Teaching and Learning Conditions are Critical to the Success of Students and the Retention of Teachers

Final Report on the 2006 Teaching and Learning Conditions Survey to the Clark County School District and Clark County Education Association

By
Eric Hirsch and Scott Emerick
with Keri Church and Ed Fuller

CTQ CENTER FOR TEACHING QUALITY

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The Center for Teaching Quality improves student learning through developing teacher leadership, conducting practical research and engaging various communities. To accomplish this mission, the Center for Teaching Quality strives to shape policies that ensure:

- **Students**, no matter what their background or where they go to school, are ready to learn; with
- **Teachers** who are caring, qualified, and competent with vast content knowledge and the ability, through quality preparation and ongoing development and support, to ensure that all children can learn; in
- **Classrooms** that have adequate resources and provide environments conducive to student learning; in
- **Schools** that are designed to provide teachers with sufficient time to learn and work together in collaboration with a principal who respects and understands teaching; in
- **Districts** that have policies and programs that support the recruitment, retention and development of high quality teachers in every school; in
- **States** that have well-funded systems that include rigorous preparation and licensing with evaluation tools that ensure performance based standards are met; in a
- **Region** that works collaboratively, using common teaching quality definitions, sharing data, and working across state lines to recruit, retain and support high quality teachers; in a
- **Nation** that views teaching as a true profession and values teachers as one of its most important resources.

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Acknowledgments

CTQ could not have conducted the Teaching and Learning Conditions Initiative in Clark County without the support and guidance of the Clark County School District (CCSD) and the Clark County Education Association (CCEA). CTQ would especially like to thank George Ann Rice, Human Resource Director, CCSD, and John Jasonek, Executive Director of the Clark County Education Association, whose leadership has been instrumental in moving this effort forward. Denise Thistlewaite at CCSD, and Christine Page at CCEA provided daily support, manned the help desk and completed everything necessary to ensure the initiative was a success. The Contract Maintenance Committee provided helpful guidance throughout. The CCEA building representatives who helped disseminate survey codes and encouraged their colleagues to complete the survey ultimately made this initiative a success.

We would also like to thank our partners in completing this project. Phil Kaufman and Chris Andrews at LearnNC hosted the on-line survey and provided data reports for all eligible schools. Ed Fuller helped organize and manage the data and also provided virtually all statistical analyses throughout the report.

Most importantly, we would like to extend our sincere appreciation to the 8,500 dedicated educators who were willing to share their time and input with us while they are striving to ensure that CCSD students achieve at the highest levels.

Executive Summary

Emerging research from across the nation demonstrates that school working conditions—time, teacher empowerment, school leadership, professional development, and facilities and resources—are critical to increasing student achievement and retaining teachers.

The existing national data regarding working conditions impact on student achievement and teacher turnover provided a meaningful impetus for the Clark County School District and its schools to have data to inform local working condition reform strategies.

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The Clark County School District and the Clark County Education Association conducted the survey to provide data that can be used for data-driven school improvement planning, faculty conversations and consideration of district and school policies and programs. By placing the perceptions of Clark County educators at the center of school and district efforts to better recruit and retain teachers, the goal is to create a stable teaching force that allows for a high quality teacher in every classroom across the district.

Analysis of the approximately 8,500 survey responses (representing 47.5 percent of CCSD educators) demonstrates that working conditions are critical to increasing student achievement and retaining teachers. Of the various data implications from the survey, five primary findings from the analysis of the teacher working conditions data are included in this report:

1. **Teacher Working Conditions are Student Learning Conditions**
   The overall findings from the analysis regarding the impact of teaching and learning conditions on student achievement provides compelling evidence to support the notion that teacher working conditions are student learning conditions. The analyses specifically point to the need to empower teachers in selecting teaching strategies, consistently enforcing codes for student conduct, and recognizing teachers as educational experts.

2. **Teaching and Learning Conditions Affect Teacher Retention**
   The presence of an atmosphere of trust and mutual respect was a powerful predictor of whether a teacher would continue working in their current position at the elementary level. For every 10 percent of teachers agreeing or strongly agreeing that trust is present, a 3.1 percent increase in the percentage of teachers wanting to stay could be expected.

3. **Teachers and Administrators View Working Conditions Differently**
   There are considerable gaps between the perceptions of teachers and administrators regarding the degree to which school leadership addresses teacher concerns. While some discrepancies might be expected between administrators and teachers on a measure of leadership

effectiveness, the degree of these discrepancies is startling and must be taken into consideration for any working conditions reforms to be successful.

4. **Schools Vary Widely in the Presence of Teaching and Learning Conditions**
   Unfortunately, some of the disparities in the presence of working conditions can be explained by the students served in those schools. Schools serving a lower percentage of economically disadvantaged students consistently had more positive working conditions, particularly in the area of facilities and resources

5. **Clark County Teachers are More Negative about Working Conditions than Teachers in Other States**
   Of particular importance is that Clark County educators have the most negative perception about being involved in education decision making. Conversely, Clark County educators were at least as positive as teachers in most other states in the area of sufficient access to instructional technology.

From these findings and the domain analysis, recommendations for CCSD and individual schools are offered to enhance efforts to improve teacher working conditions.

More in-depth analysis of each of the five working conditions areas (along with mentoring and induction) is also provided within the body of this report. From these findings and the domain analysis, recommendations for CCSD and individual schools are offered to enhance efforts to improve teacher working conditions.

1. Ensure Schools Have and Use Teaching and Learning Conditions Survey Data as Part of School Improvement Planning

2. Invest in School Leaders Who Can Create Positive Teaching and Learning Conditions Recommendation

3. Continue Experimentations with Empowerment Schools and Other Means of Engaging Teachers in Decision Making

4. Invest Substantially in New Teacher Induction and Support

All of the data available to date in CCSD and across the nation indicate that improving these teaching and learning conditions is a critical step to improving CCSD schools. Significant and compelling connections between working conditions and student achievement, and also teacher retention were documented in CCSD.

CCSD educators must have the resources and support they need to serve all students well, and without comprehensive sustained efforts to improve conditions for work and learning, meaningful and sustainable school reform in the county will prove impossible.

Introduction

For virtually any business or organization, the conditions in which employees work drive their satisfaction and productivity. Unfortunately, many schools across the country face persistent teacher working condition challenges that are closely related to high teacher turnover rates and chronic difficulties in recruiting and retaining teachers. Turnover comes at great expense, both in the negative cumulative effect on student achievement, and as a financial drain to the state and districts that repeatedly prepare, recruit, and support teachers for the same position.

National research demonstrates the importance of addressing school conditions to improve teacher retention.

National research demonstrates the importance of addressing school conditions to improve teacher retention. Teachers who leave schools cite an opportunity for a better teaching assignment, dissatisfaction with support from administrators, and dissatisfaction with workplace conditions as the main reasons why they seek other opportunities.[1] Surveys of teachers indicate that a positive, collaborative school climate and support from colleagues and administrators are the most important factors influencing whether they stay in a school. In national surveys, teachers identified excessive workload, lack of time, and frustration with reform efforts as areas in need of focus and reform.[2]

Addressing these working conditions and building a sense of trust in schools are critical factors in reforming schools, as both have been linked to greater teacher effectiveness.[3] Center for Teaching Quality (CTQ) research examining working conditions survey results in both North Carolina and South Carolina demonstrates that teacher working conditions have a significant impact on student achievement and teacher retention.[4] One of the most extensive examinations of working conditions data revealed "a clear but difficult lesson: if we want to improve the quality of our teachers and schools, we need to improve the quality of the teaching job."[5]

While existing national data on teacher turnover and working conditions is helpful, communities need customized data from their own schools and communities to effectively inform local reform strategies. It is with this in mind that the Clark County School District and the Clark County Education Association included conducting a survey in their negotiated agreement (sec. 10-8). The groups contacted the CTQ, a North Carolina based nonprofit, which has conducted working conditions surveys in North Carolina, South Carolina, Ohio, Virginia, Arizona and Kansas. We hope that this data will help Clark County consider programs and policies that address the specific concerns of their unique teaching corps.

Methodology

In developing the survey instrument, CTQ drew from and improved upon survey questions from previous efforts to develop school climate and working conditions surveys in North Carolina, South Carolina, Virginia, Kansas, Ohio and Arizona. CTQ worked with a Nevada stake-

holder group in October 2005 to customize a CCSD survey which improved upon an existing set of core working condition domains and questions used in previous statewide assessments and reflected CCSD specific interests and context. The final survey included 44 total items, including demographic questions and mentoring questions (only asked of teachers participating in mentoring efforts).

Teachers' responses on the Clark County Teaching and Learning Conditions Survey helped to explain a significant amount of the differences across elementary schools in student performance on the state reading and math tests.

The Nevada Teaching and Learning Conditions survey was live online from January 13 through February 9, 2006. Approximately half (47.5 percent) of Clark County educators responded to the survey.

Data was provided to the Contract Maintenance Committee and made available online via a password protected web site (www.nevadatwc.org) for every school with a minimum 35 percent response rate and at least five total respondents. Schools could look at their results relative to the district and were provided a table showing their quartile ranking compared to other schools. The data is intended to serve as an impetus for a broader discussion regarding the climate, conditions and culture of schools and how they impact student learning and teacher retention.

About the Respondents

As the survey was anonymous, we do not know the extent to which the half of Clark County educators who completed the survey are representative of the entire district. However, the demographic questions on the survey do provide some aggregate description of the educators who provided the data discussed in this report.

- Approximately 8,500 educators participated in the study;
- most of the responding educators were teachers (96 percent);
- more than half had taught in their school three years or less (52.1 percent);
- almost 23 percent were in their first year at their school;
- almost 19 percent had more than 20 years experience in education and almost 45 percent had more than 10 years education experience;
- more than two-thirds (66.4 percent) have masters degree or higher education level;
- almost 6 percent of respondents are alternative route educators;
- almost one-third say they have served as a mentor (31.4 percent); and
- more than three-quarters of respondents (78.3 percent) are female.

About the Report

This report demonstrates that teaching and learning conditions are critical to increasing student achievement and retaining teachers. Teachers' responses on the Clark County Teaching and Learning Conditions Survey helped to explain a significant amount of the differences across elementary schools in student performance on the state reading and math tests. Teacher working conditions also help to explain teacher retention, particularly the presence of an atmosphere of trust and respect. Five primary findings are documented in the report:

1. Teacher Working Conditions are Student Learning Conditions
2. Teaching and Learning Conditions Affect Teacher Retention
3. Teachers and Administrators View Working Conditions Differently

4. Schools Vary Widely in the Presence of Teaching and Learning Conditions
5. Clark County Teachers are More Negative about Working Conditions than Teachers in Other States

In addition to the general findings, in-depth analysis of each of the five teaching and learning domains is also provided. Teachers' responses are explored, general trends are presented and broad recommendations for reform are offered.

Ultimately, the success of the Clark County Teaching and Learning Conditions Initiative hinges on schools and the district using the findings in this report to prompt discussions with practitioners, stakeholders, and the public at large and ultimately make improvements identified as necessary by their own teaching corps.

Ultimately, the success of the Clark County Teaching and Learning Conditions Initiative hinges on schools and the district using the findings in this report to prompt discussions with practitioners, stakeholders, and the public at large and ultimately make improvements identified as necessary by their own teaching corps. The recommendations are intended to help develop and implement customized, data-driven reforms—integrated with broader school and district improvement plans.

This report indicates the importance of teacher working conditions for improving student learning and teacher retention, consequently making efforts to reform teaching and learning conditions worthy of considerable time and resources. Ensuring a qualified teacher for every student is not enough to close the achievement gap. Teachers must have the resources and supports they need to serve all students well, and without comprehensive and sustained efforts to improve teacher working conditions, much of Clark County's notable teacher recruitment and school reform efforts could go unfulfilled.

1. Major Findings

Given the unique nature of individual schools, the challenges and likely solutions to improving teaching and learning conditions involve school level policies. This analysis provides evidence that identifying and addressing these issues at the school and district level is essential to building schools that can help all students learn. In considering the five primary findings from the initiative, policymakers, stakeholders and practitioners across Clark County can develop a more complete understanding of how teaching and learning conditions affect teacher retention and student learning and where these working conditions are more or less likely to be in place. Of particular concern is the gap in perception of teaching and learning conditions between school leaders and teachers. These analyses show that improving these conditions is critical; however, not everyone in a school is likely to see these issues in the same way and there is great room for improvement within the district.

Finding 1: Teacher Working Conditions Are Student Learning Conditions

In general, teachers in Clark County and across the nation believe that if they are given sufficient time and control over what they do, their students will learn.

Research from previous initiatives in North and South Carolina demonstrated clear connections between the conditions of work faced by teachers and their ability to impact student learning. Across the two states, all five teaching and learning conditions domains—time, empowerment, leadership, professional development, and facilities and resources—were connected to improved school level performance on state assessments.[1]

Teachers are clear as to which domains they believe are most critical to improving student learning. In general, teachers in Clark County and across the nation believe that if they are given sufficient time and control over what they do, their students will learn (Figure 1). Clark County teachers, more so than educators in other states, believe that empowerment is the key to their success with children. More than one-third (34 percent) believe empowerment is most important and over one-quarter (28 percent) indicated time is critical. Teachers reported that working conditions more associated with overall school context, like leadership and facilities, were less important than the aspects most directly associated with their classroom.

