

PROFESSIONAL DEVELOPMENT IN THE UNITED STATES: **Trends and Challenges**

Phase II of a Three-Phase Study



TECHNICAL REPORT

Ruth Chung Wei, Linda Darling-Hammond,
and Frank Adamson

THE STANFORD CENTER FOR
OPPORTUNITY POLICY
IN EDUCATION



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Stanford Center for Opportunity Policy in Education

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Finally, we would like to express our appreciation to our families who supported us through the course of this important work.

Preface

PROFESSIONAL DEVELOPMENT IN THE UNITED STATES: TRENDS AND CHALLENGES

Stephanie Hirsh, Executive Director
National Staff Development Council

At a time when the nation is moving quickly to adopt common core standards and schools are challenged to accelerate gains in student achievement to meet federal mandates, states and districts need to move more aggressively to provide continuous professional development. Effective professional learning — which enables teachers to work regularly together to improve their practice and implement strategies to meet the needs of their students — must be a key ingredient in any effort to bolster student achievement and ensure that all students complete high school ready for college and careers. Without ratcheting up support for effective educator learning, the ability of teachers and school leaders to meet these new challenges will be diminished. As consensus among researchers indicates, the quality of teaching students experience is highly correlated with their academic success. Professional development is a key strategy available to schools and school systems for improving teaching quality. To ensure effective teaching in every classroom, educators must have opportunities each day to refine and expand their practice, reflect on how their practice impacts student learning, and engage in ongoing improvement to address learning challenges in the school. States and school systems have the authority and responsibility to establish policies to guide

effective professional learning and to monitor its implementation and impact. Unfortunately, implementation as well as the impact on students is inconsistent state to state. When practice falls short of the expectations of policymakers, and educators and students are denied opportunities to learn, policymakers are obliged to determine the reasons.

This report is the second part of a larger study, *The Status of Professional Development in the United States*, a multi-year research initiative. The Phase II study, conducted by Ruth Chung Wei, Linda Darling-Hammond, and Frank Adamson of Stanford University, summarizes progress on key indicators of professional development collected as a part of the 2003-4 and 2007-08 Schools and Staffing Survey. Data and findings drawn from this study will be used to establish benchmarks for assessing progress in professional development over time. The study compares data from previous surveys and provides state-by-state comparison data. The complete study can be found at www.nsd.org/stateproflearning.cfm and at <http://edpolicy.stanford.edu>. A last report will:

- Examine state policies that support implementation of more effective professional learning tied to student learning.

- Examine district policies and contexts that support implementation of more effective professional learning.

Taken as a whole, these studies will provide the most comprehensive picture and far-reaching analysis of professional learning that has ever been conducted in the United States. The Bill & Melinda Gates Foundation provided financial support for Phase II of this study. We would like to thank Vicki Phillips and Patricia Loera from the foundation for their support. I also wish to acknowledge Joellen Killion, NSDC deputy executive director, for coordinating the research effort; our advisors—Karen Seashore-Louis, University

of Minnesota; Michael Garet, American Institute of Research; Thomas Guskey, University of Kentucky; and Kwang Suk Yoon, American Institute of Research, for reviewing and commenting on this research report; and Sheppard Rambom and Kari Hudnell, CommunicationWorks, LLC, for their editorial guidance on this document. I appreciate NSDC’s Board of Trustees for its vision and advocacy for this study; NSDC’s national advisors for their guidance and encouragement through the building stages; and NSDC consultants Hayes Mizell and M. René Islas for their perspectives. NSDC intends for each phase of this study to answer key questions about professional learning that contributes to improved teaching and student learning.

Professional Development in the United States: Trends and Challenges

Executive Summary

Ruth Chung Wei, Linda Darling-Hammond, and Frank Adamson
Stanford Center for Opportunity Policy in Education

This report is the second part of a three-phase research study of teacher professional learning opportunities in the United States. In the first report, *Professional Learning in the Learning Profession: A Status Report on Teacher Development in the United States and Abroad* (Wei, Darling-Hammond, Richardson, Andree, & Orphanos, 2009), an in-depth review of the research on effective professional development served as the basis for evaluating the current status of professional learning in the United States in relation to learning opportunities in other countries. (That report can be downloaded from <http://www.nsd.org/stateproflearning.cfm>.) The report found that opportunities for sustained, collegial professional development of the kind that produces changes in teaching practice and student outcomes are much more limited in the United States than in most high-achieving nations abroad.

This second report utilizes several data sets to update that examination of professional learning opportunities for U.S. teachers. It analyzes the Schools and Staffing Survey (SASS)—a major national dataset—over three administrations of the survey (2000, 2004, and 2008), comparing teachers' responses on professional development questions in order to evaluate the progress of professional development efforts in the states over the last decade.

This report finds that there has been progress among states in the provision of induction supports to beginning teachers and professional development on the content of the subjects taught. Nearly 75 percent of beginning teachers now participate in induction programs, and 80 percent report having a mentor. These opportunities are more available, however, to teachers in suburban districts than to those in urban

or rural schools and those serving larger proportions of low-income and minority students.

More teachers had access to professional development regarding the content they teach and to greater time on these subjects. However, there has been a decline in the intensity of professional development in all other areas of professional learning. In 2008, teachers nationwide had fewer opportunities to engage in sustained professional learning opportunities (i.e., professional development of more than eight hours in duration) than they had four years earlier. In areas like reading instruction, uses of computers, teaching of English language learners and special education students, U.S. investments in teacher learning appear to be increasingly focused on the least effective models of professional development—the short-term workshops that

research suggests are unlikely to influence practice and student achievement.

Equally troubling, well under half of teachers reported access to professional development on teaching students with disabilities (42 percent) and teaching ELLs (27 percent), consistent with previous years' findings. In addition, only a third of teachers agreed that their schools provide support for teaching students with special needs, a lower proportion than in 2004.

We also examine teachers' opportunities to learn and work collaboratively with other teachers by consulting several sources of data, including the Met Life Survey 2009 as well as SASS data. These sources of data suggest that about three-quarters of teachers indicate that they have some formal opportunities for collaborative planning with other teachers. However, the opportunities are limited—averaging only about 2.7 hours a week—and rarely translate into a school climate that is perceived to enable significant cooperative effort. Teachers were only half as likely to report collaborative efforts in their schools in 2008 (at 16 percent) than in 2000 (when 34 percent did so).

Data from the first Teaching and Learning International Survey (TALIS) indicate that American teachers—compared with teachers in high-achieving Organization for Economic and Co-operative Development (OECD) nations—have much less time in their regular work schedules for cooperative work with colleagues. These findings suggest that while an increasing number of

American teachers have opportunities for collaborative work in schools, the current structures (e.g., work schedules) rarely allow for deep engagement in joint efforts to improve instruction and learning.

There are, however, some states that buck the national trends, providing more intensive, sustained learning experiences for teachers. We describe the overall directions of teacher professional learning opportunities in the United States over the last decade, and highlight the distinctions among states and types of school districts.

This report rates state professional development efforts on 11 separate indicators, noting that some states have clearly made significant strides in offering induction opportunities for beginning teachers (e.g., South Carolina, Iowa, Colorado, Pennsylvania, Delaware) and professional learning opportunities for veteran teachers (e.g., Arkansas, Colorado, Oregon, Utah).

In the next phase of this study, we will examine the policies and local professional development practices of several “high-performing” states and districts through in-depth case studies of several states and districts that show evidence of high levels of teacher participation in professional development as well as improvements in student achievement. Through these case studies, we hope to deepen our understanding of the kinds of policy contexts and local practices that lead to excellence in professional development at both the state and local levels.

Professional Development in the United States: Trends and Challenges

In November 2009, the federal government announced four priorities in its Race to the Top competition for states vying for \$4.35 billion in funding provided under the American Recovery and Reinvestment Act (ARRA). Among the top priorities are, 1) increasing teacher and principal effectiveness and achieving equity in their distribution among schools and, 2) turning around our lowest-achieving schools. While U.S. policy initiatives increasingly reflect an understanding that effective teaching and school leadership are critical to the quality of education that students receive, there is often less recognition that teacher professional development is a key element of school reform. Without a strategic investment in high-quality professional development, it is unlikely that any effort to improve teacher effectiveness or to turn around low-performing schools will succeed.

Unfortunately, as we describe in this report, U.S. investments in teacher learning appear to be increasingly focused on the least effective models of professional development—short-term workshops that research suggests are unlikely to influence teaching practice and student outcomes. There are, however, some states that buck the national trends, providing more intensive, sustained learning experiences for teachers. We describe the overall directions of teacher professional learning opportunities in the United States over the last decade, and the distinctions among states and types of school districts as a prelude to more in-depth case studies of professional development policy, to be published separately.

RESEARCH ON HIGH-QUALITY PROFESSIONAL DEVELOPMENT

The first report of this three-phase study, *Professional Learning in the Learning Profession: A Status Report on Teacher Development in the United States and Abroad* (Wei, Darling-Hammond, Richardson, Andree, & Orphanos, 2009), offered an in-depth review of the research on effective

professional development as the basis for evaluating the current status of professional learning in the United States. In that review, “high-quality” or “effective” professional development was defined as that which results in improvements in teachers’ knowledge and instructional practice, as well as improved student learning. The review included quasi-experimental studies that linked professional development to student achievement measures, as well as studies that utilized both quantitative and qualitative methods to assess interim impacts of professional development on teacher knowledge and practice.

The research review affirmed the common sense notion that professional development that is short, episodic, and disconnected from practice has little impact, and that well-designed professional development can improve teaching practice and student achievement. Several features of professional development are more likely to lead to improved teacher knowledge, teaching practice, and/or student achievement. To summarize the previous review, “high-quality” professional development is:

- Focused on specific curriculum content and pedagogies needed to teach that content effectively
- Offered as a coherent part of a whole school reform effort, with assessments, standards, and professional development seamlessly linked
- Designed to engage teachers in active learning that allows them to make sense of what they learn in meaningful ways
- Presented in an intensive, sustained, and continuous manner over time
- Linked to analysis of teaching and student learning, including the formative use of assessment data
- Supported by coaching, modeling, observation, and feedback
- Connected to teachers' collaborative work in school-based professional learning communities and learning teams

Since the publication of this research review in the Phase I report, additional research evidence has emerged that provides new insights on the kinds of professional learning opportunities that make a difference for teaching practice and student outcomes.

RESEARCH ON PROFESSIONAL LEARNING COMMUNITIES

Previous research on the impact of professional learning communities allows for the identification of general features that may be associated with effective communities,

but there have been few studies designed in such a way as to allow for causal inferences about the impact of particular designs on teaching and student learning. However, a study published last year provides empirical evidence of the effectiveness of professional learning communities for increasing student achievement. This longitudinal quasi-experimental study of the impact on student achievement of grade-level teams focused on student learning was conducted by Saunders, Goldenburg, and Gallimore (2009). (See also Gallimore, Ermeling, Saunders, and Goldenburg, 2009, for another report on the same study.)

The authors found that in the nine Title I schools in which a grade-level teaming strategy was implemented, students outperformed their peers in six matched schools in the same large, urban district on standardized achievement tests (with effect sizes improving over time to an effect size of 0.88 in the fifth year). Furthermore, direct training of principals and teacher leaders (not just principals), distributed leadership, and explicit protocols for leading grade-level learning teams were critical for effective grade-level teams. Last, the sustainability of grade-level teams depended on coherence with district policies and practices.

This research supports the National Staff Development Council's new definition of effective professional development as a cycle of continuous improvement as articulated by its executive director Stephanie Hirsh (2009, pp. 10-11):

Good teaching occurs when educators on teams are involved in a cycle in which they analyze data, determine student and adult learning goals based on that analysis, design joint lessons that use evidence-based

strategies, have access to coaches for support in improving their classroom instruction, and then assess how their learning and teamwork affects student achievement....

The new definition calls for every educator to engage in professional learning at the school as part of the workday. Professional learning should tap the expertise of educators in the school and at the district office, with support from universities and other external experts who help local educators address needs specific to their students and school improvement goals.

RESEARCH ON PEER LEARNING

By contrast, Murray, Ma, and Mazur (2009) conducted a quasi-experimental matched-sample study of six teachers who participated in a math/science summer institute (one to two weeks long) with follow-up through a peer coaching program. The scholars found that while teachers reported positive experiences with the program, there were no significant effects on students' mathematics achievement in comparison to the students of five teachers in a control group.

This study is limited by small sample size and non-random assignment to groups (since the six experimental group teachers were volunteers). It suggests, however, that the model of peer coaching that was used may be insufficient for supporting improvements in teaching and learning. The peer coaching model had a very modest level of activity (two peer observations of each teacher over a one-year period, as well as one observational visit from a "lead mentor"). Also, the model was implemented with questionable fidelity (lesson observa-

tion debriefs were perfunctory, sometimes took place weeks or months after observation, lacked an analytical focus, and consisted mainly of supportive, positive comments). These findings suggest that greater guidance around peer observation protocols were needed. Another major challenge for participants was finding time to travel to their peer partners' schools for observations and follow-up discussions, as the participant populations were mainly in remote, rural settings. This challenge speaks to the drawbacks of individual participation versus school-based team participation in a professional development program.

In another study that examined peer learning effects among teachers, Jackson and Bruegmann (2009) used econometric methods and a longitudinal achievement dataset of North Carolina students linked to teachers to show that a teacher's students have larger achievement gains in math and reading when she has colleagues (teaching the same grade in the same school) who are effective teachers, as defined by value-added estimates on previous student achievement scores. These "spillover" effects are strongest for beginning teachers and persist over time, explaining about 20 percent of a teacher's effect on her own students' achievement.

The authors propose three possible reasons for this peer effect: 1) more effective teachers may reduce the work burden for less effective teachers by sharing work responsibilities as well as resources; 2) more effective teachers may positively affect the motivation and effort of less effective teachers; and 3) less effective teachers are motivated to learn from more effective peers, especially if they are beginning teachers or have many more years of teaching ahead of them. This effect may partially explain the

The National Staff Development Council's New Definition of "Professional Development" (2009)

(34) PROFESSIONAL DEVELOPMENT— The term “professional development” means a comprehensive, sustained, and intensive approach to improving teachers’ and principals’ effectiveness in raising student achievement—

(A) Professional development fosters collective responsibility for improved student performance and must be comprised of professional learning that:

1. is aligned with rigorous state student academic achievement standards as well as related local educational agency and school improvement goals;
2. is conducted among educators at the school and facilitated by well-prepared school principals and/or school-based professional development coaches, mentors, master teachers, or other teacher leaders;
3. primarily occurs several times per week among established teams of teachers, principals, and other instructional staff members where the teams of educators engage in a continuous cycle of improvement that:
 - a. evaluates student, teacher, and school learning needs through a thorough review of data on teacher and student performance;
 - b. defines a clear set of educator learning goals based on the rigorous analysis of the data;
 - c. achieves the educator learning goals identified in subsection (A) (3)(ii) by implementing coherent, sustained, and evidence-based learning strategies, such as lesson study and the development of formative assessments, that improve instructional effectiveness and student achievement;
 - d. provides job-embedded coaching or other forms of assistance to support the transfer of new knowledge and skills to the classroom;
 - e. regularly assesses the effectiveness of the professional development in achieving identified learning goals, improving teaching, and assisting all students in meeting challenging state academic achievement standards;
 - f. informs ongoing improvements in teaching and student learning; and
 - g. may be supported by external assistance.

(B) The process outlined in (A) may be supported by activities such as courses, workshops, institutes, networks, and conferences that:

1. must address the learning goals and objectives established for professional development by educators at the school level;
2. advance the ongoing school-based professional development; and
3. are provided by for-profit and nonprofit entities outside the school such as universities, education service agencies, technical assistance providers, networks of content-area specialists, and other education organizations and associations.

Retrieved on March 24, 2010 from: <http://www.nsd.org/standfor/definition.cfm>

growth in teacher effectiveness in the early years of teaching, and a plateau observed in the fourth or fifth year of teaching. While this study does not identify the precise mechanisms or the features of school working conditions that lend themselves to peer learning, it does show that teacher learning (as measured by gains in student achievement) is malleable to peer effects and suggests that there is likely to be value to coaching programs in which teachers with greater expertise mentor less experienced ones.

RESEARCH ON LITERACY COACHING

While the evidence on the effectiveness of peer coaching models appears to be quite thin, additional research evidence that evaluates the value-added effects of literacy coaching has been documented by Biancarosa, Bryk, and Dexter (2008). In this longitudinal analysis of the value-added effects of the Literacy Collaborative coaching model, the authors examined the contribution of a coaching program to changes in the literacy performance of some 8,000 children taught by 250 teachers in 18 schools across eight states. The Literacy Collaborative is a comprehensive school reform program in which teachers are selected by their schools to provide leadership in instructional improvement.

The researchers used hierarchical crossed-level value-added effects modeling to compute baseline trends for assessing subsequent program effects from data that consisted of repeated measures on students who changed teachers within schools over time. (The measures included the DIBELS and TerraNova, using Rasch scaling of test items to account for variation in item difficulty.) To assess the effects of implementation of the Literacy Collaborative coaching program,

the authors compared learning gains in each teacher's classroom during program implementation against the gains in the same teacher's classroom during the baseline year. Observed gains were adjusted for differences in the latent growth trends of individual students over time.

