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How teachers in the U.S. and Finland see their jobs

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AN **ns** a publication

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How teachers in the U.S. and Finland see their jobs

In an international benchmark survey of high school students, the U.S. consistently scores in the middle of the pack compared to many western European and eastern Asian countries. Finland has been among the top performers dating back to 2000. The country's performance led many in the U.S. to ask, what is Finland doing that is leading to high student achievement? Are there lessons the U.S. can apply here at home?

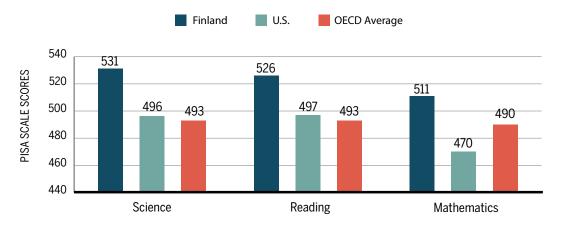
In this brief, we examine teacher survey data from the Teaching and Learning International Survey (TALIS) and compare the responses from Finland and the U.S. to discover what, if any, relationship there might be to Finland's high performance.

WHY FINLAND?

The Organization of Economic Cooperation and Development (OECD) administers the Program for International Student Assessment (PISA), a survey that has been conducted every three years starting in 2000. PISA tests 15-year-old students' knowledge and skills in reading, math and, science. The number of countries that participate in PISA has grown every testing cycle. The most recent administration was in 2015 at which time 72 countries and economies took the two-hour test.

Finland is one of the countries that consistently scores at the top in these international assessments, performing significantly above the OECD average in reading, writing and math. Conversely, the U.S scores at, or in the case of math, below the OECD average (see Chart 1). Given this mediocre performance, looking to other countries could provide some worthwhile insight that could be incorporated into American education policies and practices.

Chart 1. PISA Results, 2015



Pasi Sahlberg is an internationally known Finnish educator and scholar. In his 2013 book, "Finnish Lessons 2.0: What Can the World Learn from Educational Change in Finland?", he clearly credits Finnish teachers for the country's high marks. Research in the U.S. has also documented the value of teachers to student achievement. (Darling-Hammond, 2000; Sanders & Rivers, 1996; Gershenson, 2016; Ladd & Sorensen, 2017) According to the Alliance for Excellent Education, one of the four drivers for school improvement is having high quality educators in classrooms (Alliance for Education & John Hopkins University, 2017). If Finnish teachers play such a paramount role in their country's academic performance, what, if anything, can the United States learn from them?

In this report, we aim to explore differences and similarities between lower secondary school teachers in the U.S. and Finland that could explain, at least partially, the difference in PISA achievement levels between these nations. The

ABOUT THE DATA

This report examines survey data from the Organization of Economic Cooperation and Development to identify differences between teachers in the United States and Finland on a variety of themes. The Teaching and Learning International Survey (TALIS) is answered by teachers and schools. According to OECD, "[TALIS] covers important themes such as initial teacher education and professional development; what sort of appraisal and feedback teachers get; the school climate; school leadership; and teachers' instructional beliefs and pedagogical practices" (OECD What is TALIS?). There have been two rounds of TALIS, the first in 2008 and the second in 2013, in which teachers and schools in 33 countries, including Finland and the United States, participated.

report focuses on lower secondary teachers because that is the targeted age group that TALIS surveys. The OECD definition of lower secondary education is a more subject-focused teaching that continues the basic classes and subjects of the primary level (OECD glossary). According to the U.S. Department of Education, lower secondary education is known as middle school in the United States. Using data from OECD's Teaching and Learning International Survey (TALIS), we examine key areas in preparation, teacher work hours, student demographics, teacher autonomy and evaluation for both countries and compare the results to the OECD average.