The relationship between teaching and learning conditions and student achievement is clear, particularly in the area of elementary mathematics performance (Table 1).[2] All of the working conditions domains are positively correlated with the proportion of students proficient or above in math, reading and writing, as well as with whether or not schools made Adequate Yearly Progress. Facilities and resources was the only teaching and learning conditions area correlated with *all three* achievement areas at a statistically significant level.

Figure 1. Aspect of Working Conditions Teachers Believe Is Most Important to Student Learning

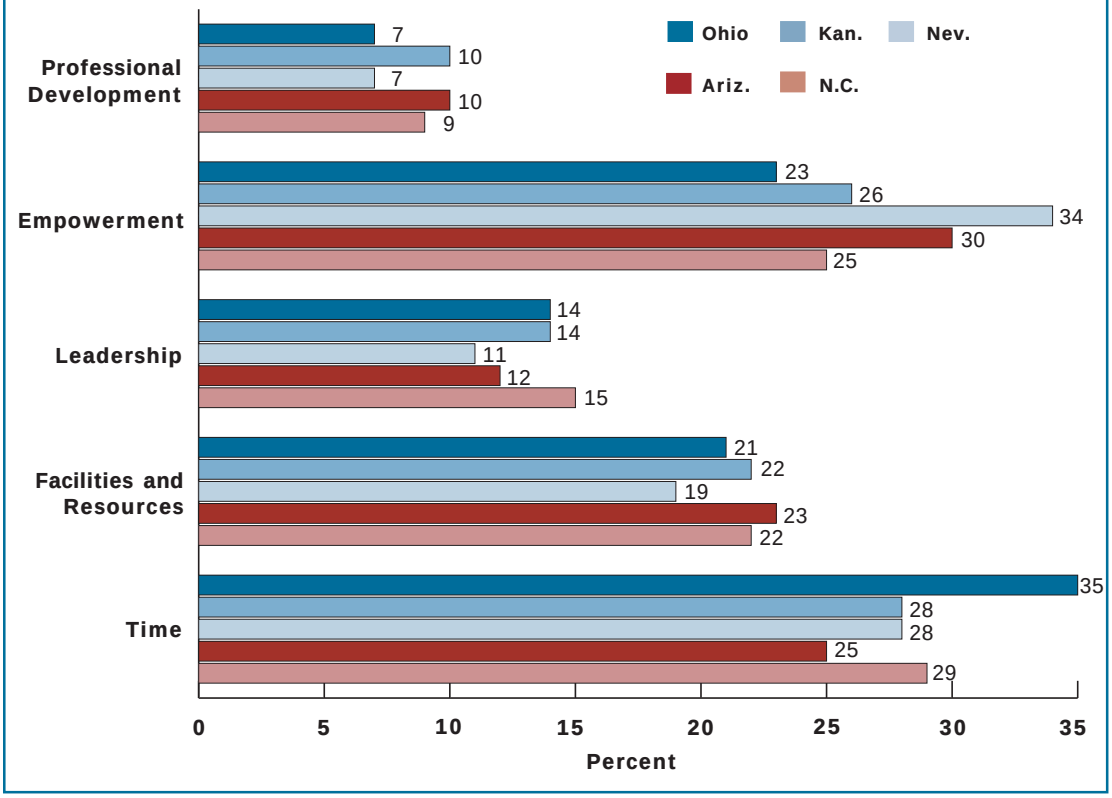


Table 1. Correlation Between Working Conditions, School, Teacher and Student Characteristics with Elementary School Student Performance*

Correlates	K-8 Math	K-8 Reading	K-8 Writing	Met AYP
Empowerment Domain	**.221**	.152	.092	.041
Leadership Domain	**.263**	**.178**	.195	.048
Time Domain	**.183**	.089	.214	.063
Facilities and Resources Domain	**.366**	**.308**	**.273**	.129
Professional Development Domain	**.191**	.167	.103	.147
Economically Disadvantaged Students	**-.728**	**-.806**	**-.624**	**-.362**
Race (Percentage White)	**.795**	**.779**	**.582**	**.328**
English Language Learners	**-.700**	**-.669**	**-.568**	**-.287**
Student Mobility	**-.686**	**-.665**	**-.494**	**-.233**
Teacher Experience	**.343**	**.210**	.157	**.206**
Percentage of Teachers Not Highly Qualified	**-.365**	**-.218**	-.036	**-.216**
Student/Teacher Ratio	-.162	-.128	**-.426**	**-.236**
School Size	**-.196**	-.050	-.036	**-.211**
Per Pupil Expenditure	-.094	**-.194**	-.112	-.029

***Note:** Data are correlation coefficients. The closer to 1.0 or -1.0, the stronger the correlation between variables. In social sciences, a .3 is generally accepted as a relatively strong connection. All coefficients in bold are statistically significant at the .05 level.

As would be expected, student characteristics were the area most highly correlated with achievement. Strong, significant and negative correlations with achievement can be found on virtually all student background areas. The proportion of poor, minority and English Language Learners are all correlated with lower levels of student proficiency on state assessments. Teacher background characteristics are also connected to student proficiency rates. A greater proportion of students are proficient or above in schools with more veteran educators and more high qualified teachers. School level influences, while significantly correlated with some assessment areas, appear less connected than student and teacher characteristics.

Discussion of Models

The correlations were used to explore different configurations of variables to model against the school wide percentage of students scoring a level three or four (proficient or above) on the Nevada Criterion Referenced Test in 5th grade reading and mathematics (Appendix A and Appendix B).[3] This modeling moves beyond correlation by controlling for various factors to better determine whether there is a causal relationship between working conditions and achievement. Ordinary Least Squares regression was run with independent variables entered in three blocks: working conditions domain questions, teacher/classroom/school variables, and student variables. Variables were than standardized and converted to a 0-to-100 scale to aid in the interpretation of results.

A greater proportion of students are proficient or above in schools with more veteran educators and more high-qualified teachers.

Various configuration of working condition domains and individual questions were explored in an attempt to create the most robust models that could explain the greatest proportion of variance in achievement performance. A few things to note:

- Modeling is difficult given the strong connections between variables. Separating the working conditions domains was particularly difficult as teachers often view them similarly across schools. The correlation between working conditions domains ranged from a low of .586 between professional development and time to a high of .926 between empowerment and leadership. This "multicolinearity" makes it difficult to find significant connection as the variables often weaken each other in the model.

- The amount of variance the blocks explain is dependent on the order in which they are entered. As this analysis is most concerned with the connection between student achievement and working conditions, the teaching and learning conditions block was entered first.

Explaining Elementary Mathematics Achievement

The statistical model for math was robust, explaining 81 percent of the variance in school level math achievement (Appendix A). The working conditions block explained up to 22 percent of the differences in achievement. Consider the following:

- Teachers' role in devising instructional techniques was significantly related to improved math proficiency. For every 10 percent of teachers who indicate they play at least a large role in devising instructional techniques, a 1.1 percent increase in students scoring proficient or above on the math assessment can be estimated.

- Leadership consistently enforcing rules for student conduct was statistically significant. For every 10 percent of teachers who agree or strongly agree that leadership is consistent, a 1.1 percent increase in student proficiency could be expected.

- Teacher recognition as educational experts was predictive of achievement. For every 10 percent increase in the percentage of educators who agree that they are recognized as experts, a 1.7 percent increase in the proportion of students proficient or above in math can be estimated.

Interestingly, two working conditions variables were significant in explaining math achievement, but in a negative way. For every 10 percent of teachers who agreed that efforts were made to reduce paperwork, a one percent decline in elementary math achievement could be expected. This could be due to the fact that those schools where efforts are made to reduce paperwork had greater paperwork problems in the first place.

More troubling was the significant and negative connection between teacher empowerment and math proficient rates. For every one point increase in the school level empowerment domain average, a 10 percent drop in student proficiency on math could be expected. When individual questions in the empowerment domain were loaded separately, only the question about teachers being viewed as education experts had a positive effect. Further investigation needs to occur, but one explanation may be the general lack of experience in the teaching corps in Clark County. According to data available on the state website, the average years of experience in the 160 schools for which working conditions data is available is only 3.9 years. Given this lack experience, teachers may not be fully prepared to assume the school level responsibilities reflected in some of the empowerment concepts measured on the survey.

Teacher recognition as educational experts was predictive of achievement. For every 10 percent increase in the percentage of educators who agree that they are recognized as experts, a 1.7 percent increase in the proportion of students proficient or above in math can be estimated.

While working conditions influence math proficiency, student characteristics have a stronger impact. Student variables explain one-third of the variance across schools in math proficiency rates, the greatest of the three variable groupings. In particular, the proportion of economically disadvantaged students, is significantly and powerfully connected to achievement. For every 10 percent increase in the percentage of students eligible for free or reduced lunch, a three percent decline in student proficiency could be expected. The proportion of minority students was significant in explaining proficiency but student mobility was not.

School and teacher background factors explained 27 percent of the variance in achievement. The proportion of teachers indicating they wanted to leave their school was the most powerful predictor within the block of variables. For every 10 percent of teachers who indicated on the survey they wanted to leave, a two percent decline in the percentage of students proficient or above in math could be expected. The proportion of highly qualified and smaller school and class sizes were all statistically significant in explaining math achievement.

Explaining Elementary Reading Achievement

The statistical model for reading was robust, explaining almost 87 percent of the variance in school level percentage (Appendix B). The working conditions block explained up to 24 percent of the differences in achievement.

Many of the same working conditions variables were significant in explaining reading achievement.

- Teachers' role in devising instructional techniques was significantly related to improved reading proficiency. For every 10 percent of teachers who indicate they play at least a large role, a 1.6 percent increase in students proficient or above on the reading assessment could be estimated.

- Leadership consistently enforcing rules for student conduct was statistically significant. For every 10 percent of teachers who agree or strongly agree that leadership is consistent, a 1.1 percent increase in student proficiency could be expected.

- Teacher recognition as educational experts was predictive of achievement. For every 10 percent increase in the percentage of educators who agree that they are recognized as experts, a 2.3 percent increase in the proportion of students proficient or above in reading could be expected.

The same negative connections between efforts to reduce paperwork and empowerment were documented. In fact, there were even stronger negative connections between empowerment and reading achievement. For every one point increase in the school level empowerment domain average, a 14.5 percent drop in student proficiency on reading could be expected. The same explanation may apply in reading.

The percentage of teachers agreeing that their class size is reasonable, affording them the time to meet the needs of all of their students was significant in explaining reading achievement.[4]

The analyses specifically point to the need to empower teachers in selecting teaching strategies, consistently enforcing codes for student conduct, and recognizing teachers as educational experts.

Student characteristics again have the stronger impact on achievement. Student variables explain 42 percent of the variance across schools in math proficiency rates, the greatest of the three variable groupings. In particular, the proportion of economically disadvantaged students, are significantly and powerfully connected to achievement. For every 10 percent increase in the percentage of students eligible for free or reduced lunch, a 3.8 percent decline in student proficiency could be expected. The proportion of minority students was not significant in explaining proficiency, but student mobility was in this model.

School and teacher background factors explained 20 percent of the variance in achievement. For every 10 percent of teachers who indicated on the survey they wanted to leave, a 1.7 percent decline in the percentage of students proficient or above in math could be expected. School size and per pupil expenditures were both statistically significant in explaining math achievement.

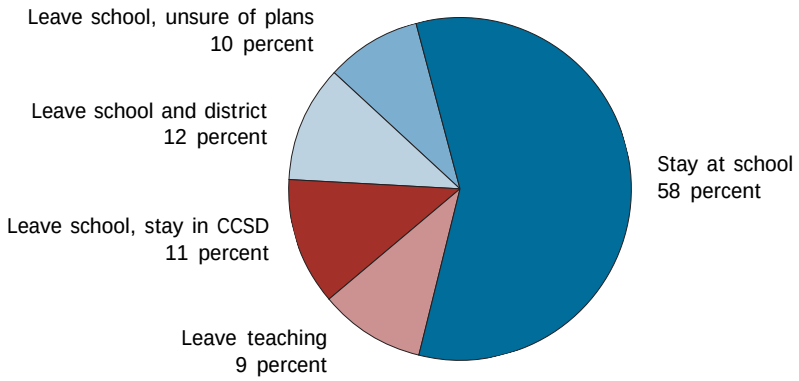
The overall findings from the analysis regarding the impact of teaching and learning conditions on student achievement provides compelling evidence to support the notion that teacher working conditions are student learning conditions. The analyses specifically point to the need to empower teachers in selecting teaching strategies, consistently enforcing codes for student conduct, and recognizing teachers as educational experts.