The average value-added program effect during the first implementation year was a 16 percent increase in learning compared with the average baseline growth rate. In the second implementation year, the program effect represented a 27 percent increase in learning over the baseline growth rate. While the authors put forth these results as preliminary, since analysis of a fourth year of data collection (third year of implementation) was yet to be completed, they suggest substantial effects of literacy coaching on student learning. These results also provide support for the use of school-based literacy coaches as an effective strategy for improving literacy achievement. It is important to note that the Literacy Collaborative lead teachers receive rigorous training in the theory and content of literacy learning and provide extensive school-based professional development activities and individual coaching. That this model of coaching is school-based, sustained over time, and part of a coherent school reform effort lends additional support for the above-cited features of effective professional development that are associated with improvements in student achievement.

In contrast, another study that examined the impact of literacy-related professional development and school-based literacy coaching did not show significant impacts on student achievement when examining second-grade students' reading scores. Commissioned by the federal Institute for Education Sciences (IES), the study by

Garet and colleagues (2008) conducted a randomized experimental investigation of 90 schools in six large urban districts. The study looked at 270 second-grade teachers: One-third participated in an intensive summer institute directed by Language Essentials for Teachers of Reading and Spelling, for 35 hours on average. Another third participated in the same institute and received an additional 60 hours of literacy coaching during the school year, with school-based coaches receiving training from the Consortium for Reading Excellence—CORE. The remaining third of teachers received the usual professional development provided by their districts—about 13 hours.

While the study found that both treatments had significant effects on teachers' knowledge of early reading content and instruction (using the Reading Content and Practices Survey) and on teachers' use of explicit instruction, the effects on student outcomes were non-significant. The second treatment (the institute plus 60 hours of coaching) had no significant added effect over the first treatment (the institute only). This study was limited, however, to one year of implementation and participation by teachers and to test scores for one grade only (second grade) by design. Student reading achievement gains were noticeable (a growth rate of .57 standard deviations for a second grade student), but not statistically significant.

NEW EVIDENCE OF PROFESSIONAL DEVELOPMENT IMPACTS

The Council of Chief State School Officers (CCSSO) published a review of evaluation studies of professional development programs for mathematics and science teachers that operated from 2004 to 2007.

Twenty-five programs from 14 states were nominated to be included in the review and could be said to represent “leading efforts” to improve math and science teaching in the states. Using a set of research-based criteria to evaluate the characteristics and quality of each program, Blank, de las Alas, and Smith (2008) examined the programs' features, as well as the methods and findings of 41 evaluation studies of their effectiveness.

Seven of the evaluation studies reported measurable effects on *student outcomes*, providing further evidence that well-designed professional development produces results for students. These studies used comparison groups, pre- and post-test measurements, and quasi-experimental designs, often using state tests as the outcome measures. Ten program evaluations recorded measurable effects on *teacher knowledge*, using previously validated instruments or state assessments, and four program evaluations found measurable effects on *teacher instruction*. (Some studies evaluated impacts in all three categories of teacher knowledge, teacher instruction, and student outcomes.)

Design characteristics of the eight professional development programs that had significant, measurable impacts on *teacher instruction and/or student outcomes* include:

- A strong focus on content and content-pedagogy in math or science;
- An annual duration ranging from 45 to 300 hours (or 9-12.5 graduate credit hours), and in most cases a design requiring more than 100 hours of engagement with both off-site (e.g., a two-week summer institute) and school-based components;

- Explicit links to, and thereby coherence with, the participants' school curriculum and organization;
- Elements of collective participation, bringing teachers together to engage in professional learning through coaching and mentoring by master teachers, lesson study with colleagues, additional training sessions focused on content pedagogy, and participation in learning activities with grade-level teams;
- Designs that are school-based and involve the schools as strong partners.

The researchers also found that school-based professional development designs: 1) facilitate follow-up activities and alignment to a school's curriculum and 2) are easier to evaluate using scientific research methods that examine impacts on student learning over time than professional development programs in which individual teachers voluntarily participate. However, only a small minority of programs focused on school-based strategies for professional development.

Another recent experimental study—conducted by Garet and colleagues (2010), of an intensive mathematics professional development program for middle school teachers—showed that the program had positive but not always statistically significant impacts on teacher knowledge and practice, but no effects on student outcomes. Two providers, Pearson and America's Choice, offered the program, which they designed to be coherent with district curricula: Glencoe/Prentice Hall Mathematics or Connected Mathematics. The study sample included 195 seventh grade mathematics teachers in 77 schools across 12 districts. One hundred teachers across 40 schools in the treatment

group received on average 45 hours of professional development in the form of a three-day summer institute followed by five seminars spread across the school year, and five four-hour sessions of coaching. The control group included 95 teachers from 37 schools.

Garet and his colleagues found that after the first year of implementation, the professional development program had modest positive effects on teacher knowledge of rational number topics and ability to teach rational number topics, although the effects were not statistically significant (effect size = 0.19, p value = 0.15). The study showed that the professional development had a statistically different and positive impact on the frequency of teachers' practice of eliciting student thinking (effect size = 0.48) and a marginally significant effect on teachers' use of representations (effect size = 0.30, p value = 0.05). There was no effect on teachers' use of activities that focused on mathematical reasoning (effect size = 0.19, p value = 0.32). In this first year of the two-year study, there were no significant impacts on student achievement as measured by the total scale score and two subscales on a computer adaptive test administered by the Northwest Evaluation Association.

These mixed findings suggest that only one year of teachers' participation in this kind of professional development program may be insufficient to counteract gaps in teachers' mathematical knowledge and pedagogical content knowledge. For example, Garet and colleagues note that the average percentage of correct answers on the measure of teacher knowledge was only 55 percent for the treatment group, as compared with 50 percent for the control group and 93 percent for the professional development provider staff members.

The mixed findings that we see in the recent research on professional development suggest 1) that there is still much to be learned about the features of truly effective professional development that has a significant impact on teacher knowledge and practice and on student achievement, and 2) that what is effective may vary for different populations of teachers and students and for different school contexts.

AN UPDATE ON THE STATUS OF TEACHER DEVELOPMENT IN THE UNITED STATES

In July 2009, the National Center for Education Statistics (NCES) released the dataset for the 2008 administration of SASS, the only nationally representative survey of teachers. This dataset allows us to trace trends in professional development participation across several administrations of the SASS (from 2000, 2004, and 2008) to evaluate the progress of professional development policies and practices in relation to our research-based definition of high-quality professional development.

The professional development questions that were consistent across survey administrations and could be compared across the different administrations of the survey concern:

1. **The content of professional development** (e.g., professional development offered on content of the subjects teachers teach, the use of computers for instruction, reading instruction, discipline/classroom management, teaching disabled/

limited-English proficient students), as well as the number of hours spent in these activities, and teachers' usefulness ratings of those activities;

2. **Priorities for additional professional development** (teachers were asked to select their top three priorities from a range of nine topics);
3. **School climate** with regard to the extent of teacher cooperation and support for teaching students with special needs; and
4. **Participation in induction programs** for beginning teachers during the first year of teaching, including specific forms of support such as mentorship, seminars, and reduced teaching load.

Unfortunately, a significant number of the items that relate to professional development were removed from the most recent questionnaire (2008), which limits the SASS as a source of indicators of national progress with regard to professional development.¹

The questions omitted concern the following aspects of professional development:

1. **Formal professional development** activities (e.g., university courses; workshops, conferences, training sessions offered during or outside of school hours); and **resources supporting teacher participation in professional development** (e.g., release time; time built into regular work hours for professional development; reimbursement for tuition, fees, travel expenses); and

¹ *The Institute of Education Sciences, which designs the Schools and Staffing Survey, commented in a letter to the authors that the survey items were eliminated due to pressures to reduce the length of the survey in order to increase the response rate and lower the costs of survey administration.*

2. **Job-embedded professional development** activities (e.g., teacher collaboration on issues of instruction, collective research on topics of professional interest, peer observation and mentoring) as well as the **conditions that support teacher collaboration and learning** (e.g., regularly scheduled time during teachers' work hours, level of influence teachers have over school decisions).

Survey data were analyzed in terms of participation reported by teachers at the

national and state levels and by school types (e.g. grade level, type of community, and student population served). Some items were analyzed by certification content area, certification status (regular certification to no certification), and years of teaching experience to test particular hypotheses. Responses from administration to administration were compared when the questionnaire items were phrased the same way. In some cases, slight changes in the way the questions were asked made direct comparisons impossible. (A more detailed description of the dataset and methodology are found in Appendix A.)

I. Participation in Professional Development

The findings reported here are based on data from the latest restricted-use dataset from the Schools and Staffing Teacher Survey (2008), with comparison to findings from earlier administrations of the survey (2000, 2004) when there is comparable data. The SASS Teacher Questionnaire (2008) asked teachers whether they had participated in professional development on six topics: 1) the content of the subject(s) taught; 2) the uses of computers for instruction; 3) reading instruction²; 4) student discipline and management of the classroom; 5) teaching students with disabilities; and 6) teaching LEP students.

The questionnaire also asked teachers to report the number of hours they had participated in professional development covering these topics over the previous 12 months (or over the previous three years for professional development on teaching students with disabilities and LEP students) and to rate the usefulness of these professional development opportunities.

NATIONAL AVERAGE RATES OF PARTICIPATION IN PROFESSIONAL DEVELOPMENT

Finding 1: *Nationally, the percentage of teachers reporting participation in professional development regarding teachers' content areas, reading instruction, uses of computers, and classroom management has increased slightly, with the highest rates of participation in professional development with a content focus (88 percent). Participation varies by teachers' level, subject area, and years of experience.*

While the percentage of teachers reporting participation in professional development on the **content of the subject(s) taught** increased modestly from 2004 to 2008

(from 83 to 88 percent), the percentage of teachers participating in professional development on each of the other three topics remained fairly stable, with very slight increases (by 2 percentage points on average).

The SASS Teacher Questionnaire did not query teachers about the subject matter of content-focused professional development (other than reading instruction); however, rates of participation can be analyzed by the certification area teachers reported. Tables 69–70 in Appendix B display the average participation rates in professional development differentiated by 1) the content of the subject(s) taught across 12 certification areas, 2) grade level, and 3) years of experience. We find that teachers with Early Childhood or General Elementary certification are most likely to have participated in content-focused professional development. Teachers with certification to teach arts and music, foreign languages, natural sciences, and social sciences are the least likely to have participated in content-focused professional development during the previous 12 months, although the participation rates are still quite high (over 70 percent across all certification areas).

² While professional development on reading instruction may be considered a content area for elementary teachers, this item was asked separately for all teachers.

**TABLE 1. PARTICIPATION IN PROFESSIONAL DEVELOPMENT
ON FOUR TOPICS (2000, 2004 & 2008)**

(Percentage of all teachers reporting participation in professional development topics during the past 12 months)

Topic of Professional Development	SASS Data Year	Percentage reporting participation in this kind of professional development (Std Error)	Percentage of all teachers with 33 or more hours on topic (Std Error)	Percentage of teachers reporting participation who rated training on this topic “useful” or “very useful”*
1) The content of the subject(s) they teach	2000	59.0 (0.300) ¹	18.0 (0.290)	71.3
	2004	83.4 (0.313)	23.0 (0.389)	70.9
	2008	87.5 (0.334)	23.8 (0.430)	69.9
2) Uses of computers for instruction	2000	70.0 (0.370)	8.0 (0.220)	63.6
	2004	64.9 (0.532)	6.8 (0.217)	64.7
	2008	67.0 (0.569)	4.8 (0.211)	65.3
3) Reading instruction	2000	n/a	n/a	n/a
	2004	60.9 (0.478)	8.9 (0.285)	68.9
	2008	61.5 (0.583)	7.7 (0.298)	67.7
4) Student discipline and management in the classroom	2000	41.0 (0.390)	2.0 (0.110)	55.5
	2004	43.5 (0.476)	2.1 (0.124)	61.7
	2008	45.7 (0.595)	2.0 (0.120)	61.6

SOURCES: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (SASS), 2003-04, 2007-08; Choy, Chen, Bugarin, & Broughman (2006). Teacher Professional Development in 1999-2000: What Teachers, Principals, and District Staff Report.

* Standard errors are not reported for figures that represent a sum of two or more categories.

¹ In 2000, the topic was “In-depth study of content in main teaching field.”

Analysis of participation in content-focused professional development by years of teaching experience also reveals that beginning teachers in their first to third years of

teaching have significantly lower participation rates in content-focused professional development than their more experienced colleagues (though the difference is only

TABLE 2. INTENSITY OF PARTICIPATION IN PROFESSIONAL DEVELOPMENT ON FOUR TOPICS (2004 & 2008)

(Percentage of all teachers in sample reporting the length of time they participated in professional development on these topics during the last 12 months)

Topic of Professional Development	SASS Data Year	None	Percentage reporting up to	Percentage reporting	Percentage reporting	Percentage reporting
			8 hours (Std. Error)	9-16 hours (Std. Error)	17-32 hours (Std. Error)	33+ hours (Std. Error)
1) The content of the subject(s) they teach	2004	16.6	22.9 (0.459)	17.2 (0.382)	20.3 (0.472)	23.0 (0.463)
	2008	12.5	18.3 (0.382)	24.5 (0.477)	21.0 (0.448)	23.8 (0.430)
2) Uses of computers for instruction	2004	35.1	15.0 (0.480)	37.4 (0.523)	6.6 (0.362)	6.8 (0.328)
	2008	33.0	41.0 (0.444)	15.8 (0.407)	6.2 (0.271)	4.8 (0.211)
3) Reading instruction	2004	40.0	16.8 (0.499)	26.0 (0.638)	10.1 (0.431)	8.9 (0.440)
	2008	38.5	27.9 (0.466)	17.5 (0.375)	9.5 (0.304)	7.7 (0.298)
4) Student discipline and management in the classroom	2004	56.5	8.3 (0.460)	31.1 (0.628)	2.9 (0.314)	2.1 (0.273)
	2008	54.3	32.9 (0.342)	9.0 (0.304)	3.1 (0.174)	2.0 (0.120)

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (SASS), 2003-04, 2007-08.

Note: Sums of percentages may not add up to 100 percent in all cases due to rounding. Percentages are based on the total number of teachers in the sample, not just those who responded “yes” to participation in the PD topic.

about 5 percent). This was true for both elementary and secondary teachers. This may be due to beginning teachers’ participation in induction and mentoring program activities that may not be focused solely on the content of their teaching area. See Table 70 in Appendix B for a breakdown by school level and years of experience.

teachers teach was stable, in other areas—such as reading instruction, classroom management, and use of computers for instruction—teachers received less intensive learning opportunities (i.e., fewer hours of professional development on a given topic) in 2008 than they did four years earlier.

INTENSITY OF PROFESSIONAL DEVELOPMENT

Finding 2: *While the intensity of professional development related to the content*

The trends from 2004 to 2008 indicate that the intensity of professional development related to the content teachers teach was stable—that is, the percentage of teachers reporting 17 or more hours of professional development on the topic remained about

that same. However, fewer than half of all teachers received this level of professional development (at least 17 hours) regarding the content they teach.

Meanwhile, there was a decrease in the intensity of professional development in other areas, including uses of computers for instruction, reading instruction, and student discipline/classroom management. In these areas, there was a dramatic shift away from professional development of a modest duration (i.e., 9 to 16 hours to professional development) toward shorter workshops of 8 hours or shorter in length.

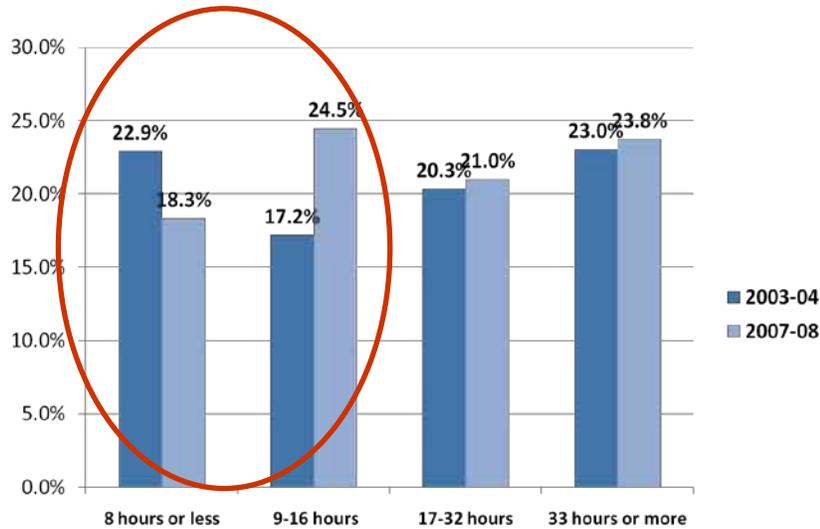
In a review of nine research studies, Yoon and colleagues (2007) found that professional development that includes a substantial number of contact hours (ranging from 30 to 100 hours in total and averaging 49 hours) spread out over 6 to 12 months showed a positive and significant effect on student achievement gains. Meanwhile,

professional development that offered 5 to 14 hours of contact had no statistically significant effect on student achievement. This suggests that the participation of our nation's teachers in professional development in most areas is likely to have little impact on the quality of their instructional practice and on student achievement.

