø		Ì	Ś	Ś

relationship at the .001 level

relationship at the .01 level

relationship at the .05 level

As the tables reveal, SPS results correlate to teacher ratings on the state evaluation system and TCAP results. In reviewing these results, two interesting themes emerge. First, the grades 3-5 survey is generally more strongly correlated to both teacher evaluation ratings and measures of student growth and achievement (although the secondary survey still shows positive relationships). This indicates that the ratings of elementary students are more positively associated with those from principals and evaluators and with overall student growth and achievement than ratings from students in grades 6-12. This finding seems to contradict fears expressed by many teachers and some scholars that student surveys may be developmentally inappropriate for elementary students. Second, overall student survey results seem to be most strongly correlated with one facet of teaching, Teacher Quality Standard II (learning environment), which is certainly an area in which students are particularly qualified to provide feedback.

Together, these results suggest that teachers who score higher on the SPS also achieve higher performance ratings in the Colorado State Model Evaluation System. Their students also score higher and attain higher growth on the TCAP - a desirable result that indicates the SPS is capturing teacher quality in a meaningful way, consistent with other measures of teacher effectiveness.

Open-ended survey results

During the spring pilot, more than 14,500 students shared open-ended responses to the question, "Do you have any other thoughts or feedback for your teacher?" These results were analyzed to further ensure that students were interpreting the survey items and providing actionable feedback to their teachers. The majority of student responses to this question were actionable, demonstrating that students take the survey seriously and provide substantive feedback about their instructional experiences. See CEI's full report on the openended analysis for more information.



We encourage you to review the answers to other common questions about the SPS and explore other resources associated with student perception surveys. Visit the Student Perception Survey Toolkit for more information.

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