Finding 2: Teaching and Learning Conditions Affect Teacher Retention

Given the astronomical population growth in Clark County, the district has invested heavily in recruitment strategies to ensure that all schools are staffed with qualified educators. Many of these programs are well known not only in the district, but also nationally, as other states and districts have looked closely at CCSD's innovative strategies around housing, online preparation, etc.

While these strategies have helped attract teachers to the district, keeping them may present an even greater challenge (Figure 2).

Figure 2. Future Employment Plans of Clark County Teachers



While approximately 60 percent of Clark County teachers want to stay teaching in their current school (referred to throughout the report as stayers), one-fifth of the work force are "leavers," looking to leave CCSD (half of those leaving teaching altogether and the other half looking to teach in another state or district in Nevada), and another one-fifth are "movers," either unsure of their plans or looking to stay within the district but teach elsewhere.

There is admittedly some difficulty comparing attrition across districts and states, as attrition is oftentimes defined and calculated differently across locales, and many educators indicating they would like to leave may not actually do so; nevertheless, this high rate is alarming. Fully 40 percent of educators report wanting to leave their school. This creates a potentially extraordinary burden on the district and school leaders to constantly fill positions and leads to inconsistency in instruction and support to students.

Fully 40 percent of educators report wanting to leave their school. This creates a potentially extraordinary burden on the district and school leaders to constantly fill positions and leads to inconsistency in instruction and support to students.

Attrition is not isolated to new teachers in Clark County. In fact, those with seven to ten years of experience in education (10.5 percent) are more likely to report the desire to leave teaching than those with one to three years experience (7.7 percent). The most senior educators (20+ years experience) were the most likely to state their intent to leave education (12.7 percent).

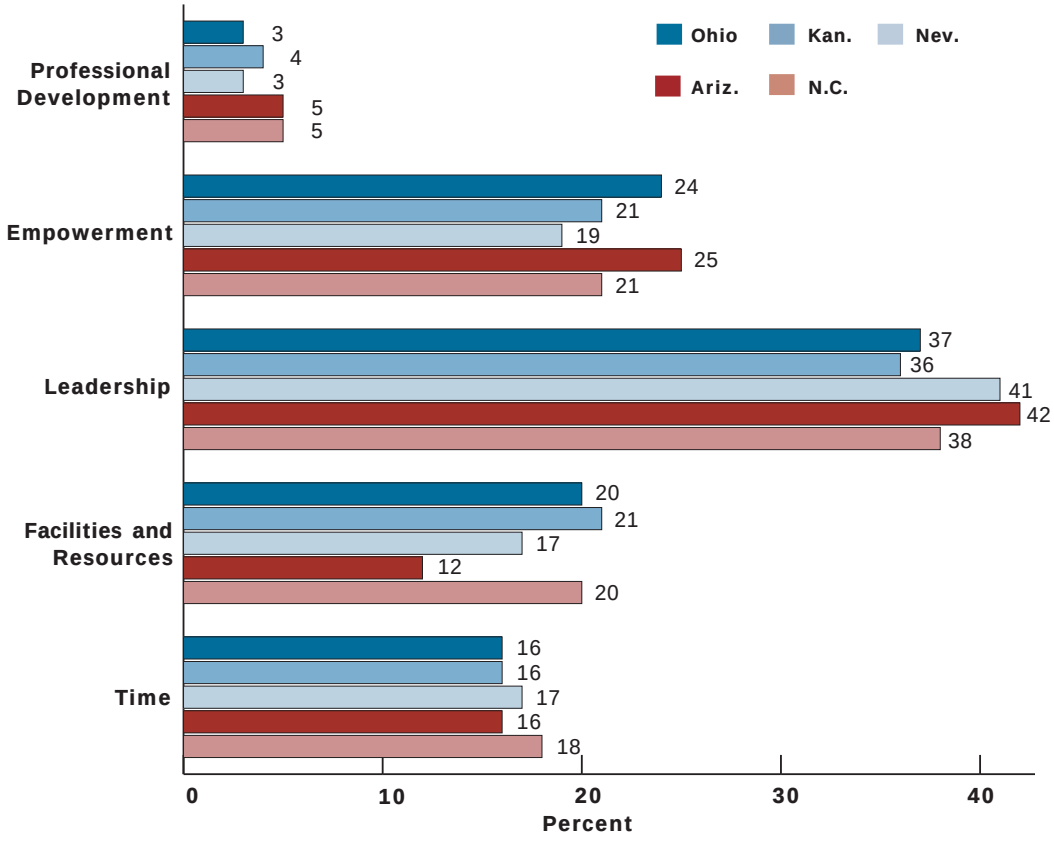
Educators note several important considerations influencing their future plans (Table 2). While more than three-quarters listed virtually every reason as important, greater differentiation occurs when noting which were listed as extremely important. The most important factor influencing employment decisions is the support they receive from school administrators (63 percent), followed by compensation issues, including the cost of living (54 percent) and salary (53 percent). As Table 2 shows, working conditions are critical. Leadership and time are of particular importance to educators, but empowerment, a collegial atmosphere, and facilities and resources are also noteworthy.

The importance of leadership and its connection to retention was noted throughout the survey. When asked to select which of the working conditions studied most influenced retention decisions, leadership was by far the most important (Figure 3). More than double the proportion of educators listed leadership (42 percent) as any other working condition. While time, empowerment, and facilities and resources were all indicated as important by about one-fifth of teachers, only three percent of Clark County educators listed professional development as the most critical working condition influencing retention decisions.

Table 2. Influences on Teachers' Future Employment Plans

In considering your future plans, please indicate the importance of the following in influencing your decision	Important	Extremely Important
Support from school administrators	94%	63%
Time to do my job during the work day	94%	50%
Effectiveness with the students I teach	94%	50%
Teaching assignment (class size, subject, students)	93%	51%
Empowerment to influence decisions that affect my school and/or classroom	93%	38%
Salary	92%	53%
Cost of living	90%	54%
Comfort with the students I teach	90%	40%
Collegial atmosphere amongst the staff	89%	40%
Student disciplinary problems	87%	39%
Quality of life in this community	86%	37%
Other teachers with whom I work	86%	29%
Facilities and/or resources	84%	26%
Personal reasons (health, family, etc.)	83%	42%
Eligible for retirement	77%	37%
Focus on testing and accountability	72%	20%

Figure 3. Aspect of Working Conditions Teachers Believe Is Most Important to Continued Teaching in Their School



Teachers Stay in Schools with Positive Working Conditions

Evidence was found throughout the survey that teachers with positive perceptions about their working conditions are much more likely to stay at their current school than educators who are more negative about their conditions of work. There are strong correlations between working conditions and plans to stay at elementary, middle and high schools. At the elementary level, leadership has the strongest correlation to percent of teachers planning to stay (.673), while empowerment is strongest at the middle school level (.712). At the high school level, leadership has the strongest correlation to plans to stay at a school (.584).[5]

Evidence was found throughout the survey that teachers with positive perceptions about their working conditions are much more likely to stay at their current school than educators who are more negative about their conditions of work.

Teachers appear to be more likely to stay in schools when critical conditions are in place, particularly in the area of leadership (Table 3). Almost three-quarters of teachers who want to stay in their current position agree that there is an atmosphere of trust and mutual respect versus less than one-third of those who want to move to a new school. Similar disparities exist on other questions. Empowerment is also important. About double the proportion of stayers (74.6 percent) agree that steps are taken to solve problems at their school than movers (38.2 percent); and about two-thirds of educators who want to stay in their school believe that teachers are trusted to make sound decisions about instruction compared to about one-third of movers (31.6 percent) and leavers (37.1 percent).

Table 3. Differences in the Perceptions of Stayers, Movers and Leavers on Teacher Working Conditions Questions

Teaching and Learning Survey Question	Percent of Teachers Who Agree		
	Stayers	Movers	Leavers
There is an atmosphere of trust and mutual respect in this school	71%	31%	46%
Teachers have sufficient access to instructional materials and resources	72%	54%	55%
Teachers feel comfortable raising issues/concerns that are important to them.	65%	27%	41%
Opportunities are available for members of the community to contribute actively to this school's success	73%	46%	54%
Overall, the school leadership in my school is effective	70%	31%	49%
The faculty has an effective process for making group decisions and solving problems	57%	24%	34%

Schools where teachers report a greater prevalence of positive working conditions are more likely to retain teachers (Table 4). In considering career intentions of teachers based on whether their schools have working condition survey results in the highest 25 percent (quartile) of Clark County Schools versus the career plans of teachers working in schools scoring in the lowest quartile of schools, it becomes obvious that working conditions improvements are critical to stemming teacher attrition in Clark County.

Schools with educators reporting working conditions in the top quartile averaged between two-thirds (67 percent) and three-quarters (77 percent) of teachers wanting to stay in their current position (Table 4) at every school level (elementary, middle and high school) and for all five

working conditions. Conversely, in schools in the bottom quartile of working conditions scores, only about half (between 44 and 55 percent) want to stay.

Table 4. Educators Staying, Moving, Leaving Schools Based on Performance on All Domain Averages

School Level	Quartiles of Average of All Working Conditions Domain Scores	Percent of Teachers Who Agree		
		Stayers	Movers	Leavers
Elementary	Top Quartile	76.4%	10.1%	13.5%
	Second	62.1%	16.4%	21.5%
	Third	56.7%	21.5%	21.7%
	Fourth	45.2%	30.8%	24.0%
Middle School	Top Quartile	74.0%	10.4%	15.6%
	Second	63.1%	17.6%	19.3%
	Third	54.2%	17.2%	28.6%
	Fourth	49.5%	24.3%	26.2%
High School	Top Quartile	69.0%	12.5%	18.5%
	Second	64.6%	12.2%	23.2%
	Third	67.4%	10.4%	22.2%
	Fourth	52.6%	22.1%	25.3%

Note: Average Domain rating is the composite of questions from statistical analyses that were predictive in that area. Ratings are on a one to five scale with one being the lowest and five being highest

Discussion of Models

To assess whether there is a casual relationship between teaching and learning conditions and teacher attrition, statistical modeling controlling for student, teacher and school factors was conducted.

The presence of an atmosphere of trust and mutual respect was the most powerful predictor of any variable on whether a teacher would continue working in their current position.

Ordinary Least Squares regressions were run examining influences on the percentage of teachers indicating their intent to stay working in their current position (as indicated on the Teaching and Learning Conditions Survey). Independent variables were entered in two blocks: working conditions domain questions and other control variables, including student, teacher and school characteristics. Variables were than standardized, converted to a 0 to 100 scale to aid in the interpretation of results.

Elementary School Teacher Attrition

The statistical model explained almost two-thirds of the variance (65.5 percent) in the proportion of teachers wanting to stay in their current position across the 160 elementary schools with at least a 35 percent response rate. Working conditions explained over 40 percent of future employment intentions.

- The presence of an atmosphere of trust and mutual respect was the most powerful predictor of any variable on whether a teacher would continue working in their current position. For every 10 percent of teachers agreeing or strongly agreeing that trust is present, a 3.1 percent increase in the percentage of teachers wanting to stay could be expected.[6]

- Although efforts to reduce paperwork were negatively connected to performance, it is significantly and positively predictive of attrition. For every 10 percent increase in those who

agree efforts are made to reduce paperwork, 1.2 percent increase in planned retention could be expected.

- Teacher recognition as educational experts mattered for achievement and retention. For every 10 percent increase in those who agree they are viewed as experts, a 1.5 percent increased in teachers wanting to stay could be expected.

- For every 10 percent increase in the percentage of teachers agreeing that their non-instructional time is sufficient, a 1.3 percent increased in planned retention could be expected.

Of the school, student and teacher variables in the model, only teacher experience was statistically significant in explaining teacher retention.[7] Newer teachers were more likely to indicate that they would leave their school. Neither the students served, nor the proficiency on state assessments were significantly connected to future employment plans.

Secondary School Teacher Attrition

The statistical model explained almost two-thirds of the variance (66.1 percent) in the proportion of teachers wanting to stay in their current position across the 65 middle and high schools with at least a 35 percent response rate. Working conditions explained 39 percent of future employment intentions.

School safety is an important predictor of retention at the secondary level. An increase of 10 percent of educators agreeing that their school is safe could be expected to lead to an increase in planned retention of 2.3 percent.

- Rather than using the atmosphere of trust and mutual respect question, the leadership domain average was examined, as its inclusion added to the predictive power of the model. For every one point increase in the school leadership domain average, a 12.8 percent increase in the proportion of teachers indicating a desire to stay in their current position could be expected. The question within the domain that revealed the greatest connection to retention was agreement that the faculty had a shared vision.

- School safety is an important predictor of retention at the secondary level. An increase of 10 percent of educators agreeing that their school is safe could be expected to lead to an increase in planned retention of 2.3 percent.

- Teachers' belief that they are centrally involved in decision making was significantly connected to teachers' future employment plans.

Again, few student, teacher and school characteristics were predictive of future employment intentions. Needing to work a second job—in this case considered a proxy for dissatisfaction with salary and benefits—was significantly and negatively connected to teacher retention.