Our analysis indicates that while Finnish lower secondary teachers excel in certain areas, the U.S. outdoes Finland in others. We also found some similarities, particularly in the amount of training teachers receive. In general, we find that:

- About the same proportion of lower secondary teachers in the U.S. and Finland report having had
 formal teacher training, and both are above the OECD average. The one difference is that U.S. lower
 secondary teachers are slightly more likely to had formal practice in their subject area.
- Teachers in the U.S. teach significantly more hours per week than teachers in Finland: 26.8 hours per week in the U.S. compared to 19.3 hours in Finland. The OECD average is 20.6 hours per week.
- Student demographics and needs in Finland and the U.S. are very different. American teachers report teaching more students that come from economically disadvantaged homes, and are not native speakers of the national language.
- Teachers in Finland utilize student survey data to inform instruction and evaluate other teachers, more than their U.S counterparts; in contrast, U.S. teacher evaluations are more likely to emphasize assessment data.
- Perhaps most significantly, teachers in Finland report having more decision-making power on school level policies and procedures than teachers in the U.S, and are far more likely to report feeling valued by society.

In the following pages, we discuss these and other findings in more detail. Of course, the cultural context in Finland and the U.S. is different in multiple aspects which may limit our ability to engage in some international policy borrowing. In addition, the data represents teacher perceptions; to truly understand the differences with confidence more research is required. Nonetheless, we think the teachers' observations raise some possible lessons that policymakers, educators, and school district leaders in the U.S. can consider when examining teacher policies and practices in their communities.

MOST TEACHERS HAVE FORMAL TRAINING, REGARDLESS OF COUNTRY

There was little difference in the proportion of American and Finnish teachers who had formal teacher training, although in both countries teachers exceeded the OECD average.

Lower secondary teachers in the U.S. reported completing a teacher preparation or training program at just slightly higher rates than their Finnish peers. Likewise, teachers in both countries report receiving formal training in the content and pedagogy for the subjects they will teach at about the same rates, while U.S. teachers are, again, slightly more likely to have had formal practice in their subject (see Chart 2).

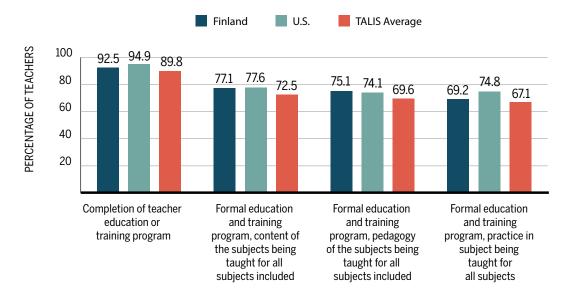


Chart 2. Completion and content of teacher education or training program

Percentage of lower secondary education teachers who completed a teacher education or training program and for whom the above elements were included in their formal education and training.

Many analysts attribute the success of teachers in Finland to their preparation and training process. (Salhberg, 2012; Darling-Hammond et al., 2017). Researchers believe that when Finland moved the training to universities from separate teacher training colleges in the 1970s, and incorporated practice and research into the curriculum, they found the secret ingredient for high student achievement (Sahlberg, 2012). These researchers consider teacher education to be one of the major points of difference between Finland and other countries that propels it to the top tier in student performance.

The simple act of having formal training doesn't appear to tell us much. More important may be the quality of the training. Finnish teachers, for example, are required to have a graduate-level degree (Sahlberg, 2012). Education graduate degrees for teachers in Finland have more of an em-

ALTERNATIVE CERTIFICATION IN THE U.S.

American researchers have defined alternatively certified teachers as "individuals who had not completed all requirements for initial licensure prior to entering into the teaching profession." These teachers tend to be significantly less effective than traditional teachers in teaching middle school math, and high school math and science based on student observation data. However, with time, alternatively certified teachers have been found to catch up to their traditionally certified peers (Henry et al., 2014).

Teach For America certified teachers are their own certification classification in most research. Although TFA teachers are often criticized for leaving the classroom after their two-year commitment, several studies found them to be more effective than traditionally certified teachers in teaching elementary school math and reading, middle school math and high school math, science, and English (Henry et al., 2014).

phasis on research than the education master's degrees in the United States. When comparing the required courses at the Curry Education School at the University of Virginia to two universities in Finland (University of Jyväskylä and University of Oulu), both Finnish institutions required teacher candidates to take research methods courses and perform their own research for a master's thesis. The University of Virginia did not require any courses in research or the production of an original piece of research. Their program was primarily filled with teacher practicum experiences and a field project paper where teacher candidates reflect on their teaching practices.