Figures 1 to 4 (see pages 14–15) provide a visual representation of trends in the duration of professional development across the four topics. This suggests that states and school organizations made content the highest priority (among the four topics), and shifted resources and time away from professional development on technology and student discipline/classroom management, and to a lesser extent, away from professional development on reading instruction. They also shifted resources away from longer term professional development toward shorter bursts of training in these areas.

FIGURE 1. INTENSITY OF PROFESSIONAL DEVELOPMENT— CONTENT OF SUBJECT(S) TAUGHT, 2004 AND 2008

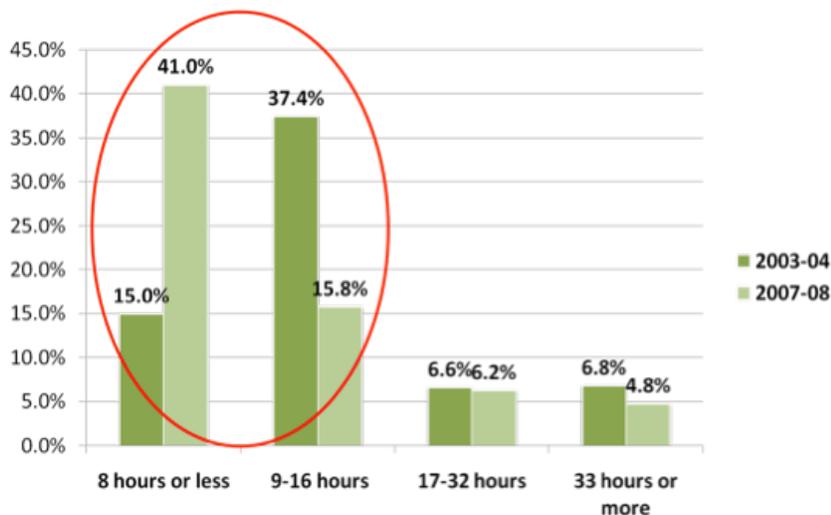
(Percentage of teachers reporting the length of time they participated in professional development on this topic during the last 12 months)



SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (SASS), 2003-2004, 2007-08.

FIGURE 2. INTENSITY OF PROFESSIONAL DEVELOPMENT— USES OF COMPUTERS FOR INSTRUCTION, 2004 AND 2008

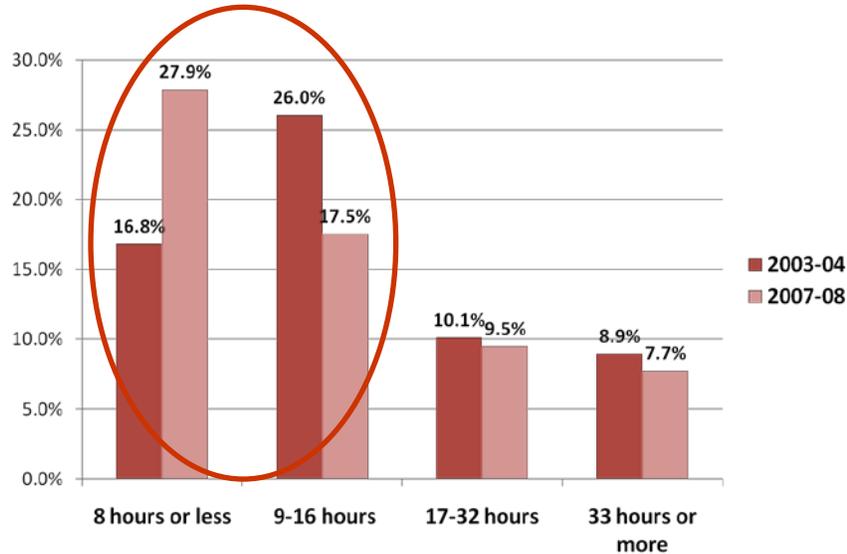
(Percentage of teachers reporting the length of time they participated in professional development on this topic during the last 12 months)



SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (SASS), 2003-2004, 2007-08.

FIGURE 3. INTENSITY OF PROFESSIONAL DEVELOPMENT— READING INSTRUCTION, 2004 AND 2008

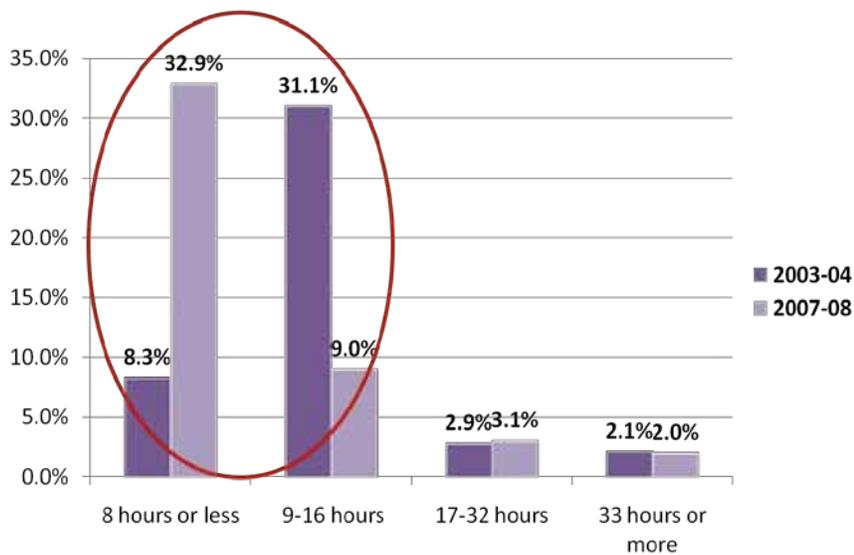
(Percentage of teachers reporting the length of time they participated in professional development on this topic during the last 12 months)



SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (SASS), 2003-2004, 2007-08.

FIGURE 4. INTENSITY OF PROFESSIONAL DEVELOPMENT— STUDENT DISCIPLINE AND CLASSROOM MANAGEMENT, 2004 AND 2008

(Percentage of teachers reporting the length of time they participated in professional development on this topic during the last 12 months)



SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (SASS), 2003-2004, 2007-08.

TABLE 2. PARTICIPATION IN PROFESSIONAL DEVELOPMENT RELATED TO TEACHING STUDENTS WITH DISABILITIES AND LIMITED-ENGLISH PROFICIENT STUDENTS (2004 AND 2008)

(Percentage of teachers reporting participation in professional development topics during the last 12 months and numbers of hours of participation during the last three years)

Topic of Professional Development	SASS Data Year	Percentage of all teachers (Std Error)	Percentage of all teachers with more than 8 hours on topic during the last three years ^{2*}	Percentage of teachers reporting participation who rated training on this topic “useful” or “very useful”*
1) Teaching students with disabilities	2004	n/a ¹	36.6	n/a
	2008	42.3 (0.590)	17.1	63.1
2) Teaching limited-English proficient students	2004	n/a	32.1	n/a
	2008	27.9 (0.612)	20.0	57.6

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (SASS), 2003-04, 2007-08.

¹“n/a” indicates that the question was not asked in that particular year’s survey.

² In the 2004 teacher questionnaire, the questions asked were “In the last three years, have you had eight hours or more of training or professional development on how to teach special education students?” (Yes/No) and “In the last three years, have you had eight hours or more of training or professional development on how to teach limited-English proficient students?” (Yes/No)

* Standard errors are not reported for figures that represent a sum of two or more categories.

TEACHING STUDENTS WITH DISABILITIES AND LIMITED-ENGLISH PROFICIENT (LEP) STUDENTS

Finding 3: *Fewer than half of teachers nationally report receiving professional development for teaching students with disabilities and fewer than a third for teaching LEP students.*

Fewer than half of teachers (43 percent) received any training to teach students with disabilities in 2008. In addition, on a survey item that asked teachers to rate the aspects of school climate, only a third (33 percent)

of respondents agreed that their schools provided support for teaching students with special needs, a decline from 36 percent in 2004.

RATINGS ON THE USEFULNESS OF PROFESSIONAL DEVELOPMENT

Finding 4: *In 2008, about two-thirds of teachers rated the professional development they experienced as useful or very useful. Teachers with more intensive professional development experiences rated the usefulness of those experiences significantly higher.*

The ratings on the usefulness of professional development across the four topics were relatively stable from 2000 to 2008 (see Table 1, page 11). As in the 2004 data, there is a significant positive relationship between the number of hours reported by teachers and their ratings of the usefulness of the professional development. Tables 13 to 18 in Appendix B display the proportion of teachers who rated the usefulness of professional development they participated in (1 = Not useful, 2 = Somewhat useful, 3 = Useful, 4 = Very useful) by the number of hours reported (8 hours or less, 9 to 16 hours, 17 to 32 hours, 33 hours or more). All six tables show that the more hours of participation reported by teachers, the more highly they rated the usefulness of the professional development. These findings support previous empirical research that professional development that is longer in duration and more sustained over time is more effective in improving teaching practice and student achievement. Teachers' perceptions of usefulness clearly increase when they are engaged in professional learning over a longer duration.

VARIATION IN PARTICIPATION IN PROFESSIONAL DEVELOPMENT ACROSS SCHOOL CONTEXTS

Finding 5: *Participation in professional development varies across different schools contexts: Perhaps as a result of targeted federal funding under No Child Left Behind (NCLB), the highest rates of participation were for elementary school teachers, urban teachers, and teachers in schools with the highest populations of low-income, minority, and LEP students.*

In Appendix B, Tables 2, 4, 6, 8, 10, and 12 display the mean values of responses across

the professional development items, while Tables 19 through 58 display the differences across categories for each of the school context variables, as well as standard errors and p-values.

Grade Level Differences. SASS data from 2008 show that elementary teachers had significantly higher rates of participation than secondary teachers in professional development on the content they taught (91 percent vs. 81 percent), reading instruction (71 percent vs. 44 percent), student discipline/classroom management (46 percent vs. 44 percent), and teaching LEP students (30 percent vs. 26 percent). These results are similar to the results from the 2004 SASS data.

Elementary teachers also rated the value of their professional development experiences significantly higher than did secondary teachers, particularly on reading instruction, discipline/classroom management, teaching students with disabilities, and teaching LEP students. Last, across the six topics reported in SASS, elementary teachers had a significantly higher cumulative number of professional development hours than secondary teachers (46 hours vs. 39 hours). (See Tables 59 and 60 in Appendix B for details.)

School Community Differences. In 2008, teachers in urban areas had higher rates of professional development participation on the content of the subject(s) they teach than teachers in suburban areas (90 versus 88 percent) and rural areas (84 percent), and teachers in suburban areas had significantly higher rates of participation than teachers in rural areas. Teachers in urban areas also had significantly higher rates of professional development participation on reading instruction, student discipline/classroom man-

agement, and teaching LEP students than teachers in suburban and rural schools. This was true also in 2004.

In terms of average cumulative number of hours of professional development (across the six topics), teachers in urban schools had a significantly higher average (47 hours) than teachers in suburban schools (43 hours) and rural schools (42 hours). (See Tables 61 and 62 in Appendix B for details.)

Schools Serving Different Student Populations.

Results from 2008 show that teachers in schools with the highest minority enrollment had significantly higher rates of participation in professional development on the content of the subject(s) they teach than teachers in schools with the lowest minority enrollment (89 percent vs. 85 percent), as well as on reading instruction (65 percent vs. 56 percent) and teaching LEP students (68 percent vs. 60 percent). However, teachers with the lowest minority enrollments had significantly higher rates of participation in PD on uses of computers for instruction. These results are similar to those in 2004. Teachers in schools with higher percentages of minority enrollment also had a significantly higher number of average cumulative hours of professional development across six topics than teachers in schools with lower percentages of minority enrollment. The numbers ranged from an average of 39 cumulative hours in schools with the lowest minority enrollment to 47 cumulative hours in schools with the highest minority enrollment. (See Tables 63 and 64 in Appendix B for details.) Teachers in schools with higher free and reduced lunch (FRL) program enrollment had significantly higher rates of professional development participation on the content of the subject(s) they teach (89 percent vs. 86

percent), on reading instruction, on student discipline and classroom management, and on teaching LEP students than those with lower FRL program enrollment. Teachers in schools with higher FRL program enrollment also had significantly more average cumulative hours of professional development than teachers in schools with a lower FRL program enrollment, ranging from 41 hours in schools with the lowest enrollment to 48 hours in schools with the highest enrollment. (See Tables 65 and 66 in Appendix B for details.)

However, teachers in schools with the lowest FRL program enrollment had significantly higher rates of participation in professional development on the uses of computers for instruction. These results mirror the 2004 results and may be an indicator of the ongoing resource gap (documented in other studies, e.g., NEA, 2008) that schools in urban, high-poverty, high-minority-enrollment areas face in terms of access to computing technology and professional development on the uses of computers for instruction. Alternatively, lower rates of participation in technology-related professional development may be due to a differing set of priorities for professional development in schools with high poverty levels (as is shown by analyses cited later in this report).

Teachers in schools with the highest enrollment of LEP students (more than 10 percent) had significantly higher participation than teachers in schools with the lowest LEP enrollment in professional development on the content of the subject(s) they teach (90 percent vs. 86 percent), reading instruction (68 percent vs. 60 percent), teaching students with disabilities (48 percent vs. 40 percent), and teaching LEP students (41 percent vs. 15 percent). How-

ever, teachers in schools with low LEP enrollment (0.0 to 2.5 percent) had significantly higher participation in professional development on uses of computers for instruction than did teachers in school with the highest LEP enrollment of 10 percent (70 percent vs. 65 percent).

These results are consistent with those from the 2004 dataset. Teachers in schools with the highest levels of LEP enrollment also had significantly more average cumulative

hours of professional development across six topics than did teachers in schools with the lowest levels of LEP enrollment, ranging from 40 hours in schools with the lowest LEP enrollment to 50 hours in schools with the highest LEP enrollment. (See Tables 67 and 68 in Appendix B for details.) These patterns may stem from the increased provision of resources related to Title I funding and efforts to turn around underperforming schools in response to NCLB.

II. Opportunities for Teacher Collaboration

Finding 6: *Although about two-thirds of teachers report structured opportunities for collaboration in their schools, they report an average of only 2.7 hours a week of time spent in collaboration. Only 16 percent of teachers surveyed agree that there is a climate of cooperative effort among staff members in their schools.*

The 2004 SASS Teacher Questionnaire included a few items related to opportunities for teachers to participate in job-embedded, collaborative professional work with other teachers. These items, unfortunately, were removed from the 2008 questionnaire. One item was retained in the 2008 questionnaire that provides some indication about the level of teacher collaboration in U.S. schools. That item was embedded in a series of others related to school climate: “There is a great deal of cooperative effort among the staff members” (assessed on a Likert scale: from strongly agree to strongly disagree).

Few teachers in 2008 perceived cooperative effort among staff members in their schools, a finding consistent with results from the 2004 survey. Seventeen percent of teachers in 2004 and 16 percent of teachers in 2008 agreed or strongly agreed that there was cooperative effort in their schools. These recent results represent a significant decline from 2000, when 34 percent of teachers agreed or strongly agreed that “There is a great deal of cooperative effort among the staff members.” (There was also little variation across states on this item, ranging from 11 percent of teachers agreeing with this statement in New Jersey and Washington to 25 percent of teachers agreeing in Washington, D.C.)

Another item asked of beginning teachers (those with five or fewer years of experience) was whether they had received various induction supports; among them, common planning time. Presumably, if beginning teachers engaged in common planning, other teachers in their grade level or in their subject area planned with them. This item, while representative of beginning teachers only, offers some indication of the relative prevalence of common planning in schools. The percentage of beginning teachers reporting common planning time increased from 49 percent in 2004 to 56 percent 2008.

We do not know, however, how teachers use that time. The very low percentage of teachers—all teachers in the public school sample, including beginning teachers—reporting cooperative effort in their schools suggests that common planning time, even when available, does not necessarily translate into cooperative effort among beginning teachers and their more experienced colleagues. It appears that simply providing time for common planning is insufficient for supporting teachers’ joint efforts. The conjunction of these two findings—increased common planning time without matching levels of teacher cooperation—suggests that our nation’s schools have room to grow in offering protocols to guide collaboration and providing the kind of leadership needed to support follow-through. A more systematic approach to support the productive use of common planning time might strengthen the continuous improvement cycle of professional development outlined in NSDC’s new definition of professional development, cited in the introduction to this paper.

Another set of insights into this seeming paradox is offered by results from the 2009 Met Life Survey of the American Teacher (Met Life, 2010). These results are based on a Harris Interactive telephone poll of 1,003 teachers across almost all states, conducted over a month-long period in the fall of 2009. The sample was selected and weighted to be representative of the nation in terms of the demographic characteristics of teachers and schools.

The survey results (see Table 3 below) suggest that the majority of teachers are engaged in collaborative work with their school leaders and colleagues on an on-go-

ing basis, with peer observation and feedback being the least common practice (only 22 percent of teachers reported this type of collaboration). It also appears that elementary teachers are more likely to be engaged in such collaborative activities than are secondary teachers, which is consistent with findings in the 2004 SASS analysis. The Met Life Survey also reports that elementary teachers are more likely to collaborate in grade-level teams, while secondary teachers are more likely to work with departmental (content-specific) teams that span grade levels.