As teachers noted, leadership and empowerment are important factors in teachers' decisions about where to work. Teaching and learning conditions must be addressed to improve retention in schools across Clark County.

Finding 3: Teachers and Administrators View Working Conditions Differently

There are considerable gaps between the perceptions of teachers and administrators regarding the degree to which school leadership addresses teacher concerns (Table 5).[8] While some discrepancies might be expected between administrators and teachers on a measure of leadership effectiveness, the degree of these discrepancies is startling and must be taken into consideration for any working conditions reforms to be successful. There should be little surprise that more has not been done to address and improve working conditions if school administrators do not perceive that there are issues that need to be addressed.

While teachers and principals/assistant principals are both sanguine about the availability of non-instructional time, large differences exist in critical leadership and empowerment areas.

- Only one-third (34.6 percent) of teachers believe that they are centrally involved in decision making about important education issues compared to more than four-fifths (82.1 percent) of administrators who believe that teachers are centrally involved.

- While almost two-thirds (62.5 percent) of teachers believe that they take steps to solve problems in their school, virtually all principals and assistant principals believe that they take these problem solving steps.

There should be little surprise that more has not been done to address and improve working conditions if school administrators do not perceive that there are issues that need to be addressed.

Of particular concern are the convergence of the following trends related to time and empowerment.

1. The areas that educators indicated as most important to them in promoting student learning were teacher empowerment (34 percent) and time (28 percent), much more than facilities and resources (20 percent), leadership (11 percent) and professional development (7 percent).

2. The areas where teachers have the lowest perceptions of working conditions are in the areas of time (2.83) and empowerment (3.09).

3. The areas with the greatest gaps between teachers and principals/assistant principals are in the areas of time (a 1.05 difference on a 1 to 5 scale) and empowerment (1.06).

Not only are administrators far less likely than teachers to note working conditions related problems, but they are also much more likely to believe that they are making efforts to address them (Table 6).

Across all working conditions areas, about nine in ten principals/assistant principals believe that they are making sustained efforts to address concerns. Yet, less than half of teachers believe that school leadership—not defined as any particular position in the survey—continually addresses issues related to leadership (39.7 percent), empowerment (44.4 percent) and time (45.2 percent). Teachers were most likely to note leadership's response to concerns about facilities and resources (60.4 percent), but virtually all administrators (97.5 percent) believe they are addressing these facilities and resources issues.

Table 5. Differences in the Perception of Teachers and Administrators of Teacher Working Conditions

Working Conditions Question/Domain	Teacher	Principal/ Asst. Principal
The non-instructional time provided to teachers is sufficient	34.7%	55.0%
Professional development enhances teachers' skills as instructional leaders	55.0%	97.5%
Teachers are centrally involved in decision making about important education issues	34.6%	82.1%
In our school we take steps to solve problems	62.5%	97.4%
Overall the leadership in my school is effective	55.6%	89.6%
Time Domain	2.83	3.88
Facilities and Resources Domain	3.63	4.18
Empowerment Domain	3.09	4.15
Leadership Domain	3.43	4.27
Professional Development Domain	3.32	4.00

Table 6. Perception of Teachers and Administrators About Leadership Addressing Working Conditions Concerns

School leadership makes a sustained effort to address teacher concerns about:	Teachers Agreeing	Administrators Agreeing
The use of time in my school	45.2%	92.5%
Facilities and resources	60.4%	97.5%
Empowering teachers	44.4%	90.0%
Leadership issues	39.7%	87.5%
Professional development	56.3%	90.0%

Finding 4: Schools Vary Widely In the Presence of Teaching and Learning Conditions

Not all schools have the types of teaching and learning environments necessary to keep teachers and ensure student success. Unfortunately, some of the disparities in the presence of working conditions can be explained by the students served in those schools. Schools serving a lower percentage of economically disadvantaged students consistently had more positive working conditions, particularly in the area of facilities and resources (Table 7).[9]

Schools also vary on teaching and learning conditions by school type. Teachers in elementary schools, in general, are far more likely to report that teaching and learning conditions are in place. Middle school teachers, while more negative than elementary educators, are more likely to site the presence of working conditions than high school teachers. The areas where there are the greatest differences are in the areas of leadership and empowerment, both critical to retaining teachers.

Table 7. Elementary School Working Conditions and Other Factors by Proportion of Economically Disadvantaged Students

Working Conditions (Domain and Percent Agree/Strongly Agree)	Percentage Economically Disadvantaged				
	0–25%	25.1-50%	50.1-75%	75.1%-100%	Total
Time Domain	3.02	2.86	2.81	2.82	2.88
Empowerment Domain	3.38	3.21	3.02	3.07	3.17
Facilities and Resources Domain	3.87	3.70	3.54	3.52	3.66
Leadership Domain	3.68	3.55	3.39	3.40	3.51
Professional Development Domain	3.55	3.46	3.35	3.42	3.45
Non-instructional time is sufficient	46.3%	37.0%	34.1%	38.3%	38.9%
Teachers are viewed as educational experts	55.8%	49.0%	43.0%	46.7%	48.7%
Teachers are centrally involved in educational decision making	44.0%	38.5%	31.2%	32.9%	36.7%
The school is safe	92.2.%	87.7%	75.7%	65.9%	80.6%
There is sufficient office equipment	73.8%	67.4%	62.0%	59.7%	65.8%
There is an atmosphere of trust and mutual respect	68.6%	61.4%	55.7%	54.0%	60.0%
School leadership engages parents and the community	75.6%	71.9%	63.7%	62.4%	68.5%
The school is clean and well maintained	82.4%	78.2%	69.6%	64.4%	73.8%

One area where schools did not vary consistently was the geographic region of the district (Table 8). While the southwest region of Clark County was slightly less likely to note positive conditions in the area of professional development and empowerment, there were few differences. Not surprisingly given these similarities, the percentage of teachers indicating a desire to stay in their current teaching position did not vary by region either. There was a range of less than 4 percent in the percentage of teachers wanting to stay across the five regions.

Table 8. Teaching and Learning Conditions Domains by District Region

	All Domains	Time	Facilities & Resources	Empowerment	Leadership	Professional Development
East	3.30	2.85	3.65	3.17	3.45	3.39
Northeast	3.33	2.83	3.67	3.24	3.54	3.37
Northwest	3.35	2.90	3.69	3.18	3.55	3.44
Southeast	3.35	2.89	3.74	3.18	3.52	3.43
Southwest	3.25	2.82	3.64	3.06	3.43	3.29
Education Services	3.32	3.13	3.61	3.25	3.46	3.13
Total	3.32	2.88	3.68	3.18	3.50	3.37

As has been the case in other states conducting teaching and learning conditions initiatives, teacher background characteristics do not explain the way they perceive their schools. Race, gender, education level and means of preparation do not appear to influence teacher responses on the Teaching and Learning Conditions Survey. Additionally, there is no substantial variation in the perception of teaching and learning conditions based on years of experience. First-year teachers were more positive about working conditions than other educators, but those differences did not exist for second- and third-year educators, and no other discernable trends were evident based on experience.

Finding 5: Clark County Teachers Are More Negative About Working Conditions than Those in Other States

The Center for Teaching Quality is working with states across the nation in conducting initiatives similar to the Clark County Teaching and Learning Conditions Survey.[10] As many of these states asked questions with identical wording, comparisons can be made (Table 9).

As has been the case in other states conducting teaching and learning conditions initiatives, teacher background characteristics do not explain the way they perceive their schools.

While a greater proportion of Clark County educators were positive about the presence of teaching and learning conditions than in Ohio (about one-third of respondents are from Columbus and Cleveland), they were more negative than educators in North Carolina and Kansas. Of particular importance is that Clark County educators have the most negative perception about being involved in education decision making. Conversely, Clark County educators were at least as positive as teachers in most other states in the area of sufficient access to instructional technology.

Table 9. Percentage of Teachers Agreeing with Working Conditions Questions in Clark County and Other States

Teacher Working Conditions Questions	N.C.	Kan.	Ariz.	Ohio	Clark County
There is an atmosphere of trust and mutual respect within the school	64%	62%	62%	50%	58%
Teachers are trusted to make sound professional decisions about instruction	72%	61%	62%	56%	52%
The school leadership communicates clear expectations to students and parents	72%	63%	67%	56%	65%
The faculty are committed to helping every student learn	85%	87%	72%	82%	82%
Overall, the school leadership in my school is effective	64%	59%	62%	NA	58%
Teachers have sufficient access to instructional technology	74%	64%	62%	56%	70%
Teachers are centrally involved in educational decision making	53%	44%	38%	36%	35%

2. Domain Analyses

Further analyses were conducted in each of the six domains contained in the survey to better understand working conditions in the district.

Time: Ensuring Clark County Teachers Have the Opportunity to Work Collaboratively and Reach All Students

Quality teaching is time-dependent. Teachers need time to collaborate with their peers, discuss and observe best practices, and participate in professional development that prepares them for changing curriculum and the challenges of teaching a diverse population.

Most teachers have little non-instructional time during the school day, and in that time they must prepare instructional materials, assess students, and communicate with parents.

Current school schedules demand that teachers spend the vast majority of their time in classroom instruction. Most teachers have little non-instructional time during the school day, and in that time they must prepare instructional materials, assess students, and communicate with parents. Additionally, teachers often must serve on school committees, staff various extracurricular activities or cover hall or lunch duty. Such schedules do not allow adequate time for the continuous professional learning that is necessary for quality teaching.

In many European and Asian countries, teachers spend no more than half their time in classroom instruction. They spend 17-20 hours per week teaching and devote the remainder of their 40-45 hour work weeks to planning, collaboration, meeting with students, and observation of other teachers.[1] Because American teachers are so busy teaching, they often lack the opportunity to step back and evaluate the effectiveness of their instruction.

Survey data from Clark County demonstrates that time available to teachers was the working condition of single greatest concern to educators. On a one-to-five scale of satisfaction, time was the only of five working conditions with a domain average less than neutral (3.0).

The level of dissatisfaction is consistent with the perceptions of teachers in statewide surveys in both North and South Carolina from 2004, where educators expressed the most dissatisfaction on the time domain.[2]

Consider the following findings in Clark County:

- Only 34.7 percent of teachers agree that the non-instructional time provided for teachers is sufficient;
- Only 43.4 percent of teachers agree that they are protected from duties that interfere with educating students;

- Only 27.3 percent of teachers agree that they have reasonable class sizes; and
- A full 44 percent of teachers agree that it's necessary for them to work a second job during the regular school year.

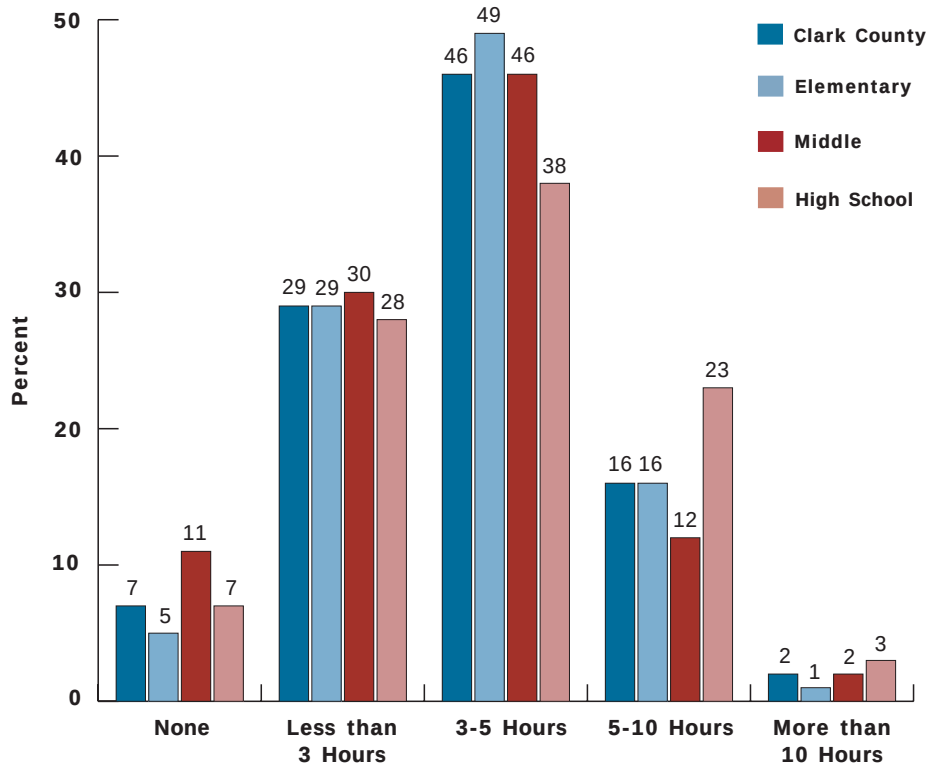
Teachers Do Not Receive Sufficient Time to Plan and Collaborate

Only 39 percent of Clark County educators believe that the non-instructional time provided is sufficient (5 percent strongly agree). This dissatisfaction is related to the amount of time teachers report.