There is research showing the value of practical experience (California State University 2002a, 2002b; Henke, Chen and Geis, 2000; NCTAF, 2004) which has informed the degree requirements at many universities in the United States, but there is little known about the impact of research requirements on teacher quality and student achievement. This is one area that could be explored further to better understand the impact of the different teacher education programs between the two countries.

Another consideration is that formal training in the U.S. could include minimum requirements of some alternative teacher preparation programs. Research has found that different types of alternative teacher preparation programs have different effects on student achievement (Henry et al., 2014), but this means that it is more difficult to ensure that all teachers are trained in high quality preparation programs.

While TALIS doesn't shed more light on the role of training, the responses to other questions provide other clues that could be factors in Finland's high performance.

FINNISH VS. US TEACHERS: THE DIFFERENCES AND THE TAKEAWAYS

Perhaps the most striking data addresses teachers' perceptions of how they are viewed by society, their working conditions, and the amount of autonomy they have to practice their craft.

SOCIETY'S VIEW OF TEACHERS

This is one area where Finnish and American teachers differ significantly. Only 33.7% of lower secondary teachers in the U.S. agreed or strongly agreed with the statement, "I think the teaching profession is valued in society," compared to 58.6% of Finnish teachers. The U.S. is just slightly higher than the OECD average on this metric but ranks far behind teachers in Finland who had the highest percentage out of all 33 countries.

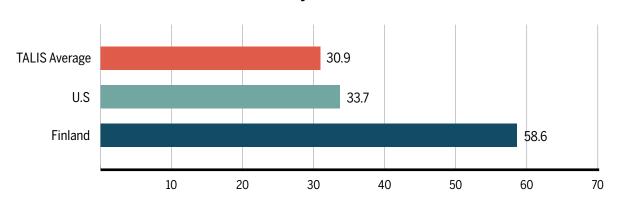


Chart 3. Society's view of teachers

Percentage of lower secondary education teachers who 'agree' or 'strongly agree' with the statement..."I think the teaching profession is valued in society."

The fact that teachers feel more valued in Finland could impact the number of candidates who aspire to be teachers. It could also play a role in teacher pay. Finnish teachers at all levels are paid closer to what a similarly educated professional makes compared to teachers in the U.S. Both countries pay more for teaching older students, but the difference between pay for each grade level increases more in Finland, so that the gap is widest for upper secondary teachers (see Chart 4).

Finland U.S. RATIO OF TEACHERS SALARIES 1 0.91 0.81 0.8 0.74 0.71 0.68 0.67 0.6 0.4 0.2 Primary school teachers Lower secondary teachers Upper secondary teachers

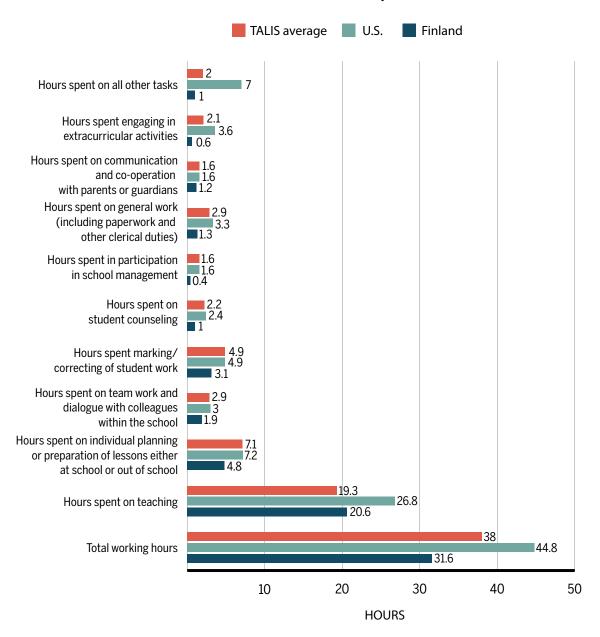
Chart 4. Teacher salaries relative to similarly educated professionals