While there are problems with the scale used in the Met Life Survey (“Always” and

TABLE 3. FREQUENCY OF TEACHER COLLABORATION (MET LIFE SURVEY OF THE AMERICAN TEACHER, 2009)

(Percentage of teachers reporting these activities “Often” or “Always”)

How often do the following occur at your school? (Never, Rarely, Sometimes, Often, Always)	All Teachers N = 1,003	Elementary Teachers N = 695	Secondary Teachers N = 222
Teachers meet in teams to learn what is necessary to help their students achieve at higher levels.	75%	78%	69%
School leaders share responsibility with teachers to achieve school goals.	73%	76%	67%
Beginning teachers have opportunities to work with more experienced teachers.	71%	72%	70%
Teachers examine and discuss student work with each other regularly.	68%	72%	60%
My school structures time for teachers to work together.	63%	68%	57%
My principal’s/My decisions on school improvement strategies are influenced by faculty input.	63%	66%	58%
Teachers observe each other in the classroom and provide feedback to each other.	22%	23%	22%

SOURCE: Met Life Survey of the American Teacher: Collaborating for Student Success—Part I (2010). Page 10. Retrieved on April 5, 2010, from: <http://www.metlife.com/about/corporate-profile/citizenship/metlife-foundation/metlife-survey-of-the-american-teacher.html>.

“Often” may mean different things to different individuals), the picture that these results create is a quite optimistic one. Two-thirds to three-quarters of teachers reported being engaged in some form of collaborative work in their schools. These results for 2009 are not too far off from the 2004 Schools and Staffing Survey. In that SASS dataset, 70 percent of teachers reported having participated in “regularly scheduled collaboration with other teachers on issues of instruction (besides administrative meetings)” and 63 percent reported participating in observing and being observed in their classrooms for at least 10 minutes during the previous 12 months.

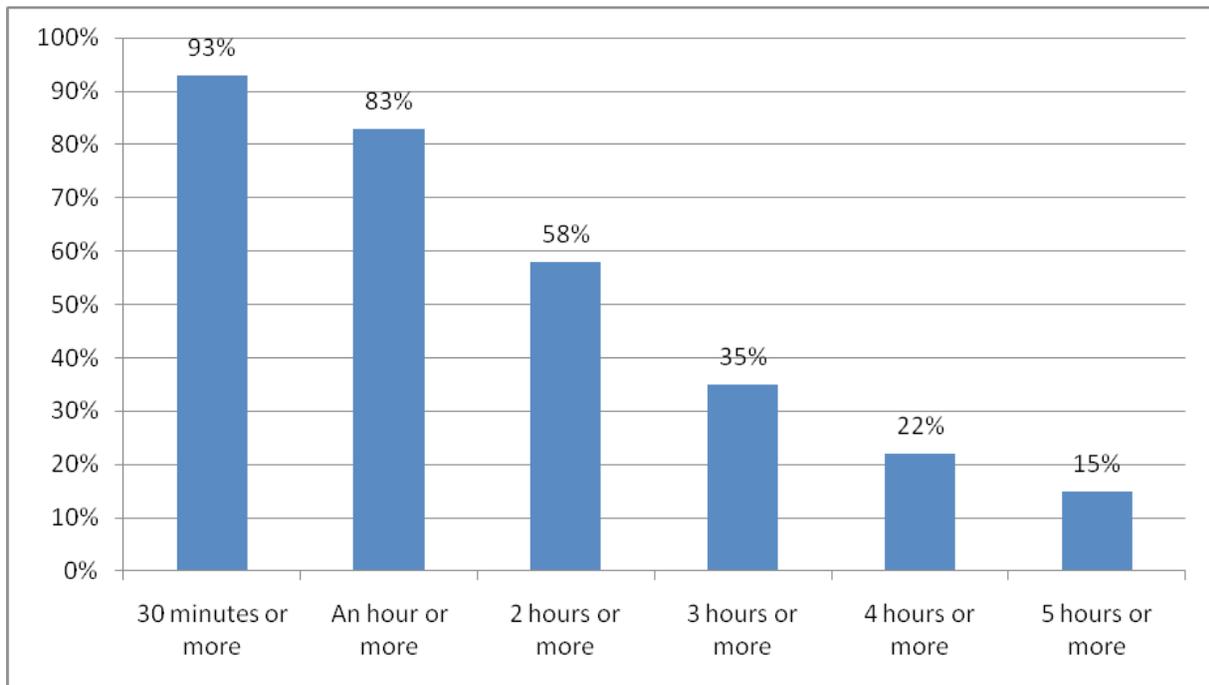
At the same time, another Met Life Survey item on the amount of time teachers spend in collaborative work sheds light on what “Always” and “Often” mean for American teachers. The survey asked: “Excluding

administrative duties, how much time per week in hours and minutes do you spend working in such structured collaboration with other teachers and school leaders?” The responses yielded an average of 2.7 hours per week of participation in structured collaboration across the sample. (See Figure 5 below.) When considered on its own, this average number of hours might be viewed as encouraging—it translates to about 108 hours a year in a 40-week school year—but it is significantly less than what is available to teachers in other nations.

TEACHER COLLABORATION ABROAD

Collaboration time for teachers is much more extensive in many high-achieving nations, where more non-teaching time is built into teachers’ workday. As cited in our previous report (Wei, Darling-Hammond, Richardson, Andree, & Orphanos, 2009),

FIGURE 5. HOURS OF WEEKLY TEACHER PARTICIPATION IN STRUCTURED COLLABORATION TIME



SOURCE: Met Life Survey of the American Teacher: Collaborating for Student Success—Part I (2010).

TABLE 5. ALLOCATION OF WEEKLY WORK HOURS REPORTED BY TEACHERS IN TALIS

(Average weekly hours, 8 OECD countries that were ranked in the top 14 on the 2006 PISA)

Countries	Hours: Teaching		Hours: Planning		Hours: Administrative Duties		Hours: Other	
	Avg	(SE)	Avg	(SE)	Avg	(SE)	Avg	(SE)
Australia	18.95	0.151	12.27	0.149	8.79	0.199	5.33	0.213
Austria	18.17	0.077	14.27	0.108	4.07	0.061	3.47	0.094
Belgium (Fl.)	18.25	0.096	10.30	0.106	3.48	0.063	3.32	0.126
Denmark	18.30	0.124	12.32	0.132	3.92	0.111	5.10	0.242
Estonia	20.25	0.157	10.32	0.121	3.58	0.065	3.65	0.121
Ireland	19.77	0.090	8.47	0.105	3.74	0.092	3.15	0.131
Korea	19.38	0.099	9.24	0.105	9.09	0.114	4.91	0.179
Poland	16.01	0.149	9.09	0.113	3.52	0.085	1.55	0.057
TALIS Average 2008	18.64	0.043	10.79	0.042	5.02	0.038	3.81	0.055
U.S. Average	Not Available							

SOURCE: Original analysis on TALIS Survey Data 2008 (OECD, 2010), retrieved on April 5, 2010, from: <http://stats.oecd.org/Index.aspx?DataSetCode=TALIS>.

Note: "TALIS Average 2008" represents the average for the eight high-achieving nations in this table only.

in many European and Asian countries, teachers spend about 15 to 25 hours per week outside the classroom, most of it working collaboratively with other teachers on preparing lessons, analyzing teaching through lesson study, action research, and classroom observations, and planning in the context of subject matter departments or grade-level teams.

This observation is supported by recent data about teachers' opportunities to col-

laborate and engage in peer learning in high-performing OECD nations. In the first Teaching and Learning International Survey (TALIS)³, administered in 2007-08, teachers were asked to report the number of weekly hours for classroom teaching, planning, administrative responsibilities, and other activities. Each week the teachers in eight high-achieving OECD countries spent on average 19 hours teaching (49 percent of their total work hours, which average between 38-39 hours per week), 11

³ In 2007-2008, the Organisation for Economic Co-operation and Development (OECD) administered the first TALIS and collected data from 60,000 "lower secondary" teachers and their school principals across 23 OECD countries. Schools and teachers were randomly selected to take part in the survey. In every country (except for smaller countries), about 200 schools and 20 teachers in each school were sampled (approximately 4,000 teachers per country). We selected the eight nations that ranked above the international average (rank of 14th and above) on the 2006 PISA (Programme for International Student Assessment) reading, science, and math exams. These eight nations included: Australia, Austria, Belgium (Flemish Community), Denmark, Estonia, Ireland, Korea, and Poland.

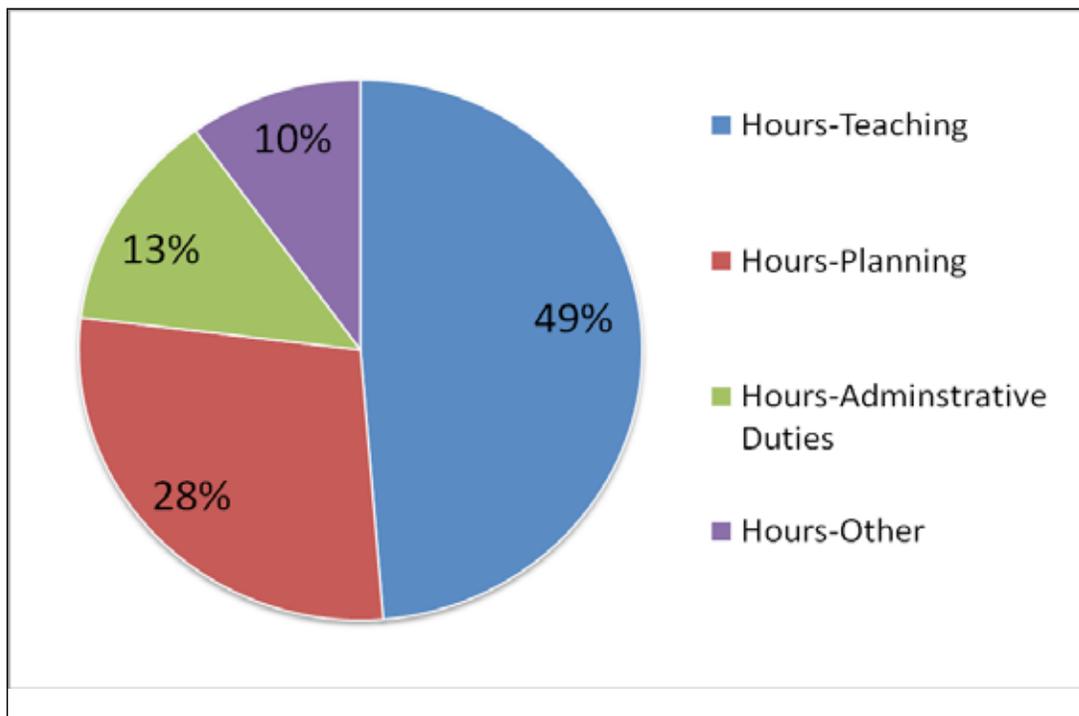
hours in planning activities (28 percent of teachers' weekly work hours), 5 hours in administrative duties (13 percent of weekly work hours), and 4 hours in other activities (10 percent of weekly work hours). It is clear that teachers in these eight countries can devote a relatively large portion of their working time to professional responsibilities outside the classroom, and that this creates greater opportunities for teacher collaboration and engagement in teacher learning. (The average hours spent in each activity is almost the same when all 23 OECD nations are included.)

Figure 6 below displays the average allocation of weekly work time reported by teachers in these eight high-achieving OECD nations, and shows that just under

50 percent of teachers' working time is spent in classroom instruction.

In contrast, for American teachers, the working day is mostly occupied by classroom teaching responsibilities, with only a few hours a week for common planning time and collaboration with colleagues. This may be changing in some school contexts where schedules have been organized to include more time for teachers to engage in planning and other collective activities on a weekly basis. Note, for instance, the 15 percent of teachers in the Met Life Survey sample who reported five or more hours of structured time for collaboration (see Figure 5, page 22). However, this is clearly unusual in the American context.

FIGURE 6. PERCENTAGE OF WEEKLY HOURS SPENT IN PROFESSIONAL WORK (EIGHT HIGH-ACHIEVING OECD NATIONS, TALIS, 2008)



SOURCE: Analysis of TALIS Survey Data 2008 (OECD, 2010), retrieved on April 5, 2010, from: <http://stats.oecd.org/Index.aspx?DataSetCode=TALIS>.

TEACHERS' VIEWS OF THE IMPORTANCE OF COLLABORATION

Ninety-four percent of teachers in the Met Life Survey (2009) agreed that “greater collaboration among teachers and school leaders” would have a “major impact” or a “moderate impact” on improving student achievement. In a recent survey of 40,000 teachers conducted by the Bill & Melinda Gates Foundation and Scholastic (2010), 86 percent of teachers reported a collegial work environment as “absolutely essential” or “very important” for their persistence in the profession, and 89 percent reported time for teachers to collaborate as “absolutely essential” or “very important”

for their persistence in the profession.

Similarly, in a recent survey conducted by Berry, Daughtrey, and Wieder (2010) for the Teachers Network (and supported by the Ford Foundation), 68 percent of the 1,210 teachers in the sample reported that they turned to other teachers for help about teaching, and 74 percent reported that they turned to other teachers for support. In addition, close to 80 percent of respondents reported that their involvement in the Teachers Network was a major reason for their intention to stay in the teaching profession. These findings underscore the importance of opportunities for teacher collaboration and their role in teachers' commitment to the profession.

III. Highest Priorities for Further Professional Development

Finding 7: *The top three topics for further professional development remained almost the same from 2004 to 2008, with teachers prioritizing the **Content of the subject taught** (23.7 percent in 2008) and **Student discipline and management** (19.9 percent in 2008). **Teaching students with special needs** and **Use of technology in instruction** were both ranked as top priorities by 13.7 percent of teachers. Teachers' needs and preferences varied across school levels and contexts.*

In each year of the survey, teachers are asked to select and rank a list of nine topics as their top priorities for further professional development. The percentages of teachers rating each topic as their first priority for further professional development are displayed in Figure 7 (see page 27). There has been relatively little change in these rankings over the last decade.

The perceived need for particular topics of professional development appears to vary by the grade level and type of school in which teachers work. For example, a significantly higher percentage of elementary teachers (17 percent) ranked teaching students with special needs as the highest priority than did secondary teachers (12 percent). But a significantly higher percentage of secondary teachers (16 percent) than elementary teachers (11 percent) ranked use of technology in instruction as the highest priority. The same was true for professional development regarding the content of the subject(s) taught (24 percent for secondary

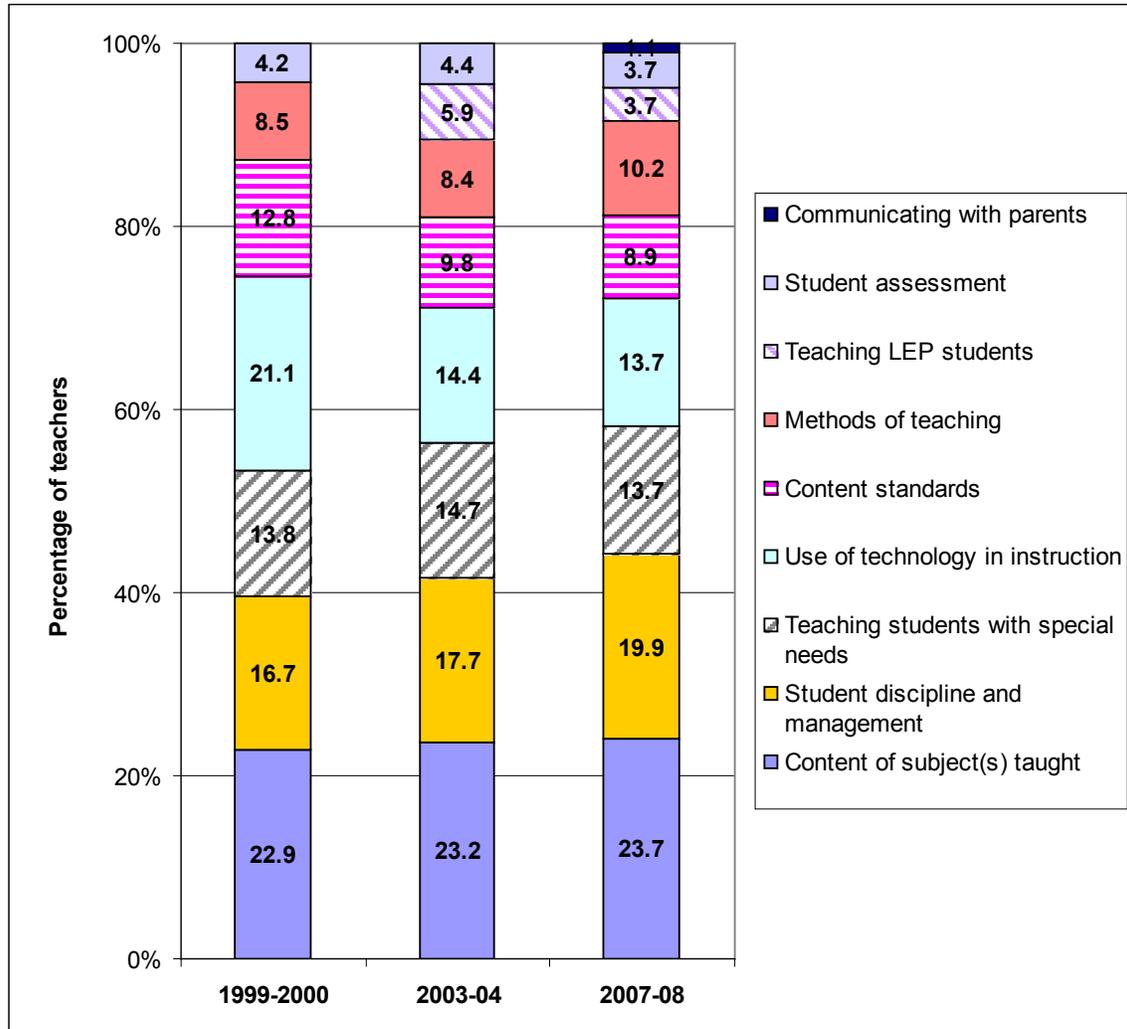
teachers prioritized this as compared to 20 percent of elementary teachers).