Only 39 percent of Clark County educators believe that the non-instructional time provided is sufficient. This dissatisfaction is related to the amount of time teachers report.

More than one-third (35.6 percent) of teachers have less than three hours of non-instructional time during the normal school week. The plurality of teachers (45.8 percent) report receiving between three and five hours per week, and only 18 percent of teachers report receiving more than five hours of non-instructional time during the week. All told, less than one in five Clark County teachers enjoy more than one hour a day of non-instructional time (Figure 4).

Figure 4. Non-instructional Time Available During the School Day



Time issues appear to be related to administrative duties

This lack of overall time appears to be related to the type and degree of non-instructional duties required of teachers. Less than half of responding Clark County teachers (44 percent) agree that they are protected from duties that interfere with their essential role of educating students. Only slightly more than one-third of respondents (35 percent) agreed that efforts are made to minimize the amount of routine administrative paperwork required.

Teachers are working outside of the school day to address the need for more time

With a desire for more non-instructional time and concerns about class size, teachers report working outside of the school day on school-related activities. Very little of this time is spent working directly with students in activities such as tutoring or coaching; far more time is reported on preparation, grading papers, parent conferences and attending meetings. A significant 69 percent of teachers report working an average of more than five hours per week outside of the school day (Table 10), and nearly 40 percent spend more than 10 hours per week. These proportions are similar to what teachers report in other states which range from 70 percent working at least five hours outside of the school day in Arizona to a low of 58 percent in North Carolina.

Table 10. Time Spent Outside the School Day on School-Related Activities

Activity	None	Less than 3 Hours	More than 3 but Less than 5 Hours	More than 5 but Less than 10 Hours	More than 10 Hours
School-related activities outside the regular school week	1%	10%	19%	30%	39%
School-related activities involving student interaction (coaching, tutoring, clubs, etc.)	50%	28%	12%	6%	5%
Other school-related activities (grading, preparation, conferences, etc.)	2%	15%	25%	31%	27%

Facilities and Resources: Ensuring Teachers Have the Resources to Help All Children Learn

A growing body of research confirms that the quality of facilities contributes directly to teacher turnover rates and student performance.

A growing body of research confirms that the quality of facilities contributes directly to teacher turnover rates and student performance. A study by the Carnegie Foundation for the Advancement of Teaching (1998) found that student attitudes about education directly reflect their learning environment. Other studies have shown that clean air, good light, and a quiet, comfortable, and safe learning environment are essential for academic achievement.[3]

Despite increased expenditures for school facilities, many education and community leaders, along with policymakers, remain unprepared for and unresponsive to the facility and resource needs of schools. One reason is illustrated by the fact that, although more than 80 percent of principals surveyed in New Jersey considered themselves well trained for providing academic leadership and ensuring teacher quality, fewer than half thought they were well prepared for facilities management.[4]

Schools on the cutting edge of the reform movement in facilities and resource management are creating smaller learning communities; delivering instruction through innovative and emerg-

ing technologies; reconsidering and redesigning the traditional school spaces to create smarter designs of teacher working and student learning spaces; and integrating community strengths and resources in partnerships with a wide array of public, civic, and private organizations.

Clark County educators expressed more positive perceptions of their facilities and resources than any of the other four teaching and learning condition domains. The facilities and resources domain average was 3.64, meaning that teachers were significantly more positive than negative about this aspect of their working conditions. Consider the following:

- About three-quarters (72 percent) of Clark County educators agree that staff work in a school environment that is clean and well maintained; and
- More than three-quarters (77 percent) of educators agree that staff work in a school environment that is safe.

Clark County educators expressed more positive perceptions of their facilities and resources than any of the other four teaching and learning condition domains.

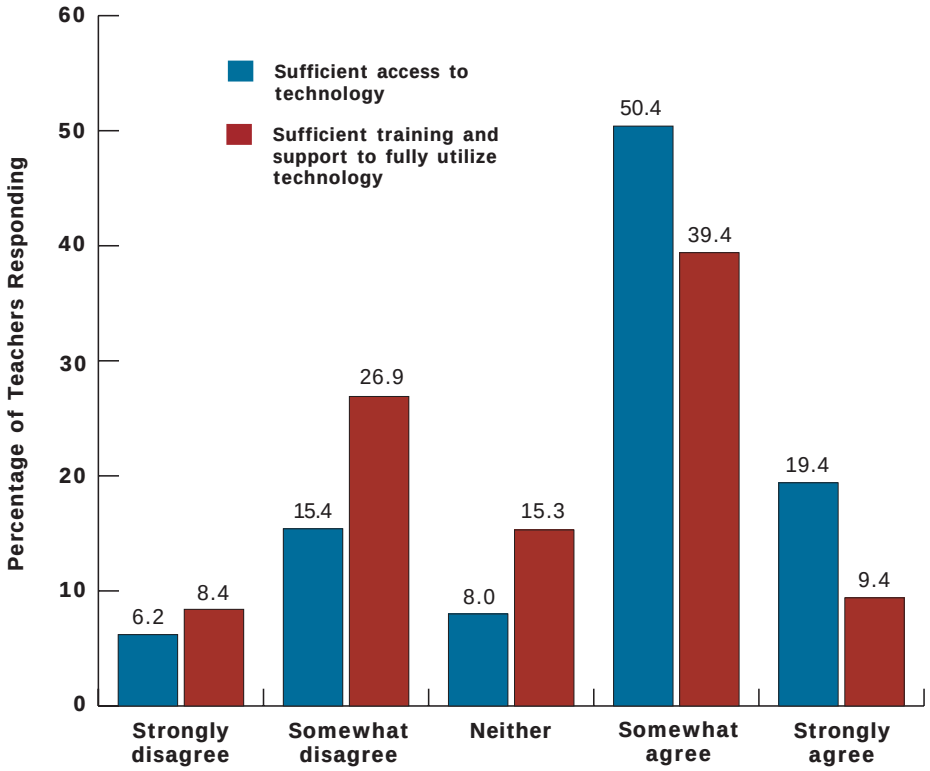
There are many positive trends to note (Table 11). More than two-thirds of teachers agree with statements related to the prevalence of resources (communications, technology and instructional), and administrators are predictably even more positive about facilities and resources. There are some discrepancies across school types. High school teachers are less likely to report the presence of instructional materials and note issues with school maintenance. A greater percentage of middle school educators report receiving technology training, but are less likely to have access to adult restrooms.

Table 11. Percentage of Teachers Agreeing with Facilities and Resources Statements

Facilities and Resources Areas	Elementary	Middle	High School	Total
Teachers have sufficient access to instructional materials and resources	66.3%	67.0%	57.5%	64.9%
Teachers have sufficient access to instructional technology	69.7%	74.0%	67.6%	70.2%
Teachers have sufficient training/support to utilize instructional technology	46.3%	56.5%	49.6%	49.0%
Teachers have reliable communication technology	81.2%	79.6%	81.3%	72.7%
Teachers have sufficient access to office equipment and supplies	65.1%	70.2%	73.2%	67.7%
Teachers and staff have access to adult restrooms	85.7%	72.9%	82.4%	82.2%
Teachers have sufficient access to a broad range of professional personnel	66.2%	67.4.%	62.1%	65.7%
Teachers and staff work in a school environment that is clean and well maintained	73.4%	71.2%	64.9%	71.4%
Teachers and staff work in a school environment that is safe	78.8%	75.0%	72.4%	77.1%

While the vast majority of teachers (71 percent) agree that they have access to instructional technology, less than half (48 percent) agree that they have sufficient access to training/support to utilize instructional technology (Figure 5). Middle school educators report more access to technology and more training than elementary or high school teachers.

Figure 5. Educator Perception of Technology Access and Support



Leadership: Ensuring Schools Have Strong Leaders Who Support Teaching and Learning

A recent report by the Wallace Foundation revealed that leadership is second only to classroom instruction among all school-related factors that contribute to what students learn at school.

School improvement is not possible without skilled, knowledgeable leadership that is responsive to the needs of all teachers and students. A recent report by the Wallace Foundation revealed that leadership is second only to classroom instruction among all school-related factors that contribute to what students learn at school, and leadership effects are usually largest where and when they are needed most. School leaders must combine appropriate pressures and supports as they develop an environment that encourages professional learning communities and continuous school improvement.

The Wallace report indicated that three sets of practices constitute the basic core of successful leadership: setting directions, developing people, and redesigning the organization.

National studies analyzing teacher survey results, like the Schools and Staffing Survey from the National Center for Education Statistics, have found that teachers leaving because of job dissatisfaction frequently indicate lack of administrative support and low salaries as the top reasons

for their departure. Teachers from high-minority, high-poverty schools were even more likely to report that lack of administrative support was the primary reason for leaving. School leadership has been documented to have an impact on the overall school culture and teacher job satisfaction. Consequently, principal development will prove essential in reducing high teacher turnover rates and creating professional learning communities within schools.

Principal development will prove essential in reducing high teacher turnover rates and creating professional learning communities within schools.

Clark County educators were generally positive about the concept of leadership in their respective schools. The domain average for leadership was 3.44 (on a one-five scale of satisfaction), ranking as the second highest of five working conditions, behind only facilities and resources. Despite this positive trend, and a tremendously positive outlook toward some elements of the leadership, there were areas for improvement.

Looking first at the positive leadership trends, teachers were generally satisfied with their school leadership, particularly on issues related to communication and evaluation. Consider the following:

- Overall, 58 percent of Clark County educators agreed that school leadership was effective, and only 12 percent strongly disagreed that leadership was effective. These figures, however, are lower than in other states that have conducted teaching and learning conditions initiatives.

- Sixty percent (61.8 percent) agreed that leadership effectively communicates policies;

- Fifty-six percent (56) of educators agreed that the school administration and faculty have a shared vision; and

- More than four-fifths (81.1 percent) of teachers agreed that the faculty is committed to helping every student learn.

It is also important to note that questions in this section of the survey focused on school leadership, not necessarily the principal. In fact, less than half (47 percent) of teachers in the pilot identified the principal as the person who most often provides instructional leadership. A full 19 percent of survey respondents said other teachers were the people most often providing instructional leadership. While the principal is essential, many other educators play critical roles in different aspects of school leadership.

Educators were highly positive regarding evaluation and feedback. Almost two-thirds of educators agreed that teacher evaluations are fair (65.5 percent) and that teachers receive feedback that can improve their teaching (62.2 percent). About two-thirds (64.5 percent) of educators agreed that their school provides a climate in which staff members are recognized for their accomplishments.

The vast majority of respondents felt that leadership did well engaging the community. Almost two-thirds (63.6 percent) agreed that opportunities are available to members of the community to contribute actively to their school's success. And more than sixty five percent of educators (65.7) felt that school leadership communicates clear expectations to students and parents.

However, there were areas for improvement within the leadership domain.

- More than half (58 percent) of teachers agreed that there is an atmosphere of trust and mutual respect within the school. While a majority of Clark County teachers agreed that this atmosphere is present, it was lower than other states. More importantly, as discussed previously, the responses to this question were extremely important to teachers in making their decision about where to work.

- Less than half of teachers (45.8 percent) agreed that the school improvement team provides effective leadership in their school. Of those agreeing, only 11 percent strongly agreed.

- And while teachers were generally positive about communication from school leadership, educators were less positive about how leadership addresses teacher concerns in their school. Slightly more than half of teachers (52.3) feel comfortable raising issues and concerns that are important to them.

As noted previously, leadership is the most important factor to teachers in making their decisions about where to work. With such a substantial proportion of teachers indicating a willingness to work elsewhere, careful consideration of school leadership and their collective knowledge and skills in building a climate of trust and respect must occur in each school and across the district.

Empowerment: Ensuring Those Who Are Closest to Students Are Involved in Making Decisions that Affect Them

When teachers believe that their knowledge of teaching and learning (and the students they teach) is considered a valuable factor in decision-making, they become connected to their schools and districts in powerful ways.

Teaching has historically been a profession which granted practitioners some degree of autonomy in their classrooms, but larger institutional decisions affecting their work were still controlled by administrators and policymakers. Everything from hiring, budgeting, scheduling, textbook and technology selections to professional development and curriculum is often in the hands of others. As noted by Richard Ingersoll, in his 2003 book *Who Controls Teachers' Work?: Power and Accountability in America's Schools*, "Those who are entrusted with the training of this next generation are not entrusted with much control over many of the key decisions in their work." He notes that in schools where teachers are more empowered, there is "less conflict between staff and students and less teacher turnover."

The importance of teacher empowerment in key education areas cannot be underestimated. When teachers believe that their knowledge of teaching and learning (and the students they teach) is considered a valuable factor in decision-making, they become connected to their schools and districts in powerful ways. This connection can help improve the retention of those teachers in their classrooms and, ultimately, the success of the students they teach.