Source: Teacher Pay Around the World, The Brookings Institute 2016

Teachers' perception of their standing in society can further have an effect on the quality of people who want to become teachers. As Salhberg (2012) writes "many young Finns select teaching as their primary career because work in schools is perceived as an autonomous, independent, highly regarded profession comparable to working as a medical doctor, lawyer or architect, for example." He goes on to say that this helps fill Finland's teaching workforce with high quality teachers, which, in turn, could have an impact on student achievement. Multiple studies have found that teachers have a significant influence over student performance (e.g., Darling-Hammond, 2000; RAND Corporation, 2012). One study took this a step further and analyzed the long-term impact high quality teachers have on students and found that "students who had a high value-added teacher were more likely to attend college, attend higher-rank colleges, earn higher salaries, live in higher socioeconomic neighborhoods, and save more for retirement." (Chetty, Friedman & Rockoff, 2011) High-quality teachers are simply better for students, and could be a key factor when explaining the difference in achievement between Finnish and American students on PISA.

DEMANDS ON TEACHERS' TIME

Chart 5. How teachers spend their time



Note: Average number of hours lower secondary education teachers report having spent on the above activities during the most recent complete calendar week

According to the TALIS data, American teachers spend significantly more hours per week working compared to Finnish teachers as well as the OECD average (see Chart 5). When the hours are broken down by typical teacher duties— such as parent communication, paperwork, student counseling, etc.—American teachers' hours equal or are above the average hours reported for every single indicator. The typical

American lower secondary teacher, for example, spends 7.2 hours per week planning, which is close to the OECD average of 7.1 hours but far more than the 4.8 hours spent by teachers in Finland.

Other teacher responsibilities identified by TALIS include hours spent grading student work, working with other colleagues, counseling students, participating in school management activities, completing administrative duties, communicating with parents, engaging in extracurricular activities and "other" tasks. Finnish teachers report lower than average hours on all duties, except for hours spent actually teaching. However, they still report fewer hours than their U.S. colleagues do.

The total work hours per week for lower secondary teachers in Finland is 31.6 hours which is 13.2 hours per week less than teachers in the U.S. That is a significant difference that could have a large impact on the professional and personal life of a teacher.

TALIS is not the first data source to report that American teachers are typically working more than a 40 hour work week. The Gates Foundation's Primary Sources 2012 report found that teachers in the U.S. work an average of 10 hours and 40 minutes per day or 53.33 hours per week. The hours were broken up as 7 hours and 20 minutes of required time at school per day; 1 hour and 35 minutes working at home; and 1 hour and 42 minutes spent working before and after school. Like the TALIS survey, this data was self-reported by teachers (Primary Source Report, 2012).

This data raises the question of how teachers in Finland can work fewer hours than their peers in the U.S. and attain higher student achievement? How are Finnish teachers using their time?

Interestingly, our analysis found that while teachers in Finland have a shorter work week, they devote the highest proportion of their time to actual teaching, which is not the case in the U.S.

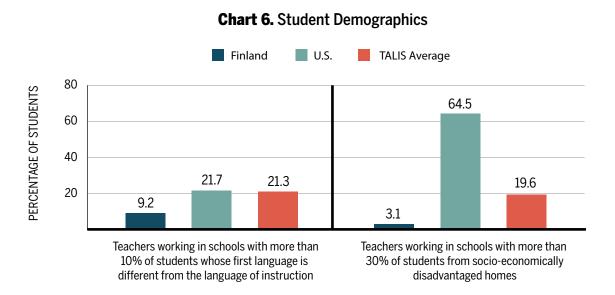
American teachers report spending 55%, or slightly more than half of their time teaching and planning compared to the 72% that Finnish teachers do. Teachers from both countries spend the rest of their work hours on a variety of professional duties, such as grading, counseling students and collaboration, as well as some non-teaching activities, such as administrative work. But these non-teaching tasks consume much more of American teachers' time.