There were even more dramatic differences in priorities for further professional development based on the school contexts in which teachers worked. These differences seem to be related to the school populations and climates that teachers working in these different contexts face. For example, for teachers in urban contexts, with high minority, LEP, and FRL enrollments, professional development on student discipline and classroom management as well as teaching LEP students were more frequently ranked as top priorities than for teachers in less diverse, more wealthy school settings. On the other hand, for teachers in suburban and rural schools and in schools with less economic and ethnic diversity, professional development on content of the subject(s) taught and use of technology for instruction were more frequently ranked as top priorities than for teachers in other community contexts.

These differences make sense in light of differences in the student populations that these schools serve and the different challenges that teachers face in different school settings. These results may partially explain the lower rates of participation by teachers working in high-need schools in professional development on the use of technology in instruction, which is perceived as being less of a priority for such teachers. Tables 71 to 118 in Appendix B display the differences in the rankings for each of the topics in which there were significant differences by school level and school context.

FIGURE 7. TEACHERS' TOP PRIORITIES FOR ADDITIONAL PROFESSIONAL DEVELOPMENT (FIRST CHOICE)

(Percentage distribution of teachers by their top priority for additional professional development, 2000, 2004, & 2008)



SOURCES: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (SASS), 2003-04, 2007-08; Choy, Chen, Bugarin, & Broughman (2006). Teacher Professional Development in 1999-2000: What Teachers, Principals, and District Staff Report.

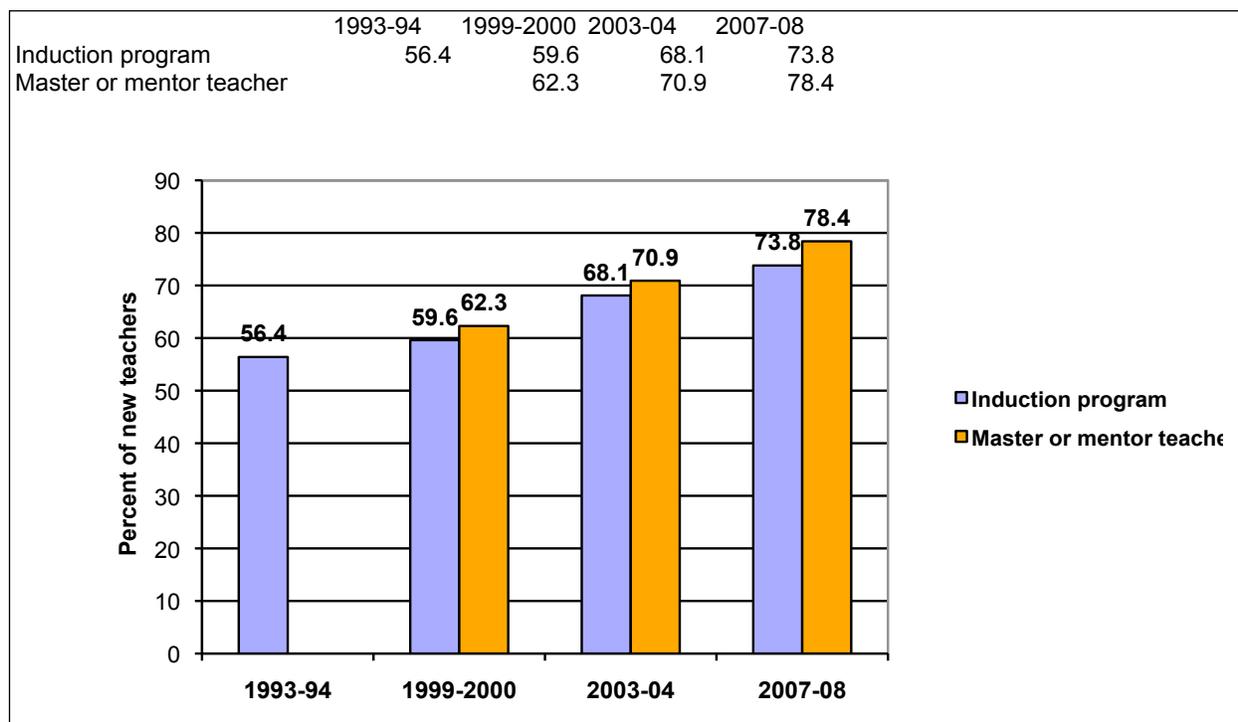
IV. Induction Supports for Beginning Teachers

FINDING 8: *There has been steady progress in the provision of induction supports for beginning teachers, but access to induction supports remains inequitable, with a significantly lower percentage of teachers in high-poverty, high-minority schools reporting a range of induction supports.*

The percentage of beginning teachers (those with five or fewer years teaching) who reported participation in an induction program during their first year has steadily increased (see Figure 8 below):

Seventy-four percent of beginning teachers reported participation in 2008—a nearly 6 percent increase over 2004. The percentage of beginning teachers who reported working with a master/mentor teacher increased by 7 percent, from 71 percent to 78 percent. Participation in seminars or classes for beginning teachers increased by 6 percent, from 68 percent (in 2004) to 74 percent (in 2008). Reports of common planning time increased by 6 percent, from 50 percent (in 2004) to 56 percent (in 2008). Other induction supports remained stable from previous

FIGURE 8. BEGINNING TEACHER PARTICIPATION IN INDUCTION AND MENTORING PROGRAMS



SOURCES: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (SASS), 2003-04, 2007-08; Choy, Chen, Bugarin, & Broughman (2006). *Teacher Professional Development in 1999-2000: What Teachers, Principals, and District Staff Report.*

years, with supportive communication with principal or other administrator remaining at high levels (80 percent), while reduced numbers of preparations or reduced teaching loads remained at very low levels (11 percent combined).

VARIATIONS IN INDUCTION SUPPORTS BY CERTIFICATION TYPE

Levels of participation in induction supports varied across certification areas and

types. Teachers with an ESL or bilingual certification were noticeably less likely to participate in induction programs (62 percent) than teachers in other certification areas (74 percent), although this difference is not significant because of a large standard error. Teachers with an early childhood/elementary certification were significantly less likely than teachers in some of the certification content areas to have had a reduced teaching schedule/reduced preps (7 percent), but were also significantly more likely to participate in common planning

TABLE 6. BEGINNING TEACHER ACCESS TO INDUCTION SUPPORTS

(Percentage of beginning teachers with five or fewer years of teaching experience who reported being provided with various induction supports in their first year of teaching, 2000, 2004 and 2008)¹

Type of Induction Support	Percentage of all beginning teachers 2000 (Std. Error)	Percentage of all beginning teachers 2004 (Std. Error)	Percentage of all beginning teachers 2008 (Std. Error)
1) Induction Program	59.6 (0.700)	68.1 (0.971)	73.8 (0.879)
2) Working with a master or mentor teacher	62.3 (0.700)	70.9 (0.906)	78.3 (1.015)
2a) Working with a mentor teacher in the same subject area	46.7 (0.810)	51.8 (0.896)	n/a
3) Regular supportive communication with a principal, administrator, or department chair	n/a	79.0 (0.765)	79.8 (0.836)
4) Seminars or classes for beginning teachers	n/a	67.6 (0.919)	73.6 (0.812)
5) Common planning time	n/a	49.2 (0.953)	55.7 (0.974)
6) Reduced number of preparations	n/a	8.0 (0.431)	11.3 ² (0.676)
7) Reduced teaching schedule	n/a	5.1 (0.364)	

SOURCES: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (SASS), 2003-04, 2007-08; Choy, Chen, Bugarin, & Broughman (2006). *Teacher Professional Development in 1999-2000: What Teachers, Principals, and District Staff Report*.

¹ Although listed in the SASS survey as an induction element, “extra classroom assistance (e.g., teacher aide)” did not figure in the analyses of induction supports because it is not generally considered a support specifically aimed at promoting new teacher learning and growth.

² In the 2008 survey, “reduced number of preparations” and “reduced teaching schedule” were combined in one question: “reduced teaching schedule or number of preparations.”

(74 percent). Last, teachers with an art or music certification were significantly less likely to participate in common planning (31 percent) than teachers in most other certification areas. This last difference makes sense since most schools (especially elementary schools) employ few teachers certified in music and art. (See Tables 119 to 124 in Appendix B.)

Teachers with no state certification were significantly *less* likely to participate in induction programs (58 percent) than teachers with regular state certification (74 percent). This may be because in some states or districts, emergency credentialed teachers are required to complete certification coursework during their first years of teaching, and therefore do not have time to participate in new teacher induction programs. Or teachers without a certification may be barred from participating in induction programs that are designed for new teachers who have completed the requisite certification requirements. Teachers with an alternative entry certificate that requires completion of additional requirements (e.g., coursework, passing tests, student teaching) were significantly *more* likely to report having a reduced teaching schedule in their first year of teaching than teachers with a regular or standard state certification. There were no significant differences on the other induction supports across certification types.

VARIATION IN INDUCTION SUPPORTS ACROSS SCHOOLS CONTEXTS

Overall, the results of the 2008 SASS data analyses were similar to the results of the 2004 SASS data analyses, although a few differences emerged by school level and community.

School-Level Differences. Elementary teachers were significantly more likely than secondary teachers to participate in common planning time (64 percent vs. 43 percent) and seminars/classes for beginning teachers (76 percent vs. 71 percent), while secondary teachers more often (although still rarely) reported having a reduced teaching schedule or number of preparations (15 percent vs. 9 percent). In addition, elementary teachers were more likely to have an array of induction supports (three or more supports).

School Community Differences. Teachers in suburban schools were significantly more likely to participate in an induction program than teachers in urban and rural schools (77 percent, 71 percent, and 70 percent, respectively). Teachers in rural schools had significantly lower participation in common planning time and seminars/classes for beginning teachers than teachers in suburban and urban schools. Rural teachers in 2008 were less likely than teachers in suburban and urban school contexts to have an array of supports (three or more supports).

Schools Serving Different Student Populations. In 2008, teachers in schools with the highest proportions of minority enrollment were significantly less likely to participate in induction and mentorship programs than all other schools. Whereas about two-thirds (68 percent) of teachers in schools in the highest quintile of minority enrollment reported participating in an induction program, at least three-quarters (75 percent to 78 percent) of teachers in other schools reported participating in an induction program. Seventy-four percent of teachers in schools with the highest minority enrollment reported working closely with a mentor, while 78 percent

to 86 percent of teachers in schools with smaller minority enrollments reported doing so. These disparities have grown since 2004, when there were no significant differences. On the other hand, teachers in schools with higher percentages of minority students had significantly higher participation in common planning, with 59 percent of teachers in the highest minority enrollment schools reporting common planning as compared to only 47 percent in schools with the lowest minority enrollment.

Similarly, teachers in schools with the highest FRL program enrollment had the lowest participation in induction programs (70 percent) versus teachers in schools with lower FRL enrollment (73 percent to 80 percent). They also reported less supportive communication with administrators than

teachers in schools with the least FRL program enrollment (77 percent vs. 82 percent). However, teachers in schools with the highest FRL enrollment reported the highest participation rates in common planning (63 percent vs. 51 percent to 55 percent).

There were few significant differences reported among teachers teaching in schools with varying LEP enrollment. However, teachers in schools with the highest LEP enrollment had slightly higher participation in common planning (59 percent vs. 54 percent for teachers in schools with no LEP enrollment), and slightly higher participation in seminars/classes for beginning teachers (76 percent vs. 72 percent for teachers in schools with no LEP enrollment). Both of these differences were statistically significant.

V. Variation in Professional Learning Opportunities Across States

Finding 9: *On most topics, teachers' participation in professional development varies widely across states. A few states stand out for offering teachers significantly more intensive professional learning opportunities. While there are generally high participation rates in induction programs across most states, rates of participation also vary widely.*

Professional development on the content of the subject(s) taught has remained a national priority as well as the highest priority among the six topics surveyed across all states, with little variation across states. In 2008, the percentage of teachers reporting participation in professional development on **Content of the subject(s) taught** ranged from 79 percent in Ohio to 95 percent in New Hampshire. For the most part, the same states that stood above the rest in 2004 remained at the top: New Hampshire, Vermont, Utah, and Arkansas. (Tables 1, 3, 5, 7, 9, and 11 in Appendix B display the state-by-state results across all of the SASS professional development items in the 2008 Teacher Questionnaire.) In terms of the intensity of professional development (hours of participation reported), Arkansas (66 percent) and Vermont (64 percent) had the highest percentages of teachers reporting more than 16 hours of professional development on this topic.

On the other hand, there was wide variation across states in participation in professional development on **Uses of computers for instruction**. In 2008, rates of participation ranged from 41 percent in Rhode Island to 89 percent in Arkansas. For the

most part, the states with the highest levels of participation in 2004 retained their top participation rates in 2008: Arkansas, West Virginia, Connecticut, and Alabama, with South Carolina rising steeply (from 69 percent in 2004 to 82 percent in 2008). However, the intensity of professional development (measured by hours of participation) on uses of computers for instruction was still very low in 2008 across most states. Hawaii (30 percent), South Carolina (28 percent), and Vermont (28 percent) had the highest percentages of teachers reporting more than 16 hours of professional development on this topic.

There was also wide variation in participation in professional development on **Reading instruction** in 2008, from 52 percent in Oklahoma to 83 percent in Florida. This is surprising, given the increased focus on reading achievement due to the No Child Left Behind program (NCLB), the federal Reading First program, and Title I. Some states with the highest participation rates in 2004 remained at the top: Washington, D.C.; Florida; Kansas; North Carolina; and Utah. Other states rose in their rankings: Iowa (from 64 percent to 78 percent), Minnesota (61 percent to 75 percent), Oregon (65 percent to 73 percent), and Wyoming (65 percent to 72 percent). However, the intensity of professional development on this topic was consistently low, despite fairly high participation rates. The highest percentages of teachers reporting more than 16 hours of professional development on this topic were in Iowa (42 percent); Vermont (41 percent); Idaho (38 percent); and Washington, D.C. (37 percent). It is unclear

what relationship Reading First has with these rates of participation, particularly since all states received funding from this program by 2007 (USDOE, 2003-2007). Clearly state-specific initiatives also mattered. It may be that resources from Reading First made professional development on this topic more accessible for a wider number of teachers, but the resources were insufficient or training models were inadequate to provide more intensive professional development.

Last, while participation in professional development on **Student discipline and classroom management** was fairly low, there was also some variation across states in 2008, from 28 percent in Maine to 68 percent in Arkansas. While Oklahoma and Texas remained at the top of the list in both 2004 and 2008, Arkansas, Missouri, Tennessee, and Nebraska were newcomers near the top in 2008. The level of intensity of professional development on this topic remains very low. The highest proportions of teachers reporting more than 16 hours on this topic were found in Washington, D.C. (27 percent); Wisconsin (24 percent); and Vermont (22 percent).

While the national average levels of participation in professional development on **Teaching students with disabilities** and **Teaching LEP students** were relatively low, there were also large variations across states. In 2008, Arkansas (58 percent), Texas (55 percent), Illinois (52 percent), Minnesota (52 percent), Kentucky (51 percent), and Maryland (50 percent) had the highest rates of participation in professional development related to teaching students with disabilities, while Montana (31 percent) and South Carolina (31 percent) had among the lowest participation rates. However, the intensity of professional development experiences in even the states

with the highest rates of participation was still uniformly low (generally 10 percent or less reporting more than 16 hours over the last three years). Teachers in Washington, D.C., reported the highest intensity, and yet only 15 percent of them reported more than 16 hours over the last three years.

In terms of professional development on teaching limited-English proficient students, in 2008 the highest rates of participation were in Arizona (75 percent), California (63 percent), Oregon (51 percent), and Texas (46 percent), while the lowest rates were in Ohio and West Virginia (both 7 percent). This variation makes sense in light of the high percentage of LEP students in states like Arizona, California, and Texas. In some of these states, the number of hours reported over the last three years clearly stood above the rest: States with the highest percentage of teachers reporting more than 16 hours of professional development were Arizona (41 percent), California (27 percent), and Florida (21 percent). However, there are no comparative data from 2004 because the amount of time spent was not queried in the same way in that year's survey.

Cumulative participation in professional development. The total cumulative hours of professional development that teachers spent during the previous 12 months on all six topics queried in the SASS do not represent the total duration of all professional development activities, as there were likely to be other types of professional development in which teachers participated. Nonetheless, they provide an estimate of the variation across states of total time that teachers spent in professional development in a given year. (See Appendix A: Dataset and Methods for a description of how the average cumulative hours for the nation and each state were computed.)