Teachers are more involved in classroom related decisions than decisions that affect planning and spending in schools

Teachers in Clark County appear to be more involved in decisions related to their own teaching than the school as a whole. About three-quarters (78 percent) play at least a moderate role in devising teaching techniques and two-thirds (66 percent) play at least a moderate roll in selecting instructional materials and resources, significantly linked to improved student proficiency in elementary reading and math in CCSD (Table 12). Teachers are also likely to be involved, at least to a degree, in setting grading and student assessment policies. Even in these areas, however, half or less believe that teachers play a large or the primary role in determining policies and practices at their school.

Teachers are less likely to control their own continued development and learning. Less than half of teachers (45 percent) indicate having a moderate role in determining the content of in-service professional development programs, and less than one-fifth (19 percent) believe teachers play a large roll. Equally rare is teacher influence in school budgeting decisions where 40 percent play a moderate role and only 15 percent believe teachers at their school have a large role in influencing spending decisions.

A majority believe that teachers play at least a moderate role in school improvement planning (59 percent), but less than one-third (29 percent) indicate playing a large role, raising questions about teachers' understanding and input into these critical processes.

Table 12. Teachers' Role in School Decision Making

Please indicate how large a role teachers have at your school in each of the following areas:	Responses from Clark County Educators				
	No role at all	Small role	Moderate role	Large role	Primary role
Selecting instructional materials and resources	9%	24%	28%	28%	10%
Devising teaching techniques	6%	16%	28%	35%	15%
Setting grading and student assessment practices	9%	19%	27%	32%	12%
Determining the content of in-service professional development	25%	30%	27%	16%	3%
Establishing and implementing policies for student discipline	16%	28%	29%	23%	5%
Providing input on how the school budget will be spent	30%	31%	25%	13%	2%
School improvement planning	13%	28%	30%	25%	4%

Teachers do not believe that they are involved in decisions central to school performance

Playing a more minimal role in school level decisions in planning and spending appears to have an impact on the perception of teachers being involved in decisions central to school performance. Only 35 percent of Clark County educators believe that they are centrally involved in decision making about important education issues, with only six percent strongly agreeing that they are involved. Almost one-fifth (18 percent) of teachers "strongly" disagree that they are centrally involved in these important decisions. As noted, teachers' perceptions of involvement were important predictors of their plans to continue teaching in their school. Teachers want to work in schools where they are engaged in classroom and school level decisions.

Teachers' perceptions of involvement were important predictors of their plans to continue teaching in their school. Teachers want to work in schools where they are engaged in classroom and school level decisions.

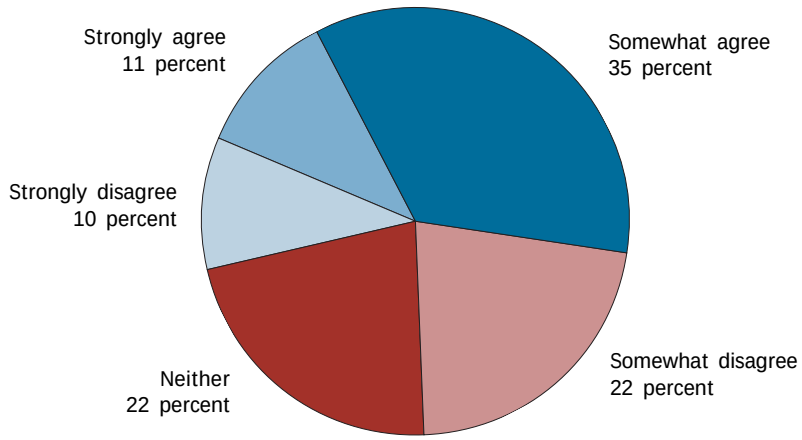
This may be influencing teachers' perceptions of trust and expertise. A slight majority (52 percent) believe that they are trusted to make sound professional decisions about instruction (only 11 percent strongly agree). Less than half (47 percent) of Clark County educators agree that teachers are recognized as educational experts.

Part of those feelings could be rooted in processes for making decisions and solving problems

This lack of efficacy may not just be related to the spheres of influence where teachers operate and their view of the recognition of their expertise, but on the processes used to make decisions.

While almost two-thirds of teachers (63 percent) believe that they take steps to solve problems, teachers were less likely to be able to identify a process for collective decision making to address those issues. Less than half of educators (46 percent) believe that there is an effective process for making group decisions and solving problems (Figure 6), and only 11 percent "strongly" agree versus about one-third who disagreed that there was an effective process in place.

Figure 6. Perception that the Faculty Has an Effective Process for Making Group Decisions and Solving Problems



Professional Development: Ensuring Teachers Can Continually Enhance Their Knowledge and Skills

Not all professional development is created equal. The most effective professional development focuses on the specific content students will learn and the specific difficulties students encounter in learning the content.

Research indicates that high-quality professional development is essential for high-quality teaching. Given the complexity of teaching and learning in today's schools, high-quality professional development is necessary to ensure that all teachers are able to meet the needs of a diverse student population, effectively use data and become active agents in their own professional growth.

However, not all professional development is created equal. The most effective professional development focuses on the specific content students will learn and the specific difficulties students encounter in learning the content. Therefore, professional development should not focus on generic teaching behaviors, but on the analysis of curriculum and student responses to it. Offering "in-service" for teachers on the new student standards is insufficient to the task at hand. Teachers need vehicles for analysis, criticism, and communication of ideas and practices.

Teachers in Clark County Want and Need More Professional Development to Reach Diverse Learners

Teachers in Clark County indicated that they needed more support to effectively teach special education students (52 percent) and close the achievement gap (45 percent) (Table 13). About one-quarter of educators felt they needed additional support in working with Limited English Proficient students (28 percent) and gifted and talented students (23 percent) as well. Teachers felt most comfortable in their knowledge of their content area and methods of teaching, and hopefully not coincidentally, had the most professional development in these areas. However, still half of Clark County educators have not received at least ten hours of professional development over the past two years in their content area (despite the requirements of No Child Left Behind and the ability through HOUSSE systems to gain highly qualified status through content-based professional development).

Still half of Clark County educators have not received at least ten hours of professional development over the past two years in their content area.

Principals and assistant principals have similar perceptions on teachers professional development needs. Only one administrator filling out the survey indicated that teachers need more content, but about two-thirds noted that teachers need more support in working with special education students and English Language Learners.

Table 13. Proportion of Teachers Receiving 10+ Hours of Professional Development During the Past Two Years

Professional Development Area	Percentage of Teachers Needing Additional Support to Effectively Teach	Percentage of Teachers Receiving 10+ Hours of Professional Development Over the Past 2 Years
Special Education – disabilities	52%	23%
Special Education – gifted	23%	4%
Limited English Proficiency	28%	19%
Closing the Achievement Gap	45%	21%
Your Content Area	11%	50%
Methods of Teaching	15%	51%
Student Assessment	21%	40%
Classroom Management Techniques	20%	25%
Reading Strategies	28%	51%

This disparity in need and opportunity does not necessarily appear to be driven by resources. Almost two-thirds (62 percent) agree that sufficient resources are available for them to take advantage of professional development activities, and only one-fifth disagree.

The mismatch may be driven more by teachers' role in selecting professional development opportunities made available to them. As discussed in the empowerment section, few teachers indicate that they are involved in determining the content of in-service programs. One-quarter

of educators said they play no role at all, and more than half (55 percent) indicate that they play a small role at best. Additionally:

- New teachers were more likely than veteran educators to indicate a need for additional support across virtually all areas (working with special education students and closing the achievement gap were notable exceptions). In particular, more than double the proportion of new teachers (47.0 percent) and those with one-three years experience (41.2 percent) want additional support in reading strategies than those with 11-20 years experience (21.7 percent) and 20+ (18.9 percent).

- Veteran educators were more likely to have had significant professional development in all areas but classroom management. Two-thirds of new teachers received at least ten hours of professional development in classroom management (63.6 percent), but only one-third had it in reading strategies (35.0 percent). It appears much of the gap in professional development needed and received in reading strategies is by educators with three years experience or less.

- As would be expected high school and middle school educators were more likely to have received content area professional development (60.0 percent and 60.6 percent respectively) than elementary teachers (44.2 percent). While two-thirds of elementary educators received support in reading strategies (64.0 percent), only one-third of middle school teachers (33.1 percent) and one-quarter of high school educators (25.2 percent) had at least ten hours over the past two years. Fewer high school educators reported having significant professional development in working with English Language Learners (10.8 percent) and closing the achievement gap (16.2 percent) than other Clark County teachers.

Teachers Have Mixed Feelings about Professional Development Quality

At least three-quarters of teachers who received at least ten hours of professional development during the past two years in every area included in the survey believed it provided them with new instructional strategies and ultimately affected student learning.

Teachers appear to have mixed feelings about professional development in Clark County according to the survey responses. About half of teachers agree that either school-based (53 percent) or district-wide (49 percent) opportunities provide teachers with the knowledge and skills most needed to teach effectively.

However, when asked specifically about the quality of professional development they had in certain areas, they were tremendously positive (Table 14). At least three-quarters of teachers who received at least ten hours of professional development during the past two years in every area included in the survey believed it provided them with new instructional strategies and ultimately affected student learning. Teachers were particularly positive about professional development received in their content area and in reading strategies.

Administrators were more positive about the effectiveness of professional development. While only about half of teachers felt that school-based professional development enhanced their knowledge and skills, 92.5 percent of administrators agreed. They also were far more likely to believe that teachers had professional development that enhanced their skills as instructional leaders (55.0 percent versus 97.5 percent).

Table 14. Effectiveness of Professional Development Provided

Professional Development Area	Clark County School District	
	Provided Instructional Strategies	Useful in Improving Student Achievement
Special Education – disabilities	84%	78%
Special Education – gifted	81%	77%
Limited English Proficiency	88%	84%
Closing the Achievement Gap	82%	75%
Your Content Area	93%	89%
Methods of Teaching	90%	85%
Student Assessment	82%	76%
Classroom Management Techniques	88%	84%
Reading Strategies	92%	89%

Induction and Mentoring: Ensuring that New Teachers Receive Sufficient Support to Be Successful and Stay in Teaching

A comprehensive induction program is one of the most effective methods for retaining quality teachers. While mentoring is often equated with induction, it is actually only one piece of a comprehensive induction program, which provides a broad framework of support and guidance for new teachers.

A growing body of research demonstrates that comprehensive induction—networking, release time, full-time mentor coaches, etc.—can cut attrition rates by 50 percent.[5] Yet, only 1 percent of beginning teachers nationally are receiving comprehensive induction. Other professions, like medicine, have comprehensive induction frameworks, while educators are often placed in classrooms with little guidance or support and are expected to perform as if they have been teaching for years.

Well-crafted induction programs can improve teaching quality and stem high rates of teacher attrition and improve instruction.

High-minority and high-poverty schools must rely on disproportionate numbers of inexperienced teachers, thereby making comprehensive induction even more vital in those schools. Well-crafted induction programs can improve teaching quality and stem high rates of teacher attrition and improve instruction.

Mentoring questions were only asked of those educators in Clark County who indicated that they had served as a mentor or were new educators (three years of experience or less in the profession). Several common questions about the frequency and effectiveness of induction were asked of both groups. As these questions were more centered on actual mentoring experiences rather than perceptions and few were on the same measurement scale, no domain average was created.

Of the approximately 8,500 respondents, about one-third indicated that they had served as a mentor (2,686). Additionally, more than 1,790 educators responding to the survey were in

their first three years. However, less than 1,000 answered most questions. Because many indicated that they had not been assigned a mentor, they were not asked mentoring questions.

Mentoring Programs Provide Some Support to New Teachers

A substantial proportion of new teachers believe that mentors are not providing any help, particularly in guiding them in completing necessary products and documentation and completing school or district paper work.

New teachers indicate that mentoring was effective in several areas (Table 15). In particular, mentors provided helpful general encouragement and social support (61 percent indicated it helped a lot or was critical). About half of teachers felt their mentor provided a lot of help in providing instructional strategies (48 percent), school and district procedures (47 percent), and support in content specific curriculum (45 percent).

However, a substantial proportion of new teachers believe that mentors are not providing any help, particularly in guiding them in completing necessary products and documentation (23 percent) and completing school or district paper work (25 percent). About one-third of new teachers indicated that their mentor helped no more than a little across all areas listed in the survey.

Table 15. Effectiveness of Mentoring in Providing Support to New Teachers

My mentor was effective in providing support in the following areas	No help at all	Helped a little	Helped some	Helped a lot	Help was critical
Instructional strategies	12%	15%	25%	34%	14%
Curriculum and the subject content I teach	16%	15%	24%	31%	14%
Classroom management/ discipline strategies	15%	18%	26%	28%	12%
School and/or district procedures	15%	16%	23%	34%	13%
Completing products or documentation required	23%	17%	19%	27%	14%
Completing other school or district paperwork	25%	16%	21%	25%	13%
Social support and general encouragement	11%	12%	16%	36%	25%

This lack of support could be due to the lack of support provided to mentors. Almost two-fifths (39 percent) report that they receive no support, and only about one-quarter have received specific training in working with new teachers (Table 16). Additional support that could help mentors and mentees find time to work collaboratively is not offered systematically across CCSD. Only about one-third (32 percent) of mentors receive common planning time with their mentee, and few receive a reduced teaching schedule or number of preparations or time to observe their mentee.