An example is time spent on extracurricular activities. Lower secondary teachers in the U.S. devote 7%, or four hours, of their week to extracurricular activities compared to Finland's one hour or 3%. American teachers are often encouraged to coach an after-school sport or sponsor a club to help build relationships with students. While research does show a positive correlation between student achievement and participation in an extracurricular activity, it may come at a cost for teachers. Whitely and Richards (2013) conducted a qualitative study and found over 70% of the teachers in the sample did not have enough time to adequately prepare for the extracurricular activities. If teachers feel pressured for time, one effect is "burnout syndrome," defined "as having three dimensions: physical, mental and emotional exhaustion." (Saiiari, Moslehi, & Valizadeh, 2011; Maslach & Pines, 1984 cited in Saiiari et al., 2011). Both students and teachers can benefit from taking time to get involved in extracurricular activities, but the more crammed teachers' schedules become, the greater the risk of burnout.

Clearly, teachers in the U.S. are putting in more hours than they do in Finland, but they also assume more roles than "classroom teacher." American teachers are also responsible for counseling, coaching, and some

school management and administrative duties, more so than their Finnish peers. According to the survey, 11% of American teachers' time spent was classified as "other" compared to 3% in Finland. This ambiguous category – and the time it consumes – suggests that American teachers are being asked to perform many different types of tasks that may not be part of a typical job description for teaching.

STUDENT DEMOGRAPHICS



School composition by native language speakers and students from disadvantaged homes

Student demographics are very different in the U.S. compared to Finland and the OECD average. According to TALIS, American teachers teach significantly more students who come from socio-economically disadvantaged homes, and many more non-native language speakers than Finland. Decades of research have well established that such characteristics can relate to student outcomes, which poses more challenges for American teachers (Selcuk & Sirin, 2005; Aikens & Barbarin, 2008).

The most drastic difference was the percentage of teachers who teach low-income students. The TALIS data show that 64.5% of American teachers report working in schools where more than 30% of students come from socio-economically disadvantaged homes compared to 3.1% in Finland. Not surprisingly,

FAMILY INCOME AND ACHIEVEMENT

When researchers specifically look at household wealth, they typically find a strong association with several aspects of student achievement (Selcuk & Sirin, 2005). For example, there is a strong correlation between family income and reading attainment (Aikens & Barbarin, 2008) and math scores at multiple age levels (Chen, Lee & Stevenson, 1996). Studies have also documented an effect on even more basic academic concepts like phonological awareness (Whitehurst, 1997) and a student's ability to regulate his/her emotions (Evans & Rosenbaum, 2008).

similar disparities are found in child poverty rates between the countries. In 2015, 3.7% of 0-17 year-old children in Finland lived in households with income less than 50% of the median national annual post-tax income. That same year, 19.1% of 0-17 year-old children in the U.S., lived in poverty, using the same poverty metric (OECD Family Database, 2017).

American teachers are combating many obstacles that are associated with children from lower socioeconomic situations that Finnish teachers are not. These can have a dramatic effect on student performance, and can be difficult for teachers to overcome without sufficient support.

Teaching students whose first language is different from the language of instruction is another factor that strongly influences student achievement.

Gaps persist between US English language learners and their peers

Chart 7. 4th Grade Reading, 1998-2017

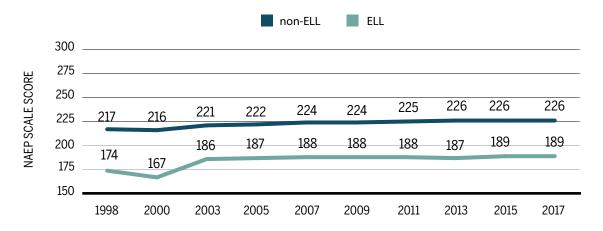
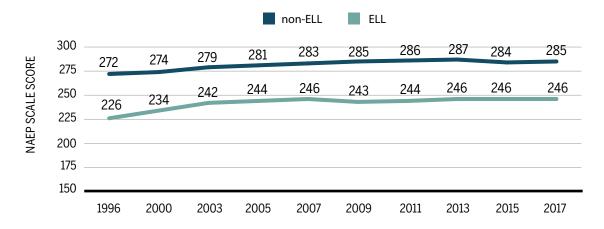