Based on this analysis, we found that the average reported number of hours of professional development across the national sample was 43.9 hours during the previous 12 months. This national average of cumulative hours across the six topics is low, given what research has suggested as the minimum duration for professional development to have an significant impact on student achievement. For example, Yoon and colleagues (2007) found that the average duration of professional development in a *single* program that has had significant effects on student achievement is at least 49 hours long. And Blank and colleagues (2008) found that effective math and science professional development programs had an average duration of at least 100 hours. However, given this average number of hours spent across six topics, one could imagine a re-allocation of resources to support teacher engagement in more sustained, intensive professional development on one topic, which is more likely to impact their learning and practice.

The range in the average cumulative hours of professional development across states varied from 33 hours in Oklahoma to 56 hours in Arkansas and Arizona. Other states with high average numbers of hours included Utah (56 hours); Florida (54 hours); Washington, D.C. (54 hours); California (53 hours); Oregon (51 hours); and Vermont (51 hours).

Variation in Participation in Induction Across States. In 2008, the highest levels of participation in induction were in South Carolina (93 percent), Iowa (93 percent), Delaware (92 percent), Colorado (91 percent), and Pennsylvania (90 percent). The lowest levels of participation in induction programs were in South Dakota (41

percent) and North Dakota (42 percent). The highest percentages of beginning teachers working closely with a master/mentor teacher were in Iowa (91 percent), Oklahoma (90 percent), Kentucky (90 percent), Pennsylvania (88 percent), and Utah (88 percent), while the lowest percentages were in South Dakota (45 percent) and North Dakota (61 percent).

As for teachers' participation in the full range of possible induction supports, South Carolina had the highest percentage of teachers (51 percent) reporting all four of the most common induction supports (mentor, common planning time, seminars/classes, regular supportive communication with a principal/administrator) in both 2004 and 2008. In 2008, other states that had among the highest percentages of teachers reporting all four of those induction supports included Utah (47 percent), Colorado (47 percent), and North Carolina (43 percent).

Professional Development Access Index.

To provide a visually simpler way to assess the overall level of access that teachers in each state have to professional development and induction supports, we created a Professional Development Access Index to recognize states based on 11 indicators for which we allocated them “apples.” This index captures access to professional learning opportunities along two primary dimensions—access to induction supports and access to professional development—which include recognition for meeting the following criteria on the 11 indicators below:

I. Access to Induction Supports

1. At least 80 percent of beginning teachers (i.e., those with five or fewer years of teaching experience) reported participating in an

induction program in their first year of teaching.

2. At least 80 percent of beginning teachers reported having a mentor/master teacher during the first year of teaching.

3. At least 51 percent of beginning teachers reported having had four out of five possible induction supports, including induction, mentoring, seminars/workshops, reduced prep/course load, and supportive communication with a principal.

II. Access to Professional Development Across Six Topics

4. At least 80 percent of teachers reported participating in professional development on the content of the subject(s) they teach.

5. At least 51 percent of teachers reported 17 hours or more of professional development on the content of the subject(s) they teach.

6. At least two-thirds (67 percent) of teachers reported participating in professional development on uses of technology in instruction.

7. At least two-thirds (67 percent) of teachers report participating in professional development on reading instruction.

8. At least two-thirds (67 percent) of teachers reported participating in professional development on student discipline and classroom management.

9. At least 51 percent of teachers reported participating in professional development on teaching students with disabilities.

10. At least 51 percent of teachers reported participating in professional development on teaching LEP students.

11. On average, teachers reported at least 50 cumulative hours during the previous 12 months of professional development across the six topics above.

The rationale for the selection of indicators and the criteria set for each indicator is described in Appendix A.

Table 7 (see pages 36–37) provides an overview of how states performed along each of these 11 indicators, on the two major dimensions, and overall. The number of criteria met by each state is indicated by the number of apples that appear in each cell. The states meeting the highest number of criteria include Arkansas (with 8 apples overall) and Utah (with 7 apples overall). Several states met 5 of the 11 indicators: Colorado, Kentucky, North Carolina, Oregon, and South Carolina, suggesting substantial efforts to make professional development more widely available.

**TABLE 7. PROFESSIONAL DEVELOPMENT ACCESS INDEX—
STATE PERFORMANCE ON 11 INDICATORS**

Professional Development Access Index – State Performance on 11 Indicators							
	Total Points (Out of 11 Possible Indicators)	Induction Indicators	1) At least 80% new teachers participating in induction	2) At least 80% new teachers working with a mentor teacher	3) At least 51% new teachers reporting 4 out of 5 induction supports	Professional Development Indicators	4) At least 80% teachers reporting PD on content
Nat'l			73.8%	78.4%	39.5%		87.5%
AL	🍎🍎🍎					🍎🍎🍎	🍎
AK	🍎🍎					🍎🍎	🍎
AZ	🍎🍎🍎🍎					🍎🍎🍎🍎	🍎
AR	🍎🍎🍎🍎🍎🍎🍎	🍎		🍎		🍎🍎🍎🍎🍎🍎	🍎
CA	🍎🍎🍎					🍎🍎🍎	🍎
CO	🍎🍎🍎🍎🍎	🍎🍎	🍎	🍎		🍎🍎🍎	🍎
CT	🍎🍎🍎🍎	🍎🍎	🍎	🍎		🍎🍎	🍎
DE	🍎🍎	🍎	🍎			🍎	🍎
DC	🍎🍎🍎🍎					🍎🍎🍎🍎	🍎
FL	🍎🍎🍎🍎					🍎🍎🍎🍎	🍎
GA	🍎					🍎	🍎
HI	🍎					🍎	🍎
ID	🍎					🍎	🍎
IL	🍎🍎					🍎🍎	🍎
IN							
IA	🍎🍎🍎🍎	🍎🍎	🍎	🍎		🍎🍎	🍎
KS	🍎🍎🍎					🍎🍎🍎	🍎
KY	🍎🍎🍎🍎	🍎		🍎		🍎🍎🍎🍎	🍎
LA	🍎🍎🍎	🍎🍎	🍎	🍎		🍎	🍎
ME	🍎🍎🍎🍎	🍎		🍎		🍎🍎🍎	🍎
MD	🍎🍎					🍎🍎	🍎
MA	🍎🍎🍎	🍎	🍎			🍎🍎	🍎
MI	🍎🍎					🍎🍎	🍎
MN	🍎🍎🍎🍎					🍎🍎🍎🍎	🍎
MS	🍎					🍎	🍎
MO	🍎🍎🍎🍎	🍎🍎	🍎	🍎		🍎🍎	🍎
MT	🍎					🍎	🍎
NE	🍎					🍎	🍎
NV	🍎					🍎	🍎
NH	🍎🍎🍎					🍎🍎🍎	🍎
NJ	🍎🍎					🍎🍎	🍎
NM	🍎🍎🍎	🍎🍎	🍎	🍎		🍎	🍎
NY	🍎🍎🍎	🍎🍎	🍎	🍎		🍎	🍎
NC	🍎🍎🍎🍎	🍎🍎	🍎	🍎		🍎🍎🍎	🍎
ND	🍎🍎					🍎🍎	🍎
OH	🍎🍎	🍎🍎	🍎	🍎			
OK	🍎🍎🍎🍎	🍎🍎	🍎	🍎		🍎🍎	🍎
OR	🍎🍎🍎🍎					🍎🍎🍎🍎	🍎
PA	🍎🍎🍎🍎	🍎🍎	🍎	🍎		🍎🍎	🍎
RI	🍎					🍎	🍎
SC	🍎🍎🍎🍎	🍎🍎🍎	🍎	🍎	🍎	🍎🍎	🍎
SD	🍎🍎🍎					🍎🍎🍎	🍎
TN	🍎					🍎	🍎
TX	🍎🍎🍎					🍎🍎🍎	🍎
UT	🍎🍎🍎🍎🍎🍎	🍎🍎🍎	🍎	🍎	🍎	🍎🍎🍎🍎	🍎
VT	🍎🍎🍎					🍎🍎🍎	🍎
VA	🍎🍎					🍎🍎	🍎
WA	🍎🍎					🍎🍎	🍎
WV	🍎🍎🍎🍎	🍎🍎	🍎	🍎		🍎🍎	🍎
WI	🍎					🍎	🍎
WY	🍎🍎🍎					🍎🍎🍎	🍎

Table continues next page

TABLE 7. (CONT'D)

	5) At least 51% teachers with 17 or more hours of PD on content	6) At least 67% teachers reporting PD on uses of computers	7) At least 67% teachers reporting PD on reading instruction	8) At least 67% teachers reporting PD on student discipline/classroom management	9) At least 51% teachers reporting PD on teaching students with disabilities	10) At least 51% teachers reporting PD on teaching ELL students	11) At least 50 average cumulative hours of PD on 6 topics
Nat'l	44.8%	67.0%	61.5%	45.7%	42.3%	27.9%	43.9 hrs
AL		🍏	🍏				
AK	🍏						
AZ			🍏			🍏	🍏
AR	🍏	🍏	🍏	🍏	🍏		🍏
CA						🍏	🍏
CO	🍏		🍏				
CT		🍏					
DE							
DC	🍏		🍏				🍏
FL		🍏	🍏				🍏
GA							
HI							
ID							
IL					🍏		
IN							
IA			🍏				
KS		🍏	🍏				
KY		🍏	🍏		🍏		
LA							
ME	🍏	🍏					
MD		🍏					
MA	🍏						
MI		🍏					
MN	🍏		🍏		🍏		
MS							
MO		🍏					
MT							
NE							
NV							
NH	🍏	🍏					
NJ		🍏					
NM							
NY							
NC		🍏	🍏				
ND		🍏					
OH							
OK		🍏					
OR	🍏	🍏	🍏			🍏	🍏
PA		🍏					
RI							
SC		🍏					
SD	🍏	🍏					
TN							
TX		🍏			🍏		
UT	🍏		🍏				🍏
VT	🍏						🍏
VA		🍏					
WA	🍏						
WV		🍏					
WI							
WY		🍏	🍏				

Conclusions

There is broad consensus among researchers and practitioners about the design of high-quality professional development for teachers. For professional development to have a significant impact on teaching practice and on student learning, it needs to be intensive; sustained over time; embedded in teachers' day-to-day work in schools; related directly to teachers' work with students; able to engage teachers in active learning of the content to be taught and how to teach that content; coherent with district policies related to curriculum, instruction, and assessment; and structured to regularly engage teachers in local professional learning communities where problems of practice are solved through collaboration.

There is good news and bad news in the nation's progress regarding high-quality professional learning opportunities for teachers. With respect to the good news: Over the last decade, there appears to have been some progress nationally in improving access to induction supports, including mentorship programs, for beginning teachers, as well as small increases in participation rates in content-focused professional development. In light of research on the links between induction supports and reduced teacher attrition (Ingersoll and Kralik, 2004), as well as improvements in the rated performance of retained teachers (Bartell, 1995; Smith & Ingersoll, 2004; Olebe, 2001), this is encouraging news.

The national focus on the content that teachers teach also seems appropriate, given that a large percentage of teachers rate this topic as a top priority for further professional development. Research also identifies professional development around content as an important building block for potentially effective professional development.

Also in the good news category is that access to professional development on content, reading instruction, student discipline/classroom management, and teaching spe-

cial education and LEP students was greater in both 2004 and 2008 for teachers in urban school contexts, and in schools with the highest proportions of poverty, minority, and LEP enrollment. Teachers in these schools reported higher cumulative hours of professional development overall.

The nationwide focus on identifying and closing achievement gaps over the last decade has led to concentrated efforts in underperforming schools deemed to be "failing" to meet Annual Yearly Progress under No Child Left Behind, particularly focused on improving instruction in literacy and mathematics at the elementary level. In some cases, whole-school efforts to improve literacy instruction, for example, through intensive school-based literacy programs and coaching, may have had the positive effect of providing greater opportunities for teachers to engage in intensive, sustained, school-based professional development activities that are coherent with district curriculum, assessment, and accountability policies. While there are debates about whether the impact of NCLB on teaching practice has been positive or negative, few challenge the notion that NCLB had an impact on teaching practice, particularly in low-

performing schools more vulnerable to state accountability policies.

The bad news is that there has been little progress in offering sustained professional development around content and a sharp decline in the intensity of professional development on topics such as reading instruction, classroom management, and uses of technology for instruction. This may be, in part, a trade-off states have made to preserve content-focused learning opportunities, given limited time and resources for professional development. However, it also appears that states and districts have reduced overall resources for professional development on these topics, and have adopted models of professional development that are more truncated and short-term.

This movement toward less intensive and less sustained forms of professional development on topics unrelated to content may or may not support improved instruction. Extensive time spent on professional development on student discipline and classroom management may be unnecessary or even counterproductive, if it signals that teachers have had poor preparation in this basic area and are focusing on it in lieu of serious curriculum planning that would involve students in more engaging and productive instruction. On the other hand, extensive professional development on reading instruction, teaching students with disabilities, and teaching limited-English Proficient students—areas that require sophisticated knowledge and skill—may be essential to support the development of high-quality instruction and student achievement.

Rather than investing in episodic and disconnected professional development workshops on the topics that matter most

for improved student achievement, state and federal policies should place a priority on more sustained, intensive, and school-based professional development designs shown as effective by research.

Furthermore, while states have made clear progress in the provision of induction and mentoring supports for beginning teachers, teachers in schools with the highest concentrations of poor and minority students have significantly lower participation rates in induction and mentoring. This suggests room for improvement in state induction policies and in the provision of resources for such programs. Even when state laws mandate induction programs, requirements for local education agencies to provide a proportion of the funding for the program invariably lead to inequities in funding, and consequently in the availability and quality of induction programs for beginning teachers. In high-need schools (those with the highest populations of economically disadvantaged, minority, and LEP students), there is often a revolving door of first-year and emergency credentialed teachers. In such schools, induction supports are direly needed and yet these are the contexts with the lowest rates of participation in induction programs. States should consider providing additional funding and guidance to these types of schools to support the provision of high-quality induction programs.

Similarly, in under-resourced urban and rural schools, and in schools with high concentrations of poor, minority, and LEP students, there are significantly lower rates of participation in professional development on the uses of computers for instruction. A decade into the 21st century, not only do we lack universal access to computers and

networks in U.S. schools, but the disparities in access hit the most economically disadvantaged populations.

Finally, while about two-thirds of teachers have structured opportunities for collaboration in their schools, these opportunities do not amount to more than a few hours of collaborative work per week, far less than what is routinely available to teachers in other schools and what is needed to move schools forward.

STATE DIFFERENCES

The Schools and Staffing Surveys are limited in what they reveal about the prevalence of specific forms of high-quality professional development and the kinds of supports that schools provide teachers for engaging in these forms of professional development. Nonetheless, the SASS data do tell us at a broad level that the United States as a whole is far from meeting the standard of high-quality professional development, but there are pockets of excellence and exemplary practices in some states. Some states have clearly made significant strides in offering both induction opportunities for beginning teachers (South Carolina, Iowa, Colorado, Pennsylvania, Delaware) and professional learning opportunities for veteran teachers (Arkansas, Colorado, Oregon, Utah).

States vary widely in the level of control they exert on local professional development policies and practices, and the link between state policies and the effectiveness of professional development practices is relatively unexplored in research (see, for example, Loeb, Miller, & Strunk, 2009, for a review of state policies related to teacher professional development). Despite

the potential for high-quality professional development to make a substantial difference in student achievement (e.g., Saunders, Goldenburg, & Gallimore, 2009), little is known about the state and district policies and practices that support teachers' access to it. Current state and local district policies designed to ensure minimum levels of teacher engagement in professional development (e.g., a minimum number of hours to meet license renewal requirements) or that specify particular topics of professional development be required (e.g., state history, civics) may or may not make a difference.

NEEDS FOR FURTHER RESEARCH

The data from the Schools and Staffing Survey provide some broad-level indicators of how the nation and individual states are doing with respect to participation in different topics of professional development. However, much more information about professional development is missing. For example, we know little about the context and form of the professional development that teachers are engaged in. Are most of the opportunities for professional learning provided by external workshops, conference, and courses? Or do teachers have substantial opportunities to work collaboratively with other teachers in their schools on local problems of practice, to co-plan their curriculum and lessons with grade-level teams, to participate in lesson study or classroom observation with their peers, or to work across grade-level teams and content areas on a whole school reform effort? Given what research tells us about the features of high-quality professional development, we recommend that the Institute for Education Sciences (the federal agency responsible for creating and administering the SASS) reinstate some of the questions

found in previous SASS questionnaires and consider building new questions into future versions of the SASS Teacher Questionnaire that would allow for an evaluation of the context and nature of teachers' professional learning opportunities (aside from the topics of professional development). In addition, given that the quality of professional development is clearly linked to the effectiveness of efforts to improve instruction and student achievement, both the federal government and the states should invest in collecting this kind of information as part of regular evaluations of policies and programs aimed at improving instruction and student achievement.

More research is needed to document the effectiveness of particular features of professional development and their impact on instruction and student achievement. Desimone (2009) proposes a common framework for conducting research on the effectiveness of professional development that focuses on five key features of

professional development (based on an emergent consensus grounded in research) as contributing to the effectiveness of professional development. These five features are: a) content focus, b) active learning, c) coherence, d) duration, and e) collective participation.