Table 16. Support Provided for Formally Assigned Mentors

Support received as a formally assigned mentor	Percentage agreeing
No support provided	39%
Common planning time with teachers you are mentoring	32%
Specific training to serve as a mentor (e.g. seminars or classes)	27%
Regular communications with principal, other administrator or department chair	24%
Release time to observe your mentees	13%
Reduced teaching schedule	7%
Release time to observe other mentors	4%
Reduced number of preparations	4%

Mentors and Mentees Disagree on the Amount of Support Being Provided

Despite limited assistance, mentors note that they are able to provide frequent support to teachers in planning, planning instruction, and discussing teaching.

Despite limited assistance, mentors note that they are able to provide frequent support to teachers in planning (45 percent), planning instruction (43 percent), and discussing teaching (58 percent) (Table 17). However, mentees do not report receiving this assistance. For example:

- While 40 percent of mentees report that they have never planned instruction with their mentor, only 12 percent of mentors report a similar lack of planning. Additionally, double the proportion of mentors (43 percent) report planning instruction at least weekly than mentees (20 percent).

- Only 10 percent of mentees report being observed or observing their mentor at least weekly, while more than one-quarter of mentors report weekly observations.

- Mentors and mentees are more in synch in reporting the frequency of having discussions about teaching, although differences are still present.

Table 17. Frequency of Mentoring Activities According to Mentors and Mentees

Mentoring Activity	Mentees			Mentors		
	Never	Less than once per month to Several times per month	At least once per week	Less than once per month	Less than once per month to Several times per month	At least once per week
Planning during the school day	38%	37%	26%	15%	39%	45%
Mentor observing mentee	56%	33%	10%	34%	39%	27%
Mentee observing mentor	59%	33%	10%	32%	42%	26%
Planning instruction	40%	40%	20%	12%	45%	43%
Having discussions about teaching	16%	44%	41%	3%	38%	58%

Some trends to consider in terms of implementation of mentoring programs also emerged:

- More than one-third (36 percent) of mentors indicate that they mentor only one new teacher, and two-thirds (64 percent) mentor two teachers or less. Ten percent indicate that they mentor more than ten new educators.

The inconsistencies in training for mentors and support for new teachers lead to some sobering conclusions on the effectiveness of induction in CCSD for keeping new teachers.

- Four-fifths (80 percent) of mentors and mentees taught the same content area, and two-thirds (68 percent taught) at the same grade level.

- A full 86 percent of mentor/mentee matches taught in the same building.

- The inconsistencies in training for mentors and support for new teachers lead to some sobering conclusions on the effectiveness of induction in CCSD for keeping new teachers. More than one-third (36 percent) of new teachers who experienced mentoring indicated that it made no difference at all, and an additional 16 percent noted that it was only slightly important in decisions to continue teaching. However, one-third (34 percent) indicated that mentoring was important in decisions to continue teaching, and one-fifth (18 percent) said it was very important.

Recommendations

The Clark County School District (CCSD) and Clark County Education Association (CCEA) made a commitment in their negotiated agreement to explore a critical issue: keeping the high quality teachers currently working in the district. Research has consistently demonstrated that the conditions teachers face in their schools and classrooms, although often overlooked, are essential elements to teacher retention and student success. The Teaching and Learning Conditions Initiative has provided data for 225 schools across the district to assess whether teachers believe their schools are good places to teach and learn and to use that information to spur data-driven reform strategies. The good news is that almost three-quarters of CCSD educators (71 percent) believe their school is a good place to work and more than one quarter (29 percent) strongly agree.

Research has consistently demonstrated that the conditions teachers face in their schools and classrooms, although often overlooked, are essential elements to teacher retention and student success.

Survey results also indicate that the district, schools and communities can and should do considerably more to improve teaching and learning conditions. This report found that successful undertakings to improve these conditions could significantly improve student achievement and help to stem teacher turnover. Given the overwhelming teacher recruitment challenges facing the district due to growth and chronic teacher retention issues, a systemic and sustained effort to improve teaching and learning conditions is a necessary investment for Clark County.

The district is making substantial investments to recruit teachers. CCSD efforts to provide affordable housing for teachers are being discussed across the nation, as are innovative efforts to prepare career switchers and grow special education teachers from within the community. Similar attention must now be paid to ensuring the schools where these new teachers work are designed for their success. If they are, they will want to stay.

Recommendation 1: Ensure Schools Have and Use Teaching and Learning Conditions Survey Data as Part of School Improvement Planning

As the survey and its subsequent use are part of the negotiated agreement between CCSD and CCEA, it is assured that the data will be used, and used wisely, within schools across the district. This data is not about any individual, and it will take the entire faculty within the school to ensure critical teaching and learning conditions are in place. The data should be part of a comprehensive school improvement planning process and aligned with other strategies to ensure schools are staffed with high quality, effective teachers.

More than anywhere in the nation, CCSD has invested in ensuring that the data will be used in schools. The district has released teachers and brought back retired principals trained in interest based problem solving by the Federal Mediation and Conciliation Services to serve as school

facilitators in analyzing data and reforming conditions. While this commitment is admirable, more can be done to ensure that schools understand and use the important data in the survey.

- Consider requiring schools in the bottom quartile of schools with data to undergo training with the facilitation team. While the district will struggle if schools do not want an outside change agent leading these conversations, more needs to be done to ensure the schools that need this facilitation the most receive it. At the very least, some incentives should be considered for schools that create data-driven plans (a per teacher or pupil allocation to actualize the plan, for example).

- Design and deliver (with the assistance team as well as principals and teachers from schools with the most positive teaching and learning conditions) professional development, web-based tools and other supports for analyzing and using data. This professional development should be targeted at school teams that include the principal and teachers.

Data is available for 160 elementary and 65 secondary schools in Clark County. In future distributions of the survey, more needs to be done to ensure high levels of participation so all CCSD schools have data available.

Recommendation 2: Invest in School Leaders Who Can Create Positive Teaching and Learning Conditions

Clark County teachers were consistent and strong in their assertions throughout the survey— they want to work in schools organized for their success led by a principal who can create a supportive environment where teachers are respected and viewed as experts.

Clark County teachers were consistent and strong in their assertions throughout the survey—they want to work in schools organized for their success led by a principal who can create a supportive environment where teachers are respected and viewed as experts. Creating an atmosphere of trust and mutual respect was found to be the most important factor in explaining teachers' employment intentions in CCSD, more so than the students served or their success on the state assessments. School leaders must be able to create safe environments, where teachers are encouraged to take reasonable risks, and all can have input into school direction without fear of reprisal.

The difficulty, however, is that an atmosphere of trust can not be required from the top; it must be built from the bottom by skilled educators—principals and teachers alike—who have the time, knowledge, and skills to work collaboratively on important issues for students, classrooms and their school.

- Create clear expectations and/or standards for the districts for what principals need to know and be able to do in recruiting and retaining teachers as well as creating positive teaching and learning conditions. Particular emphasis should be placed on building trust and development appropriate for distributed leadership approaches.

- Design and deliver professional development with principals from schools where teachers indicate there is an atmosphere of trust and respect. Consider making this professional development mandatory for new principals.

- Ensure principal evaluations include some indicators of creating positive teaching and learning conditions. Using this survey should be done with great caution as it is not intended to be an accountability tool, but rather a conversation starter for school improvement planning. Other indicators and measures should be considered and developed.

- Partner with institutions of higher education to ensure new principal candidates graduate from programs that provide them with the knowledge and skills they need to create positive school climates and build an atmosphere of trust.

Recommendation 3: Continue Experimentations with Empowerment Schools and Other Means of Engaging Teachers in Decision Making

Clark County has created empowerment schools, giving them greater flexibility and autonomy in decision making. These experiments are important and could be fruitful and should be well documented and studied. However, the results from these analyses showing a negative connection between achievement and teacher empowerment should be remembered. This should not be viewed as a rationale for excluding teachers from decision making, but rather as a clarion call for enhancing the knowledge and skills of teachers to be effective leaders in their schools and classrooms. Both new and veteran teachers need guidance and support to ensure that additional opportunities for leadership—which will be necessary for teacher retention—do not have an adverse effect on school success.

Both new and veteran teachers need guidance and support to ensure that additional opportunities for leadership—which will be necessary for teacher retention—do not have an adverse effect on school success.

- Design and deliver professional development for all Clark County teachers on school leadership, data driven decision making, budgeting, team building, etc. so that they are fully prepared to serve as leaders within their schools.

- Document successful examples of distributed leadership and share them through professional development with teachers and school leaders.

Recommendation 4: Invest Substantially in New Teacher Induction and Support

Clark County has and must continue to invest in new teacher induction. Exponential growth has required a young and mobile teaching corps. Induction and professional development, particularly in the areas of working with diverse learners and differentiating instruction, are critical to ensuring that all CCSD teachers will be successful.

- Ensure all mentors are trained and supported in working with new teachers. More than one-third of mentors (39 percent) indicated they received no training and support.

- Design and deliver training for mentors that includes conversation about and consideration of teaching and learning conditions. New teachers and mentors need to understand their roles in creating positive and trusting atmospheres and engaging in collaborative decision making.

- Continue investments in mentoring and induction and ensure support not only focuses on content and instruction, but also on how teachers can be engaged at the school level, etc.

CCSD educators must have the resources and support they need to serve all students well, and without comprehensive sustained efforts to improve teaching and learning conditions, meaningful and sustainable school reform in the county will prove impossible.

Appendix A. Statistical Analysis for Elementary School Performance on K-8 Math

Elementary School Performance on K-8 Mathematics (Percentage of students proficient or above)

Model	Variable	Unstandardized Coefficient B	Standard Error	Standardized Coefficient Beta	t	Significance
1	(Constant)	64.328	12.970		4.960	0.000
	Devising instructional techniques	0.425	0.093	0.591	4.575	**0.000**
	Leadership enforces student conduct rules	0.181	0.076	0.255	2.388	**0.018**
	Teachers recognized as educational experts	0.223	0.165	0.258	1.351	0.179
	Efforts made to reduce paperwork	-0.133	0.094	-0.149	-1.415	0.160
	Teacher empowerment domain average	-15.007	7.130	-0.500	-2.105	0.037
2	(Constant)	73.462	17.496		4.199	0.000
	devising instructional techniques	0.238	0.083	0.331	2.888	**0.005**
	Leadership enforces student conduct rules	0.162	0.062	0.228	2.606	**0.010**
	Teachers recognized as educational experts	0.215	0.138	0.249	1.561	0.121
	Efforts made to reduce paperwork	-0.138	0.079	-0.155	-1.757	**0.081**
	Teacher empowerment domain average	-11.855	5.883	-0.395	-2.015	**0.046**
	Class size (greater than 22)	-6.095	2.325	-0.173	-2.622	**0.010**
	School size (less than 600)	7.267	2.789	0.173	2.606	**0.010**
	Percentage of female teachers	45.866	12.375	0.236	3.706	**0.000**
	Teacher turnover (intent to quit/leave CCSD)	-0.209	0.114	-0.133	-1.838	**0.069**
	Per pupil expenditures (x100)	-0.654	0.129	-0.343	-5.049	**0.000**
	Teachers NOT highly qualified (greater than 20 percent)	-7.447	2.081	-0.240	-3.579	**0.000**
3	(Constant)	65.678	11.173		5.878	0.000
	Devising instructional techniques	0.112	0.050	0.155	2.212	**0.029**
	Leadership enforces student conduct rules	0.112	0.038	0.158	2.976	**0.004**
	Teachers recognized as educational experts	0.177	0.084	0.205	2.117	**0.036**
	Efforts made to reduce paperwork	-0.100	0.048	-0.112	-2.091	**0.039**
	Teacher empowerment domain average	-10.083	3.555	-0.336	-2.837	**0.005**
	Class size (greater than 22)	-3.436	1.427	-0.097	-2.408	**0.018**
	School size (less than 600)	4.163	1.769	0.099	2.353	**0.020**
	Percentage of female teachers	17.070	7.731	0.088	2.208	**0.029**
	Teacher turnover (intent to quit/leave CCSD)	-0.203	0.069	-0.129	-2.958	**0.004**
	Per pupil expenditures (x100)	0.105	0.100	0.055	1.046	0.297
	Teachers NOT highly qualified (greater than 20 percent)	-2.289	1.355	-0.074	-1.689	**0.094**
	Student mobility	-0.120	0.085	-0.082	-1.415	0.160
	Student poverty (free/reduced lunch)	-0.301	0.055	-0.573	-5.442	**0.000**
	Race (percentage White)	0.116	0.060	0.169	1.953	**0.053**

Model Summary

Model		R	R Square	Adjusted R Square	Std. Error Estimate	Change in Adj R Sqr
1	WC domain questions	0.497	0.247	0.218	0.131	0.218
2	Tchr/classroom/school variables	0.726	0.527	0.484	0.106	0.266
3	Student variables	0.913	0.834	0.814	0.638	0.330