Chart 8. 8th Grade Math, 1996-2017



SOURCE: NCES, NAEP 2017

In Finland, 9.2% of teachers report working in a school with more than 10% of students whose first language is different from the language of instruction. That compares to 21.7% of teachers in the U.S. This difference was also seen in other data from the OECD. In 2009, about 2% of students in Finland had immigrant backgrounds and did not speak the language of assessment at home (OECD Family Database, 2007). In comparison, the U.S. had about 19% of students fit this description that same year. (OECD Family Database, 2017)

Data from the U.S. shows a persistent achievement gap between students whose first language is English compared to their peers classified as English language learners (ELL). According to the National Assessment for Educational Progress (NAEP), ELL students performed worse on reading and math at both fourth- and eighth-grade (see charts 8 and 9). One bright light: students who successfully graduated from ELL status perform close to their native English-speaking classmates. Even so, if American teachers are teaching students in a second language at twice the rate of Finnish teachers, overall achievement is likely to be affected.

METHODS OF FORMALLY APPRAISING TEACHERS AND USING STUDENT SURVEYS

TALIS average U.S. Finland 67.84 Emphasis placed on teaching 63.41 students with special needs 58.58 42.63 Emphasis placed on teaching in a 38.21 multi-cultural setting 25.85 87.89 Emphasis placed on 91.58 student performance 75.01 79.49 Emphasis placed on student feedback 47.75 78.21 87.02 Emphasis placed on student behavior 81.78 and classroom management 81.99 83.53 Emphasis placed on student 81.23 assessment practices 63.45 86.98 Emphasis placed on 80.43 pedagogical competencies 78.95 71.51 Emphasis placed on parent feedback 47.68 76.22 83.8 Emphasis placed on 78.14 knowledge of subject field 77.38 Emphasis placed on feedback 31.98 provided to other teachers 81.18 Emphasis placed on collaboration 60.74 or working with other teachers 80.2

Chart 9. Emphasis on Teacher Appraisal and Feedback (reported by teachers)

Percentage of lower secondary education teachers that marked the above areas as of 'moderate' or 'high' importance when receiving feedback.

PERCENTAGE

Finland and the U.S. deviate the most on what matters in teacher evaluation.

OECD asked teachers about the degree to which various practices are emphasized when receiving feedback. Finnish teachers report a significantly higher emphasis on teacher collaboration, parent feedback, and student feedback than their American counterparts, although Finnish teachers are close to the TALIS average on all three indicators.

In contrast, the U.S. reports more emphasis on student assessment practices and student performance compared to Finnish teachers. The U.S. percentages in these areas are also close to the TALIS average. Eight in ten (81.2%) of lower secondary teachers surveyed placed a moderate or high emphasis on student assessment practices compared to 63.5% of Finnish teachers. Regarding student performance, only 75% of Finnish teachers marked a moderate or high emphasis compared to 91.6% in the United States.

One reason teachers in Finland may put less emphasis on student performance and assessment is that there are no national student assessments in Finland, except for the matriculation test at the end of upper secondary school.

In another TALIS question, teachers had to mark different areas of performance feedback as moderate or high importance. 76% of Finnish teachers marked a moderate or high emphasis was placed on parent feedback, but only 48% of teachers in the U.S. felt this way. Again, the U.S. response was well below the TALIS average of 71%. This suggests that Finnish teachers rely more on a system of "continuous evaluation" which includes formative assessments and teacher self-evaluations. The format of the evaluations are decided at the school level in Finland so there is some variation in the format and application of self-evaluations between schools.