Researchers should not abandon qualitative, survey, and observational methods in the design of such studies, given that quasi-experimental and longitudinal studies (designed to isolate the effects of a particular professional development feature on student achievement) are quite difficult and expensive to conduct. At the same time, we need disciplined methods and rigorous research designs that allow for causal inferences in order to improve the credibility of research on professional development. The CCSSO has compiled a set of recommendations from experienced researchers for evaluating more fully and accurately the effectiveness of professional development programs (Blank & de las Alas, 2008).

Recommendations

Based on our analysis, we make the following recommendations:

1. States and districts should reshape their policies and strategies related to professional development and instructional improvement to reduce their investment in less effective, short-term approaches and to support teachers' engagement in the kinds of sustained professional development that research shows is more effective.

The SASS data tell us that while most teachers are getting professional development on the content they teach, the number of contact hours they experience on a single topic in a given year is insufficient to make a difference in student achievement based on empirical research on effective professional development. Birman and colleagues (2007) reported that in the 2004-05 fiscal year, federal funds (through Title I and Title II) provided at least \$1.5 billion for state spending on professional development, and it is likely that states and districts collectively allocated additional local funds for professional development. It has been estimated that about \$24 billion has been spent on professional development in the years since Title II was created under NCLB (Islas, 2010).

2. States and districts should widely disseminate research on high-quality professional development and information on models that have been shown by research to have a significant positive impact on instruction and student achievement.

Well-informed district management of professional development is important, given

that districts and schools are primarily responsible for shaping the content and form of professional development for teachers (and are also most qualified to determine the specific needs of teachers and students in particular schools).

3. States and districts should target resources for professional learning in order to “level the playing field” across school levels and communities.

The SASS data reveal that there is inequitable access to professional development for secondary teachers (as compared with elementary teachers) and for teachers in rural schools (as compared with urban and suburban schools). The data also reveal inequitable access for teachers in high-need schools to induction supports and to professional development on using technology for instruction.

4. The federal government and states should collect data about the particular features of professional development that teachers are engaged in and view as useful.

Given that research has found that high-quality professional development can have a significant impact on teaching quality and student achievement, better data collection will make it possible to more effectively assess the quality of professional development and target resources, as well as measure the impact of investments in programs meant to improve teaching quality.

5. More research is needed to assess the link between 1) specific state and district policies and practices and 2) greater access

for teachers to high-quality professional development at the local level.

There is wide variation in states' policies regarding local professional development practices and little to no empirical research that demonstrates a connection between particular types of policies and more effective professional development for teachers. This research would help state and district policymakers craft and implement more productive initiatives.

It is unclear what set of state and national policies will lead to more effective professional development practices at the local level. We need more data and research on the specific policies, practices, and condi-

tions that are linked to improved opportunities to learn for teachers and that are likely to lead to improvements in instructional practice. In the next phase of this study, we will examine the policies and local professional development practices of several “high-performing” states and districts through in-depth case studies of several states and districts that show evidence of high levels of teacher participation in professional development as well as improvements in student achievement on the National Assessment of Education Progress. Through these case studies, we hope to deepen our understanding of the kinds of policy contexts and local practices that lead to excellence in professional development at both the state and local levels.

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Appendix A: Dataset and Methodology

SCHOOLS AND STAFFING SURVEY 2007-08

To update our analyses of the status of professional development in the United States, we used the School and Staffing Survey dataset of 2007-08. SASS includes data on the characteristics and qualifications of teachers and principals, schools' teacher hiring practices, teachers' professional development, and a number of other aspects of schools across the nation. The SASS dataset allows comparisons of public and private schools and staffs, and the sampling is representative of all states (and the District of Columbia) for public schools across the country.

We restricted our sample to schools and regular or itinerant teachers in the public sector. The total size of the sample in 2007-08 was approximately 35,800 teachers. To account for the stratified probability sample design scheme used in SASS, we used two types of weighting variables. The first weight is the sampling weight which adjusts for non-response and oversampling and is used so that estimates represent the population rather than simply the sample. The replication weights are variables containing the necessary information for computing the standard errors of point estimates without giving away any information regarding the identity of any respondents. The use of both types of weights (probability and replication) is necessary for the correct calculation of point estimates and their standard errors.

We used information on teachers provided by two different sources: the Teacher Questionnaire and the School Questionnaire. Each teacher and school in the SASS dataset has unique control numbers. Therefore, we were able to match teacher and school data by using the school control number. This allowed us to link the state and other school context variables (school grade level, school community, percentage minority enroll-

ment, percentage LEP enrollment, percentage enrolled in the Free and Reduced Lunch program) to teacher responses.

Composite variables. To aid our analysis, we created a number of composite variables that were included in the SASS data files. For example, we created several composite variables for induction, four of which focused on measuring the extent of different kinds of induction support given to first-year teachers (three out of four supports, all four supports, four out of five supports, all five supports). Another composite variable reported the total number of induction supports by combining the data on individual SASS survey items.

Another composite variable was created to roughly estimate the total number of hours of non-induction professional development that individual teachers participated in across the six topics surveyed (content of the subject(s) taught, use of technology for instruction, reading instruction, student discipline and classroom management, teaching students with disabilities, and teaching LEP students). To estimate the total number of hours of professional development that teachers were engaged in across these six topics, we computed a sum of hours

based on the number of hours reported for each topic (0 hours; 8 or fewer hours; 9 to 16 hours; 17 to 32 hours; 33 hours or more). Since these categories represented a range of hours, the mid-point value of each category was substituted for the category selected by the teachers to arrive at an average value for each category. These average (mid-point) values for all six topics of professional development were then added to arrive at a sum for each teacher record.

On one hand, this computed average is an overestimate, since teachers were asked to report the number of hours during the last three years for the last two topics (teaching students with disabilities, teaching LEP students). On the other hand, there are likely to be additional hours of professional development on other topics that were not reported. However, the computed figure provides a relative estimate of the average total annual time on professional development on these six specific topics across states and school contexts. These averages, as well as statistically significant differences between the national and state averages, are reported and noted in Appendix B: Table 5. In addition, average total hours are computed and compared for different school contexts (grade level; urbanicity; student poverty level; minority enrollment; LEP enrollment). Average total hours for each school context, along with statistically significant differences in average total hours between different school contexts, are reported and noted in Appendix B: Tables 59-68.

Last, we created a **Professional Development Access Index** (a state report card of sorts) that provides an easier, simpler way to summarize and evaluate each state's ability to provide access to the range of induction and in-service professional de-

velopment supports surveyed in the SASS Teacher Questionnaire. This index awards points to states (symbolized by apples in Table 7) based on 11 different indicators. Each of the indicators is listed below in the left-hand column and the rationale for each criterion is explained in the right-hand column.

Analysis Strategies. Our analysis consisted of two types of comparisons—of state averages to the national average and of averages across quintiles or quartiles of specific student population characteristics. For the first type, we computed the national average for all variables of interest. Then, using the sampling and replication weights, we compared the average value of teachers' responses in each state to the national average. In Tables 1, 3, 5, 7, 9, and 11 in Appendix B, we note state averages that were significantly higher than the national average at the .05, .01, and .001 levels. (On items with reverse scales—the school climate questions—we looked for state averages that were significantly lower than the national average.)

Several characteristics of school communities that may be associated with differences in school academic performance and/or teacher working conditions were used to analyze participation rates in professional development: School grade level (elementary vs. secondary); school urbanicity (large city/central, urban fringe, small town/rural); school minority enrollment (divided into quintiles); school poverty level as measured by the percentage of students eligible for the national Free and Reduced Lunch program (divided into quartiles); and percentage of students classified as limited-English proficient (divided into quintiles). (These school-level data—obtained from 2007-08 School Questionnaires that school admin-

PROFESSIONAL DEVELOPMENT ACCESS INDEX—CRITERIA FOR EVALUATION

INDICATOR	RATIONALE
A. Access to Induction Supports	
1. At least 80% of beginning teachers (with 5 or fewer years of teaching experience) report participating in an induction program in their first year of teaching.	Many states are moving toward “universal access” to induction supports for beginning teachers. Eighty percent participation was set as the criterion because it represents a critical mass that approaches “universal access.”
2. At least 80% of beginning teachers report having a mentor/master teacher during their first year of teaching.	
3. At least 51% of beginning teachers report having had 4 out of 5 possible induction supports, including induction, mentoring, seminars/workshops, reduced prep/course load, and supportive communication with a principal.	A high-quality induction program would provide all five of the different types of induction supports queried in the SASS. Four out of five possible supports represents a strong level of support for beginning teachers that is approaching full support. Fifty-one percent of teachers was set as the cut point because it represents at least a simple majority of teachers.
B. Access to In-service Professional Development	
1. At least 80% of teachers report participating in professional development on the content of the subject(s) they teach.	Eighty percent participation was set as the criterion because it represents a critical mass that approaches “universal access.” States universally seem to have invested deeply in content-focused professional development, so 80% is a reasonable criterion.
2. At least 51% of teachers report 14 hours or more of professional development on the content of the subject(s) they teach.	The duration of professional development on content matters for impact on teaching and learning. Most teachers do not get more than 14 hours of professional development on a single topic, but some states have invested in more intensive professional development. Fifty-one percent of teachers was set as the cut point because it represents at least a simple majority of teachers within a given state.

Continues next page

3. At least 67% of teachers report participating in professional development on Uses of technology in instruction.	Professional development on these topics (especially reading instruction) is relatively high, but not quite as high as content-focused PD. Sixty-seven percent was set as the cut point because it represents a clear majority of teachers, but does not require “universal access” for a state to receive credit.
4. At least 67% of teachers report participating in professional development on Reading instruction.	
5. At least 67% of teachers report participating in professional development on student discipline and classroom management.	
6. At least 51% of teachers report participating in professional development on teaching students with disabilities.	These two kinds of professional development are relatively rare in most U.S. schools, but are more common in schools with high percentages of students with disabilities and LEP students. The criterion of 51% recognizes that this topic of PD is rare, but that there are school contexts in which heavy investments in these topics of PD have been made.
7. At least 51% of teachers report participating in professional development on Teaching LEP students.	
8. Cumulative hours of professional development across the six topics above average at least 50 hours.	In a review of empirical studies, the average number of PD hours found to be effective in positively impacting student achievement (Yoon et al., 2007) was 49 hours. While the computed cumulative hours of professional development in this study represents six different topics, rather than a focused number of hours on one topic, it provides an estimate of the duration of professional development experienced by teachers.

istrators had completed—were linked with the data from the Teacher Questionnaire.) Tables 2, 4, 6, 8, 10, and 12 in Appendix B display the participation rates across these school context variables for all induction and professional development items. These tables do not indicate when the percentages are significantly different between categories. Statistically significant differences ($p < .05$) in participation levels, ratings of professional development experiences, and average cumulative hours of professional development across the school context categories are reported in Tables 19 to 68 in Appendix B.

The 2007-08 national averages for public school teachers are compared to findings from the 2003-04 and 1999-2000 SASS administrations when data are comparable. Original analyses were completed on the 2003-04 and 2007-08 SASS public school datasets, but not the 1999-2000 dataset. Data for 1999-2000 were obtained from Choy, Chen, Bugarin, & Broughman (2006), a statistical analysis of the professional development items in SASS. Variations in teachers’ reports across states are then examined, and the state averages are compared to the national average. Last, variations in participation in professional

development across school contexts (grade level; urbanicity; student poverty level; minority enrollment; LEP enrollment) are examined to determine whether participation in professional development activities varies across different types of school communities.

Teachers' reports of participation in these various forms of professional development cannot be equated with *access to* or *availability of* opportunities for professional development because some of these opportunities are required and others are voluntary. However, we infer that levels of participation are a reflection of the access to and availability of professional development opportunities across states and in different school contexts.

OTHER SOURCES OF DATA

Two other sources of survey data were used to inform the analyses in this paper. The Met Life Survey of the American Teacher: Collaborating for Student Success (conducted in fall 2009) was released early in 2010. Descriptive data from that report as well as from an advance report of results were used to examine the prevalence of and conditions for teacher collaboration in schools.

We did not have access to the raw data and could not run our own analyses.

Another source of survey data used in this paper was the first Teaching and Learning International Survey, administered by the Organisation for Economic Co-operation and Development in 2007-08. Descriptive data were obtained from two early reports on this data (OECD, 2009; Scheerens, 2009). Tables used in these reports are available online, as is the original dataset, provided by the OECD statistical services, which was used for one analysis (allocation of teachers' work hours to teaching and non-teaching responsibilities). Because the 23 OECD nations that participated in the TALIS represent a wide range of countries that are not necessarily exemplary in their professional development practices or in the level of their students' achievement, we drew data from a sub-sample of the countries: OECD countries that ranked in the top half (or at least the top 14) of countries on the PISA (Programme for International Student Assessment) assessments in reading, mathematics, and science. The data for a subset of the 23 TALIS countries—Australia, Austria, Belgium (Flemish Community), Denmark, Estonia, Ireland, Korea, and Poland—were used as the basis for comparison with U.S. teacher data from the SASS.

Appendix B: Results from the 2007-08 Schools and Staffing Survey (NATIONAL CENTER FOR EDUCATION STATISTICS)

Source for all Appendix B tables:
National Center for Education Statistics, 2007–08 Schools and Staffing Survey

Key for color coding for Appendix B tables:

$p < 0.05$ higher than nat'l avg.

$p < 0.01$ higher than nat'l avg.

$p < 0.001$ higher than nat'l avg.

TABLE 1: PROFESSIONAL DEVELOPMENT FOR TEACHERS IN FIRST YEAR OF TEACHING (BY STATE)

	Percent of teachers who participated in induction program during first year of teaching	Teachers who received the following types of support during first year of teaching						
		a) Worked closely with master or mentor teacher in first year of teaching	b) Common Planning Time with teachers in their subject	c) Seminars or classes for beginning teachers	d) Regular supportive communication with principal, other administrators, or department chair	At least 3 of supports a-d	All 4 supports (a-d)	Avg. number supports (a-d)
Nat'l	73.8%	78.4%	55.7%	73.6%	79.8%	67.9%	36.5%	2.87
AL	62.3%	74.5%	64.9%	69.2%	83.2%	65.9%	41.9%	2.92
AK	69.6%	79.8%	36.6%	53.0%	73.0%	45.1%	18.2%	2.42
AZ	64.6%	67.8%	56.4%	69.7%	73.4%	59.3%	29.7%	2.67
AR	74.1%	84.5%	56.1%	55.8%	81.5%	66.1%	28.6%	2.78
CA	75.1%	75.2%	59.2%	77.9%	74.0%	66.5%	38.8%	2.86
CO	90.6%	86.2%	59.0%	81.2%	87.0%	75.6%	46.6%	3.13
CT	82.1%	83.9%	52.1%	75.5%	82.8%	71.4%	38.4%	2.94
DE	91.5%	79.2%	52.9%	78.7%	75.2%	67.9%	39.1%	2.86
DC	61.4%	63.1%	52.4%	50.5%	61.9%	45.8%	20.4%	2.28
FL	76.9%	74.4%	62.1%	80.9%	83.8%	72.3%	41.9%	3.01
GA	62.2%	78.2%	67.6%	74.4%	81.0%	74.2%	40.9%	3.01
HI	52.7%	66.9%	57.8%	65.6%	67.9%	59.3%	34.3%	2.58
ID	69.1%	77.9%	50.2%	69.6%	80.5%	71.0%	34.7%	2.78
IL	74.3%	71.5%	42.8%	66.2%	76.4%	59.0%	26.9%	2.57
IN	70.0%	75.6%	40.3%	58.6%	79.7%	53.7%	22.1%	2.54
IA	92.7%	91.0%	40.1%	69.9%	76.6%	62.0%	24.3%	2.78
KS	66.8%	74.4%	47.8%	60.5%	77.8%	56.1%	27.5%	2.61
KY	78.3%	89.7%	64.1%	70.4%	86.4%	78.2%	42.7%	3.11
LA	83.4%	82.2%	58.1%	77.7%	85.5%	77.3%	41.8%	3.03
ME	71.6%	86.0%	29.9%	53.4%	82.5%	51.2%	12.7%	2.52
MD	77.3%	76.5%	67.8%	82.3%	81.7%	76.9%	39.5%	3.08
MA	80.5%	77.6%	47.2%	54.7%	69.1%	52.3%	24.9%	2.49
MI	65.3%	76.8%	41.8%	59.7%	75.0%	56.5%	20.3%	2.53
MN	68.1%	69.3%	42.0%	62.7%	74.9%	52.8%	29.4%	2.49
MS	55.3%	66.8%	58.8%	60.9%	75.0%	56.4%	33.4%	2.61
MO	82.3%	87.0%	49.2%	84.4%	83.8%	76.9%	36.3%	3.04
MT	47.4%	67.0%	39.2%	47.7%	79.4%	48.1%	22.7%	2.33
NE	62.4%	68.0%	47.6%	60.6%	80.7%	57.0%	27.8%	2.57
NV	73.3%	62.9%	53.9%	86.4%	74.7%	63.3%	35.5%	2.78
NH	72.2%	73.9%	45.5%	52.1%	74.6%	51.6%	16.5%	2.46
NJ	68.4%	79.7%	50.8%	73.8%	81.4%	66.8%	35.2%	2.86
NM	73.1%	83.0%	50.7%	73.0%	73.0%	62.0%	31.9%	2.80
NY	69.6%	83.2%	58.9%	71.5%	85.3%	72.9%	39.0%	2.99
NC	88.9%	84.9%	56.1%	89.4%	75.7%	72.8%	42.8%	3.06
ND	42.1%	61.2%	32.0%	44.0%	72.3%	40.8%	14.7%	2.09
OH	88.7%	86.6%	43.2%	78.4%	82.4%	72.8%	32.2%	2.91
OK	79.3%	90.2%	51.6%	50.2%	84.5%	65.7%	26.7%	2.77
OR	56.8%	75.0%	46.8%	63.0%	76.7%	58.9%	26.6%	2.61
PA	90.1%	87.9%	42.3%	70.3%	74.0%	63.3%	29.0%	2.75
RI	61.8%	75.0%	49.8%	54.1%	66.3%	58.7%	25.6%	2.45
SC	93.3%	84.0%	67.1%	88.7%	82.8%	77.9%	51.4%	3.23
SD	40.7%	45.3%	29.4%	49.7%	70.0%	33.0%	13.1%	1.94
TN	52.5%	75.8%	52.9%	75.2%	87.0%	71.7%	37.4%	2.91
TX	68.3%	77.7%	68.3%	78.9%	83.9%	75.5%	45.9%	3.09
UT	82.9%	87.5%	56.1%	89.4%	85.7%	81.7%	47.0%	3.19
VT	59.4%	78.0%	38.4%	33.1%	69.4%	43.1%	9.9%	2.19
VA	77.7%	76.2%	61.3%	77.7%	78.8%	66.4%	41.4%	2.94
WA	75.5%	73.5%	47.7%	70.0%	73.7%	59.9%	28.9%	2.65
WV	70.9%	83.9%	42.2%	64.4%	84.4%	64.9%	26.7%	2.75
WI	71.8%	73.7%	40.3%	69.3%	72.7%	56.7%	25.4%	2.56
WY	69.0%	71.4%	42.8%	63.2%	71.3%	51.8%	25.5%	2.49

¹ Extra classroom assistance (e.g., teacher aide) is not included in the previous induction supports because we do not consider it to be an induction support.

