

The New Teacher Center's Teaching, Empowering, Leading and Learning (TELL) Survey

Research Base

Why do teaching and learning conditions matter? Teaching and learning conditions impact two significant areas of national interest: teacher retention and student learning. The following section summarizes the quantitative relationship between teaching and learning conditions and student learning and teacher retention. It is not intended as an exhaustive review.

Teacher Retention

Large-scale empirical studies present evidence that contextual factors matter for teachers' decisions about staying at and leaving schools. In a meta-analysis of 34 studies, researchers suggest that teaching and learning conditions influence teachers' career paths more than previously documented (Borman & Dowling, 2008). Boyd et al. (2011) demonstrate that teachers' perceptions of the school administration have the greatest influence on teacher retention decisions. Other work finds similar effects (Pogodzinski et al., 2012). Studies also find statistically significant relationships between teachers' perception of school facilities and their plans to stay or leave (Loeb, Darling-Hammond & Luczak, 2005; Buckley, Schneider & Shang, 2004).

Researchers using TELL data from various states confirm that teaching and learning conditions influence teachers' plans to stay. Johnson, Kraft and Papay (2011) demonstrate that the conditions that matter most in deciding to stay include the school's culture, the principal's leadership and relationships among peers. Ladd (2009), also using TELL data, documents that teaching and learning conditions predict plans to leave a school, independent of school demographics.

Student Learning

Far fewer large-scale empirical studies explore the association between teaching and learning conditions and student achievement.

The analysis by Ladd (2009) shows that teaching and learning conditions predict student achievement in mathematics, and to a lesser degree, in reading. The Johnson, Kraft and Papay (2011) research indicates that positive conditions contribute to improved student achievement. Both of these efforts use the TELL survey data from various states to estimate the impact of teaching and learning conditions on student learning. Additional work by Kraft and Papay also uses student-teacher linked data and school-level teaching conditions as measured by the TELL survey to find that teachers who work in more supportive environments become more effective at raising student achievement on standardized tests over time than do teachers who work in less supportive environments, after controlling for student characteristics, prior test scores, and teacher and school characteristics.

In a forthcoming book featuring research from the Bill & Melinda Gates Foundation's Measures of Effective Teaching Project, Ferguson with Hirsch (2014) demonstrate significant connections

between teaching conditions and student value-added gains. In particular, the authors find that four areas assessed by the NTC's TELL survey — student conduct management, demands on time, professional autonomy and professional development — are significant predictors of student learning gains and student perceptions of rigor and support.

TELL Background and Structure

The TELL survey originates from the Governor's Teacher Working Conditions Initiative in North Carolina (2002–2009). As part of this work, the North Carolina Professional Teaching Standards Commission (NCPTSC) conducted a literature review and analyses of state and national survey data from the National Center for Education Statistics' School and Staffing Survey to better understand the factors contributing to teacher satisfaction and employment trajectories. Based on these efforts, the NCPTSC identified the following areas as related to teachers' future employment plans: time, empowerment, leadership, decision-making, and facilities and resources. The commission created standards aligned with these areas to assess whether the standards were in place in schools.

The first statewide teaching conditions survey was administered by the North Carolina Office of the Governor in the spring of 2002. It continues to be administered biennially out of the Department of Public Instruction. (www.ncteachingconditions.org)

By 2009, other states had duplicated North Carolina's work, and the teaching conditions survey was housed in the New Teacher Center located in Santa Cruz, CA. In 2010, the survey, newly named the TELL Survey (Teaching, Empowering, Leading and Learning) was part of the MET project supported through the Bill and Melinda Gates Foundation (Swanlund, 2011). The Swanlund analyses use data from 286,835 educators from 11 states across the U.S. The external survey review examines both validity and reliability. These analyses identify patterns in the data that provide a clear structure for the survey and confidence for interpreting the results.

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Validity

“Validity” generally refers to the process of ensuring that the survey accurately measures what it is intended to measure, in this case teaching and learning conditions. There are several approaches to testing validity. The external validity testing conducted for the TELL survey assesses the structure of the response scale and the alignment between survey items and the broader survey constructs identified in Exhibit 1. The review uses the Rasch rating scale to examine the item-measure correlations, item fit, rating scale functioning, unidimensionality and generalizability of the instrument.

Results from the external validity testing prompted several edits to increase the statistical stability of the TELL survey. For example, a four-point rating scale replaced the original six-point scale to ensure appropriate scoring for both individual-level responses and school-level responses. Based on the external study finding that some survey constructs are more stable if

broken into multiple constructs, an additional construct was added, resulting in eight constructs. Additionally, the results indicate that some individual items overlap across survey constructs. For example, items found in the teacher leadership construct overlap with the school leadership construct and should be reviewed for each analysis.