Another stark difference between the two countries is that Finland utilizes student surveys more than the U.S, with 78% of Finnish teachers reporting that student feedback is emphasized in their appraisal compared to 48% in the U.S. Student surveys could be an important classroom perspective that more U.S. schools could seek to improve their practice.

STUDENT SURVEYS PROVIDE TEACHER FEEDBACK

One student survey that is utilized in the United States is the Tripod survey. Economist Ronald Ferguson of Harvard University created the Tripod survey over 10 years ago with three versions for grades K-2, 3-5 and 6-12. Based on a rubric known as the "7 Cs'", Tripod evaluates a teacher's pedagogical and content knowledge as well as their student relationships.

THE 7 CS

What Teachers Do (What Students Experience)

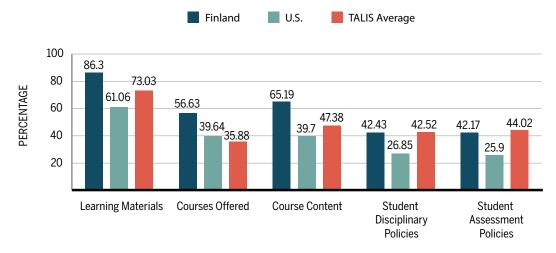
- Caring about students
 (Encouragement and emotional support)
- Captivating students
 (Learning seems interesting and relevant)
- Conferring with students
 (Students sense their ideas are respected)
- 4. Clarifying lessons (Success seems feasible)
- 5. Consolidating knowledge (Ideas get connected and integrated)
- Challenging students
 (Press for effort, perserverance, and rigor)
- Controlling behavior
 (Culture of cooperation and peer support)

"Student Perception Survey's Presentations to STLE Grantees," 2013

Student surveys are still a relatively new field of research. Two of the biggest uncertainties around student surveys are reliability and validity. Some research claims that the Tripod survey has been sufficiently refined to reduce student bias, since researchers found less than 1% of the student surveys contained biased replies. (Student Perception Surveys, 2013). However, other research on the study has come to different conclusions and cautions policymakers against tying student surveys to teacher evaluations. Clearly, research on student surveys and feedback is an area that deserves more attention in the U.S.

TEACHER AUTONOMY

Chart 10. Teacher Autonomy



Percentage of lower secondary education teachers who decide the above instructional and organizational aspects for their school.

A major difference between American and Finnish teachers is that teachers in Finland have a larger part in their school's decision-making process. On three questions—selecting learning materials, course content and courses offered—Finnish teachers claim to have more decision-making power in their schools com-

TEACHER AUTONOMY AND STUDENT RESULTS

The research on teacher autonomy shows that it can be an important factor for increasing student achievement. One study analyzed the autonomy in Chicago Public Schools and elementary student achievement on reading and math standardized test scores. Researchers used a sample of 73 elementary schools that were granted Autonomous Management and Performance Schools (AMPS) status for the 2005-2006 school year. The schools were offered autonomy in five areas: budget, curriculum, instruction and assessment, school calendar, and professional development. After one year, there were no significant changes in students' standardized test performance. However, researchers did find statistically significant differences in reading proficiency after two years of autonomy. This is a short-term analysis, but the results do indicate two points: schools need time to effectively increase teacher autonomy and to see higher student performance.

In another study by McKinsey & Company researchers found that increased autonomy for teachers can lead to improved student achievement in certain countries. Countries or regions that were characterized by slow growth found success with tight, central control, such as scripted lessons and system-approved textbooks. Countries with high-growth systems, however, were most successful when teachers were given an extensive amount of autonomy. In these systems "creating an environment that will unleash the creativity and innovation of its educators and other stakeholder groups" is the ultimate goal. This shows the importance context plays in increasing autonomy because autonomy may not be a one-size-fits-all solution.

pared to teachers in the U.S. and the OECD average. Finnish teachers reported similar rates of autonomy as the OECD average for creating student disciplinary and student assessment policies, but both were higher than American teachers. This consistently shows that lower secondary school teachers in the U.S. have much less say in deciding many types of policies in their schools.