Appendix B. Statistical Analysis for Elementary School Performance on K-8 Reading

Elementary School Performance on K-8 Reading (Percentage of students proficient or above)

Model	Variable	Unstd Coeff B	Standard Error	Std Coeff Beta	T	Sig.
1	(Constant)	56.184	12.874		4.364	0.000
	Devising instructional techniques	0.357	0.095	0.506	3.760	**0.000**
	Leadership enforces student conduct rules	0.182	0.074	0.258	2.462	**0.015**
	Teachers recognized as educational experts	0.211	0.158	0.256	1.340	0.183
	Class size is reasonable	0.296	0.087	0.286	3.402	**0.001**
	Efforts are made to reduce paperwork	-0.251	0.088	-0.304	-2.840	**0.005**
	Teacher empowerment domain average	-15.778	6.889	-0.539	-2.290	**0.024**
2	(Constant)	92.859	25.821		3.596	0.000
	Devising instructional techniques	0.247	0.087	0.350	2.851	**0.005**
	Leadership enforces student conduct rules	0.132	0.065	0.187	2.025	**0.045**
	Teachers recognized as educational experts	0.236	0.141	0.286	1.676	**0.096**
	Class size is reasonable	0.184	0.082	0.178	2.230	**0.028**
	Efforts made to reduce paperwork	-0.190	0.080	-0.230	-2.373	**0.019**
	Teacher empowerment domain average	-15.186	6.071	-0.519	-2.501	**0.014**
	Average class size	-0.530	0.753	-0.053	-0.703	0.483
	School size (700 to 1000 students)	1.992	2.069	0.070	0.962	0.338
	Percentage of female teachers	0.395	0.128	0.213	3.080	**0.003**
	Teacher experience (less than 4 years)	-0.383	0.103	-0.282	-3.726	**0.000**
	Teacher turnover (intent to quit/leave CCSD)	-0.109	0.121	-0.072	-0.900	0.370
	Per pupil expenditures (x100)	-0.686	0.150	-0.350	-4.572	**0.000**
3	(Constant)	67.592	13.569		4.981	0.000
	Devising instructional techniques	0.159	0.045	0.226	3.556	**0.001**
	Leadership enforces student conduct rules	0.113	0.034	0.160	3.334	**0.001**
	Teachers recognized as educational experts	0.232	0.072	0.281	3.199	**0.002**
	Class size is reasonable	0.081	0.046	0.078	1.767	**0.080**
	Efforts are made to reduce paperwork	-0.128	0.042	-0.156	-3.035	**0.003**
	Teacher empowerment domain average	-14.497	3.134	-0.495	-4.626	**0.000**
	Average class size	0.095	0.396	0.009	0.240	0.811
	School size (700 to 1000 students)	2.435	1.084	0.086	2.246	**0.027**
	Percentage of female teachers	0.070	0.069	0.038	1.022	0.309
	Teacher experience (less than 4 years)	-0.053	0.057	-0.039	-0.918	0.361
	Teacher turnover (intent to quit/leave CCSD)	-0.167	0.063	-0.111	-2.651	**0.009**
	Per pupil expenditures (x100)	0.236	0.098	0.121	2.403	**0.018**
	Student mobility	-0.162	0.069	-0.114	-2.342	**0.021**
	Poverty (free/reduced lunch)	-0.379	0.051	-0.713	-7.378	**0.000**
	Race (percentage White)	0.065	0.057	0.095	1.153	0.251

Model Summary

Model		R	R Square	Adjusted R Square	Std. Error Estimate	Change in Adj R Sqr
1	WC domain questions	0.523	0.273	0.237	0.124	0.237
2	Tchr/classroom/school variables	0.697	0.486	0.432	0.107	0.195
3	Student variables	0.932	0.868	0.851	0.055	0.418

Appendix C. Statistical Model on Elementary School Teacher Intent to Stay Teaching in Their School

Model	Variables	Unstandardized Coefficient B	Standard Error	Standardized Coefficient Beta	t	Significance
1	(Constant)	72.794	13.582		5.360	0.000
	Need second job (agree/strongly agree)	-0.107	0.111	-0.075	-0.960	0.339
	Teacher experience (less than 4 years)	-0.451	0.122	-0.313	-3.711	**0.000**
	Student achievement (proficiency reading)	-0.032	0.141	-0.030	-0.225	0.823
	Poverty (free and reduced lunch)	-0.106	0.059	-0.196	-1.782	**0.077**
	Race (greater than 60 percent white)	-0.574	3.643	-0.015	-0.158	0.875
	Student mobility	0.001	0.161	0.001	0.005	0.996
	Agreement on reasonable class size	0.282	0.095	0.239	2.986	**0.003**
2	(Constant)	55.719	15.011		3.712	0.000
	Need second job (agree/strongly agree)	-0.093	0.077	-0.065	-1.211	0.228
	Teacher experience (less than 4 years)	-0.352	0.083	-0.244	-4.241	**0.000**
	Student achievement (proficiency reading)	0.031	0.097	0.029	0.319	0.750
	Poverty (free and reduced lunch)	0.009	0.042	0.016	0.210	0.834
	Race (greater than 60 percent white)	-2.797	2.509	-0.074	-1.115	0.267
	Student mobility	-0.181	0.111	-0.119	-1.628	0.106
	Agreement on reasonable class size	0.049	0.070	0.042	0.698	0.486
	Teachers recognized as educational experts	0.147	0.085	0.164	1.728	**0.086**
	Non-instructional time received is sufficient	0.131	0.076	0.131	1.718	**0.088**
	Professional development domain average	-4.524	3.852	-0.084	-1.174	0.242
	Efforts are made to reduce paperwork	0.122	0.073	0.134	1.663	**0.099**
	There is an atmosphere of trust and mutual respect	0.306	0.055	0.443	5.589	**0.000**

Model	Model Name	R	R Square	Adjusted R Square	Std. Error Estimate	Change in Adj R Sqr
1	Control	0.533	0.284	0.246	13.786	0.246
2	Working Conditions	0.828	0.685	0.655	9.325	0.409
3						

Appendix D. Statistical Model on Secondary School Teacher Intent to Quit or Leave CCSD

Model	Variables	Unstandardized Coefficient B	Standard Error	Standardized Coefficient Beta	t	Significance
1		83.235	6.647		12.522	0.000
	High school	6.164	3.284	0.210	1.877	0.066
	Met Adequately Yearly Progres	7.373	3.186	0.262	2.314	0.024
	Student mobility	-0.265	0.148	-0.201	-1.793	0.078
	Need to work second job (agree/strongly agree)	-0.396	0.119	-0.370	-3.321	0.002
2		16.155	13.086		1.235	0.222
	High school	7.534	2.305	0.256	3.268	**0.002**
	Met Adequate Yearly Progress	1.909	2.318	0.068	0.823	0.414
	Student mobility	-0.114	0.110	-0.087	-1.036	0.305
	Need to work second job (agree/strongly agree)	-0.266	0.091	-0.248	-2.917	**0.005**
	School is clean and well-maintained	-0.121	0.067	-0.172	-1.808	**0.076**
	Teachers are centrally involved in decision making	0.171	0.099	0.220	1.722	**0.091**
	School is safe (agree/strongly agree)	0.229	0.105	0.269	2.175	**0.034**
	Leadership domain average	12.772	5.138	0.360	2.486	**0.016**

Model	Model Name	R	R Square	Adjusted R Square	Std. Error Estimate	Change in Adj R Sqr
1	Control Variables	0.567	0.322	0.275	11.890	0.275
2	Working Conditions	0.839	0.705	0.661	8.131	0.386

Notes

Introduction

1. National Center for Education Statistics. *Teacher Attrition and Mobility: Results for the Teacher Follow-up Survey, 2000-01.* Washington, D.C.: NCES 2004-301, August 2004.

2. Hilary Loeb, Ana Elfers, Michael Knapp and Marge Plecki with Beth Boatright. *Preparation and Support for Teaching: Working Conditions of Teachers* Working Paper #2. Seattle, Wash.: Center for the Study of Teaching Policy at the University of Washington, May 2004.

3. For example, see Rosenholtz, S. J. (1989). *Teachers' workplace: The social organization of schools.* New York, N.Y.: Longman; Talbert, J., McLaughlin, M., & Rowan, B. (1993). "Understanding context effects on secondary school teaching." *Teachers College Record*, 95(1), 45-68, and Bryk, A.S. and Schneider, B. (2002). *Trust in Schools: A Core Resource for Improvement.* New York. Russell Sage Foundation.

4. Hirsch, Eric. *Teacher Working Conditions are Student Learning Conditions: A Report of Governor Easley's 2004 Working Conditions Initiative.* Chapel Hill: Southeast Center for Teaching Quality, 2005 and Hirsch, Eric. *Listening to the Experts: A Report on South Carolina's 2004 Teacher Working Conditions Initiative.* Chapel Hill, NC: SECTQ, 2005. For copies of the report go to www.teachingquality.org/TWC.htm.

5. Ingersoll, Richard M.. *Who Controls Teachers' Work?: Power and Accountability in America's Schools*. Cambridge, Mass.: Harvard University Press, 2003.

1. Major Findings

1. Hirsch, Eric. *Teacher Working Conditions are Student Learning Conditions: A Report of Governor Easley's 2004 Working Conditions Initiative.* Chapel Hill: Southeast Center for Teaching Quality, 2005 and Hirsch, Eric. *Listening to the Experts: A Report on South Carolina's 2004 Teacher Working Conditions Initiative.* Chapel Hill, N.C.: SECTQ, 2005. For copies of the report go to www.teachingquality/TWC.htm.

2. Correlations and statistical modeling was done only for elementary schools given the number of available schools in Clark County with a sufficient response rate to generate a school level average. While 160 elementary schools were available for analyses given response rates, only 65 middle and high schools participate. While they were able to be merged into a secondary category for turnover and modeling was possible, this was not true for student achievement.

3. The CRT tests are available for grades 3-5 at the elementary level for math and reading. The writing assessment is offered in 5th grade only at the elementary level. For more information on the assessment itself and schedule see http://www.doe.nv.gov/statetesting/critreftests.html. Assessment, student, teacher and school data for the 2005-06 school year was downloaded directly from the Nevada Department of Education site at http://www.doe.nv.gov/accountability/ayp/ayp_2005-06/clark.html.

4. At the .10 level. Not surprisingly the connection was minimal with a 10 percent increase in teachers agreeing that their class size is reasonable yielding a less than one percent increase in the percentage of students proficient in reading.

5. Correlation coefficients run between working conditions domains compiled in the five areas and the percentage of teachers indicating that their career intention was to stay in their current school. Correlation coefficients range from -1.0 to 1.0.

6. This question was so predictive it knocked out the leadership domain from the model given the colinearity between variables.

7. While these variables were not statistically significant, all added explanatory power to the model.

8. While these results should be interpreted with caution as only 40 principals and assistant principals responded to the survey (compared to about 8,200 teachers and 300 other school-based licensed personnel), they are consistent with findings from other working conditions initiatives with substantially greater principal participation. For example, even larger gaps were found in North Carolina where more than 1,400 principals responded to the survey. See Eric Hirsch and Scott Emerick with Keri Church and Ed Fuller, *Interim Report on the North Carolina Teacher Working Conditions Survey.* Chapel Hill, N.C.: CTQ, October 2006.

9. All working conditions had a statistically significant correlation with the percentage of students eligible for free and reduced lunch. The strongest correlation was with facilities and resources at -.414.

10. For a complete description of CTQ teacher working conditions projects see www.teachingquality.org. Information on survey design, response rate and scope of the initiative for each state can be found on their respective websites at: www.northcarolinatwc.org, www.kansastwc.org, www.ohiotlc.org, and www.aztwc.org.

2. Domain Analyses

1. Organisation for Economic Cooperation and Development (OECD). *Education at a Glance: OECD Indicators.* Paris, France: OECD, 2003. Available online at http://www1.oecd.org/publications/e-book/9603061E.PDF.

2. Hirsch, Eric. *Teacher Working Conditions are Student Learning Conditions: A Report of Governor Easley's 2004 Working Conditions Initiative.* Chapel Hill: Southeast Center for Teaching Quality, 2005 and Hirsch, Eric. *Listening to the Experts: A Report on South Carolina's 2004 Teacher Working Conditions Initiative.* Chapel Hill, N.C.: SECTQ, 2005. For copies of the report go to www.teachingquality/TWC.htm.

3. For example, see Cash 1993, Earthman and Lemasters 1996, Lemasters 1997, Lackney 1999, Schneider 2002.

4. Schneider, Mark. *The Educational Adequacy of New Jersey Public School Facilities: Results from a Survey of Principals.* Stony Brook, N.Y.: State University of New York at Stony Brook, May 10, 2004. Available online at http://edlawcenter.org/ELCPublic/elcnews_040510_PrincipalsSurvey.pdf.

5. Smith, T. & Ingersoll, R. 2004. "What are the Effects of Induction and Mentoring on Beginning Teacher Turnover?" *American Educational Research Journal.* Vol. 41, No. 2, Summer.