Reliability

Reliability testing ensures the survey instrument produces the same results across repeated measures, either within the same population or with a similar population. A reliable survey is generalizable and is therefore expected to reproduce similar results across settings. The external review analyzes reliability using both the Rasch model and Cronbach’s alpha. The Swanlund (2011) study concludes the survey is capable of producing consistent results across participant groups.

The external analyses confirm that the TELL survey offers a robust and statistically sound approach for measuring teaching and learning conditions. For a detailed review of the methods and results from the external analyses, consult Swanlund (2011).

Based on the external analyses, the current TELL survey incorporates constructs logically and empirically linked to the outcomes of interest, such as teacher retention and student learning. The TELL survey includes the eight core constructs identified in Exhibit 1.

Exhibit 1. TELL Survey Core Constructs

Construct	Descriptor
Time	Available time to plan, collaborate, provide instruction and eliminate barriers to maximize instructional time during the school day
Facilities and Resources	Availability of instructional, technology, office, communication and school resources to teachers
Community Support and Involvement	Community and parent/guardian communication and influence in the school
Managing Student Conduct	Policies and practices to address student conduct issues and ensure a safe school environment
Teacher Leadership	Teacher involvement in decisions that impact classroom and school practices
School Leadership	The ability of school leadership to create trusting, supportive environments and address teacher concerns
Professional Development	Availability and quality of learning opportunities for educators to enhance their teaching
Instructional Practices and Support	Data and support available to teachers to improve instruction and student learning

For current TELL survey administrations, NTC adds questions to these eight core constructs about general demographic information and beginning teacher support, as well as client-specific information. Survey responses to the eight constructs are scored using Likert-type ratings ranging from strongly disagree (1) to strongly agree (4), with a “Don’t Know” option.

Internal Analyses of Validity and Reliability

In addition to the external analyses, the NTC conducts internal analyses of validity and reliability to verify the stability of the instrument across survey populations as promoted by industry standards found in *Standards for Educational and Psychological Testing* (American Educational Research Association, American Psychological Association and National Council on Measurement in Education, 1999). Statistical tests of validity include conducting factor analyses and reliability tests that generate internal consistency estimates.

REFERENCES

- American Educational Research Association, American Psychological Association and National Council on Measurement in Education. (1999). *Standards for educational and psychological testing*. Washington, D.C.: American Educational Research Association.
- Borman, G. & Dowling, N. (2008). Teacher attrition and retention: A meta-analytic and narrative review of the research. *Review of Educational Research*, 78(3).
- Boyd, D., Grossman, P., Ing, M., Lankford, H., Loeb, S. & Wyckoff, J. (2011). The influence of school administrators on teacher retention decisions. *American Educational Research Journal*, 48(2).
- Buckley, J., Schneider, M. & Shang, Y. (2004). *The effects of school facility quality on teacher retention in urban school districts*. Chestnut Hill, MA: National Clearinghouse for Educational Facilities.
- Ferguson, R. & Hirsch, E. (2014). "Using teacher and student surveys to link school context, classroom learning conditions and achievement," in Kane, T.J., Kerr, K.A. and Pianta, R.C. *New guidance from the Measures of Effective Teaching project*. San Francisco: Jossey-Bass.
- Johnson, S., Kraft, M. & Papay, J. (2012). How context matters in high-need schools: The effects of teachers' working conditions on their professional satisfaction and their students' achievement. *Teachers College Record*, 114(10).
- Kraft, M.A. & Papay, J.P. (2014, Jan. 30). Do supportive professional environments promote teacher development? Explaining heterogeneity in returns to teaching experience. *Educational Evaluation and Policy Analysis*.
- Ladd, H. (2009). Teachers' perceptions of their working conditions: How predictive of policy relevant outcomes? CALDER Working Paper 33. Washington, D.C.: National Center for Analysis of Longitudinal Data in Education.
- Ledesma, R. & Valero-Mora, P. (2007). Exploratory factor analysis. *Practical Assessment, Research & Evaluation*, 12(22).
- Loeb, S., Darling-Hammond, L. & Luczak, J. (2005). How teaching conditions predict teacher turnover in California schools. *Peabody Journal of Education*, 80(3).
- Pogodzinski, B., Youngs, P., Frank, K. & Belman, D. (2012). Administrative climate and novices' intent to remain teaching. *The Elementary School Journal*, 113(2).
- Steele, J., Hamilton, L. & Stecher, B. (2010). *Incorporating student performance measures into teacher evaluation systems*. Santa Monica, CA: RAND Corporation.

Swanlund, A. (2011). *Identifying working conditions that enhance teacher effectiveness: The psychometric evaluation of the Teacher Working Conditions Survey*. Chicago, IL: American Institutes for Research.

UCLA: Statistical Consulting Group. Factor Analysis: from www.ats.ucla.edu/stat/spss/output/factor1.htm (accessed Nov. 20, 2012).