Giving teachers autonomy in areas particularly related to decisions around curriculum and in-school policies can benefit student achievement. However, the research does provide two points of caution for increased autonomy in a district. First, it takes time for school leaders to manage their new responsibilities in a way that most benefits student learning. Second, the context of a school system is an important factor. School systems need to have a strong foundation and professional development in place before teachers and principals can have the training, confidence, and time to manage these extra responsibilities.

LESSONS FROM FINLAND

After comparing TALIS data on teachers in Finland and the United States several key themes emerge. First, about the same number of teachers in the U.S. and Finland report completing formal teacher training, and both are above the OECD average. The one difference is that U.S. teachers are slightly more likely to have had formal practice in their subject area. Second, teachers in the U.S. teach significantly more hours per week than teachers in Finland and the average OECD country. Third, teachers in Finland utilize and value student survey data to inform instruction and as a part of the teacher evaluation process, more than U.S teachers. Fourth, teachers in Finland report having more decision-making power on school level policies and procedures than teachers in the U.S. Finnish teachers are consulted on matters ranging from assessment policies to course content, whereas principals and school governing boards are typically consulted regarding those matters in the United States.

Lastly, student demographics and needs in Finland and the U.S. are very different. This is a crucial point, considering the strong link between student demographic indicators and performance. American teachers report teaching far more students that come from economically disadvantaged homes, have special needs and are not native speakers of the national language. The different demographics of U.S. and Finnish students highlight contextual differences between the two countries that affect teachers' jobs. Policies that are put in place in Finland, therefore, may not have the same effect in the U.S. That being said, understanding the differences between the two should inspire policymakers in the U.S. to question different processes and think outside of the box. While the difference in student demographics represent a cautionary tale for major policy borrowing between the two countries, critically questioning policies and thinking about procedures in different ways should be continued and can be beneficial for students and teachers within the education system.

QUESTIONS FOR SCHOOL DISTRICT LEADERS:

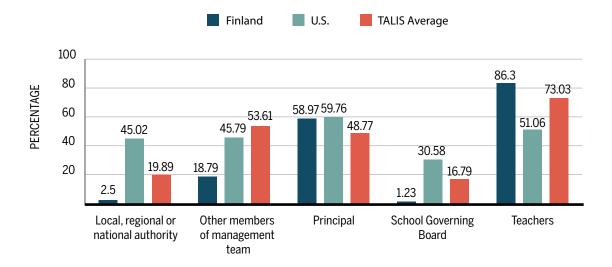
- 1. How much time are teachers actually spending on instructional time in the classroom each week? Are they spending more time in other activities throughout the day that are causing teachers to work more than a 40-hour work week?
- 2. How are teachers and schools supported to meet the needs of their special needs, low-SES and ELL students?
- 3. How are teachers evaluated in their schools? Are student surveys used to better understand the student's unique perspective in a classroom?
- 4. Is there a solid foundation regarding curriculum and in-school policies? If it is in place, how much autonomy is given to teachers in relation to decisions made about in-school procedures? If efforts have been made to increase teacher autonomy, are these policies given adequate time to be implemented?

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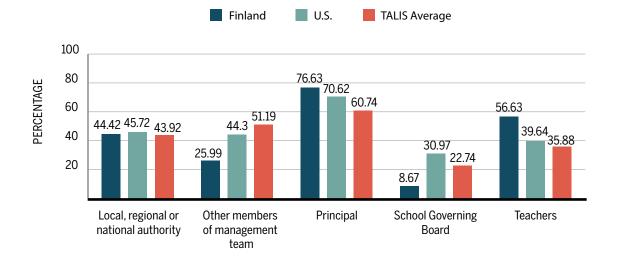
We thank Jim Hull, Policy Director, Impact, Foundation for Excellence in Education, for his review of this paper.

APPENDIX

Percentage of lower secondary education teachers who marked yes to who **chooses learning materials for schools.**



Percentage of lower secondary education teachers who marked yes to who **decides courses offered in schools.**



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