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TABLE 1. (CONT'D)

Teachers who received the following types of support during first year of teaching					
	e) Reduced teaching schedule OR number of preparations	At least 4 of the 5 supports (a-e)	All 5 supports (a-e)	Avg. number of 5 supports (a-e)	Extra classroom assistance (e.g., teacher aide) ¹
Nat'l	11.3%	39.5%	6.5%	2.99	28.2%
AL	13.2%	46.1%	7.8%	3.05	31.2%
AK	3.2%	18.8%	2.6%	2.46	28.2%
AZ	7.2%	30.7%	5.4%	2.74	24.6%
AR	11.8%	30.5%	7.2%	2.90	28.5%
CA	9.6%	40.6%	5.7%	2.96	32.6%
CO	13.8%	48.5%	8.4%	3.27	28.7%
CT	11.1%	39.5%	6.9%	3.05	30.5%
DE	5.2%	41.2%	3.2%	2.91	22.7%
DC	10.1%	21.3%	5.8%	2.38	26.7%
FL	13.5%	47.7%	6.5%	3.15	28.6%
GA	9.1%	43.5%	5.1%	3.10	26.4%
HI	13.1%	35.1%	7.5%	2.71	33.3%
ID	5.6%	36.0%	2.5%	2.84	27.8%
IL	10.2%	29.6%	5.2%	2.67	21.7%
IN	8.3%	25.7%	3.3%	2.62	24.3%
IA	9.3%	28.0%	3.1%	2.87	29.0%
KS	10.9%	30.6%	3.9%	2.71	30.7%
KY	9.5%	46.4%	4.6%	3.20	38.1%
LA	8.9%	42.7%	5.9%	3.12	33.3%
ME	5.3%	14.8%	2.1%	2.57	34.8%
MD	11.7%	43.5%	6.4%	3.20	25.4%
MA	6.7%	28.0%	1.7%	2.55	20.5%
MI	9.6%	23.7%	4.9%	2.63	26.6%
MN	7.7%	32.4%	2.4%	2.57	23.3%
MS	13.7%	36.0%	8.9%	2.75	28.5%
MO	11.5%	39.0%	6.0%	3.16	23.0%
MT	6.1%	24.0%	4.0%	2.39	34.2%
NE	8.2%	30.2%	2.4%	2.65	37.3%
NV	9.2%	37.6%	6.5%	2.87	24.9%
NH	5.5%	17.7%	3.7%	2.52	23.7%
NJ	8.8%	39.0%	4.1%	2.95	21.8%
NM	8.4%	35.1%	3.0%	2.88	20.0%
NY	18.0%	45.0%	7.5%	3.17	33.1%
NC	17.9%	46.6%	13.7%	3.24	32.9%
ND	9.1%	16.4%	3.4%	2.19	28.6%
OH	9.6%	37.3%	3.7%	3.00	17.6%
OK	10.2%	29.7%	5.1%	2.87	18.9%
OR	6.5%	28.2%	2.1%	2.68	35.5%
PA	6.9%	30.1%	4.1%	2.82	26.7%
RI	7.2%	25.6%	5.8%	2.52	28.5%
SC	9.9%	54.0%	5.1%	3.33	19.2%
SD	5.8%	15.0%	1.4%	2.00	31.2%
TN	8.6%	40.2%	3.9%	2.99	34.2%
TX	15.0%	47.6%	12.3%	3.24	30.8%
UT	18.1%	51.1%	11.4%	3.37	31.4%
VT	8.3%	11.4%	0.0%	2.27	29.4%
VA	8.4%	44.9%	4.8%	3.02	32.9%
WA	10.6%	33.6%	3.7%	2.76	21.3%
WV	9.3%	30.3%	5.3%	2.84	20.6%
WI	10.3%	27.7%	4.5%	2.66	30.6%
WY	6.6%	26.2%	4.4%	2.55	25.5%

¹ Extra classroom assistance (e.g., teacher aide) is not included in the previous induction supports because we do not consider it to be an induction support.

TABLE 2: PROFESSIONAL DEVELOPMENT FOR TEACHERS IN FIRST YEAR OF TEACHING (BY SCHOOL CONTEXT VARIABLES)

		Percent of teachers who participated in induction program during first year of teaching ²	Teachers who received the following types of support during first year of teaching						Avg. number supports (a-d)
			a) Worked closely with master or mentor teacher in first year of teaching ²	b) Common Planning Time with teachers in their subject ²	c) Seminars or classes for beginning teachers ²	d) Regular supportive communication with principal, other administrators, or department chair ²	At least 3 of supports (a-d)	All 4 supports (a-d)	
National		73.8%	78.4%	55.7%	73.6%	79.8%	67.9%	36.5%	2.87
School Level	Elem	74.5%	78.9%	63.7%	76.0%	80.1%	71.5%	41.2%	2.99
	Sec	73.8%	78.0%	42.7%	71.4%	79.5%	63.3%	29.4%	2.72
Urbanicity	City	70.6%	78.1%	57.8%	74.7%	78.8%	67.8%	37.2%	2.89
	Urban Fringe	76.5%	78.4%	57.1%	75.2%	80.0%	69.8%	37.7%	2.91
	Small Town/Rural	70.1%	78.6%	47.5%	66.7%	80.9%	61.8%	31.1%	2.74
% Minority Enrollment	<5.6%	74.5%	85.8%	46.6%	68.0%	82.6%	66.2%	31.2%	2.83
	5.6-16.2%	76.6%	80.2%	48.8%	71.2%	82.3%	66.9%	31.7%	2.82
	16.2-37.6%	78.0%	79.7%	56.8%	78.2%	82.4%	71.6%	40.9%	2.97
	37.6-78.0%	76.2%	78.3%	58.8%	78.4%	80.7%	70.2%	39.4%	2.96
	>78.0%	68.0%	74.0%	59.1%	70.6%	75.4%	65.0%	35.7%	2.79
% Free/Reduced Lunch	< 20.0%	80.2%	81.1%	51.1%	75.1%	82.0%	69.1%	34.9%	2.89
	20.0-37.96%	76.3%	78.5%	54.5%	76.2%	80.3%	68.5%	37.8%	2.89
	37.96-58.02%	73.0%	79.1%	51.7%	72.3%	80.4%	67.6%	34.9%	2.83
	>58.02%	69.4%	76.3%	63.0%	72.6%	77.1%	67.2%	38.5%	2.89
% LEP	0%	73.9%	79.9%	53.9%	71.6%	81.8%	67.6%	35.7%	2.87
	<2.5%	74.6%	76.1%	51.5%	74.7%	81.8%	68.5%	33.0%	2.84
	2.5-5%	76.9%	80.1%	53.5%	72.9%	79.2%	68.2%	38.0%	2.86
	5-10%	71.2%	74.3%	56.7%	74.0%	75.8%	65.4%	37.7%	2.81
	>10%	73.3%	77.7%	59.3%	75.9%	77.6%	68.6%	37.9%	2.90

² Extra classroom assistance (e.g., teacher aide) is not included in the previous induction supports because we do not consider it to be an induction support

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TABLE 2. (CONT'D)

Teachers who received the following types of support during first year of teaching				
e) Reduced teaching schedule or number of preparations ²	At least 4 of the 5 supports (a-e)	All 5 supports (a-e)	Avg. number of 5 supports (a-e)	Extra classroom assistance (e.g., teacher aide) ²
11.3%	39.5%	6.5%	2.99	28.2%
9.1%	43.2%	6.2%	3.08	31.1%
15.0%	34.4%	7.2%	2.87	22.1%
13.1%	40.3%	7.0%	3.02	28.9%
10.8%	40.9%	6.6%	3.01	27.3%
10.0%	33.5%	5.3%	2.84	29.8%
9.7%	33.6%	5.8%	2.93	24.1%
9.3%	34.5%	4.5%	2.92	26.9%
11.6%	45.3%	5.9%	3.09	29.1%
11.7%	41.6%	8.0%	3.08	27.9%
12.3%	38.7%	7.0%	2.92	29.9%
12.8%	39.2%	7.1%	3.02	23.7%
8.9%	40.0%	5.1%	2.98	25.7%
11.4%	38.2%	6.3%	2.95	28.4%
11.5%	41.0%	7.1%	3.01	32.7%
9.2%	38.8%	4.5%	2.96	28.3%
14.8%	37.4%	8.2%	2.99	18.3%
15.9%	41.5%	11.3%	3.02	22.4%
11.4%	40.0%	7.1%	2.92	21.7%
11.9%	40.5%	7.5%	3.02	33.5%

² Extra classroom assistance (e.g., teacher aide) is not included in the previous induction supports because we do not consider it to be an induction support

TABLE 3: FOCUS OF PROFESSIONAL DEVELOPMENT ACTIVITIES (BY STATE)

	The content of the subject(s) they teach					The use of computers for instruction					Reading Instruction		
	All	For 8 hours or less	For 9-16 hours	For 17-32 hours	For 33 hours or more	All	For 8 hours or less	For 9-16 hours	For 17-32 hours	For 33 hours or more	All	For 8 hours or less	For 9-16 hours
Nat'l	87.5%	18.3%	24.5%	21.0%	23.8%	67.0%	41.0%	15.8%	6.2%	4.8%	61.5%	27.9%	17.5%
AL	89.0%	18.7%	26.8%	21.1%	22.4%	76.5%	50.0%	15.7%	6.8%	4.0%	70.1%	30.0%	18.2%
AK	83.3%	11.8%	16.5%	22.2%	32.8%	60.9%	30.7%	16.4%	7.9%	6.0%	55.3%	18.0%	19.9%
AZ	84.6%	17.3%	22.3%	19.5%	25.5%	59.2%	41.4%	11.9%	3.3%	2.5%	68.1%	30.2%	18.8%
AR	92.0%	12.5%	13.9%	22.7%	42.9%	88.8%	46.2%	29.4%	7.0%	6.2%	67.5%	25.1%	19.0%
CA	88.0%	15.4%	23.6%	20.6%	28.4%	62.1%	36.6%	14.5%	5.7%	5.4%	57.0%	21.5%	15.0%
CO	89.0%	15.2%	22.4%	19.7%	31.7%	62.8%	39.8%	12.5%	4.7%	5.9%	68.5%	24.0%	26.3%
CT	86.7%	24.8%	27.6%	19.9%	14.4%	77.1%	53.4%	16.8%	3.9%	3.0%	66.3%	32.6%	19.9%
DE	88.8%	18.7%	26.3%	21.3%	22.5%	56.0%	34.8%	11.0%	4.5%	5.7%	61.7%	31.8%	18.0%
DC	89.4%	18.5%	17.0%	19.8%	34.1%	42.5%	25.7%	6.8%	4.9%	5.2%	74.8%	29.1%	18.0%
FL	89.9%	17.4%	26.0%	20.6%	25.9%	70.3%	41.2%	16.2%	7.7%	5.2%	82.8%	32.8%	23.8%
GA	86.3%	17.6%	29.2%	17.7%	21.8%	65.6%	40.3%	15.8%	5.1%	4.3%	57.2%	26.3%	18.6%
HI	82.8%	12.6%	23.3%	21.3%	25.5%	48.9%	25.2%	9.1%	6.5%	8.0%	64.4%	26.0%	16.1%
ID	85.9%	14.3%	21.3%	20.0%	30.4%	42.2%	21.5%	10.0%	5.7%	5.0%	53.2%	17.9%	14.9%
IL	89.1%	25.7%	25.5%	20.8%	17.1%	59.9%	39.1%	11.6%	5.3%	3.9%	66.5%	35.6%	14.8%
IN	79.6%	23.9%	24.0%	16.6%	15.1%	56.4%	38.2%	10.2%	4.8%	3.2%	61.4%	31.2%	13.2%
IA	82.7%	15.8%	19.8%	22.1%	24.9%	50.5%	31.4%	12.4%	4.5%	2.2%	78.4%	23.6%	21.7%
KS	85.6%	19.1%	25.4%	19.7%	21.5%	73.8%	42.8%	17.3%	7.0%	6.8%	75.7%	38.2%	21.3%
KY	89.2%	14.8%	28.1%	27.2%	19.0%	74.3%	51.5%	17.0%	3.7%	2.1%	66.8%	32.9%	20.5%
LA	83.2%	20.4%	25.9%	21.6%	15.4%	65.8%	36.2%	14.6%	8.2%	6.7%	63.2%	33.5%	14.7%
ME	87.2%	14.0%	21.1%	22.5%	29.7%	68.4%	38.1%	16.5%	8.0%	5.8%	60.1%	23.1%	17.7%
MD	89.9%	26.5%	22.1%	19.8%	21.5%	72.0%	45.1%	16.7%	6.6%	3.5%	66.0%	31.4%	21.2%
MA	89.4%	15.2%	22.0%	20.7%	31.4%	57.8%	32.3%	16.6%	3.0%	5.8%	53.2%	18.0%	15.6%
MI	88.1%	16.5%	22.0%	26.0%	23.6%	61.5%	43.3%	11.2%	3.5%	3.5%	57.3%	26.8%	16.3%
MN	89.1%	16.9%	21.6%	22.6%	28.0%	67.2%	42.6%	15.1%	5.8%	3.7%	75.1%	36.8%	18.0%
MS	80.0%	26.4%	22.1%	15.4%	16.2%	59.4%	36.0%	11.9%	6.7%	4.9%	56.0%	30.5%	12.9%
MO	89.2%	16.8%	25.3%	21.7%	25.4%	69.8%	41.3%	14.6%	7.8%	6.0%	63.6%	26.0%	15.7%
MT	87.0%	14.4%	22.8%	26.6%	23.2%	61.2%	31.6%	16.5%	6.9%	6.2%	52.5%	22.1%	15.3%
NE	81.7%	14.7%	30.5%	19.1%	17.4%	66.0%	38.2%	16.7%	6.6%	4.5%	56.8%	25.7%	15.6%
NV	89.0%	16.6%	25.6%	20.4%	26.4%	62.3%	37.7%	13.1%	7.2%	4.2%	64.1%	22.9%	20.1%
NH	94.6%	12.4%	23.7%	26.0%	32.5%	68.1%	44.2%	12.4%	5.1%	6.5%	61.7%	23.7%	17.3%
NJ	89.7%	22.1%	27.1%	17.8%	22.8%	67.5%	49.0%	11.0%	3.4%	4.2%	53.7%	25.7%	15.6%
NM	83.5%	17.0%	20.9%	21.1%	24.6%	57.2%	35.9%	12.1%	4.6%	4.7%	64.7%	26.6%	17.7%
NY	89.3%	21.2%	27.7%	18.2%	22.2%	66.3%	39.0%	15.7%	9.0%	2.6%	54.7%	22.2%	17.3%
NC	88.8%	25.1%	24.7%	20.7%	18.2%	69.5%	40.9%	16.8%	6.7%	5.1%	73.0%	29.8%	23.7%
ND	83.0%	13.0%	25.4%	23.0%	21.6%	72.2%	31.0%	23.4%	11.3%	6.5%	54.1%	21.8%	17.9%
OH	79.3%	21.0%	24.1%	16.6%	17.6%	60.3%	40.2%	12.5%	4.5%	3.1%	47.0%	25.1%	10.3%
OK	84.0%	23.6%	22.0%	18.5%	19.9%	69.1%	48.6%	12.8%	4.5%	3.2%	52.0%	27.5%	11.7%
OR	87.5%	14.1%	18.8%	24.1%	30.4%	58.2%	38.8%	11.2%	4.4%	3.8%	73.2%	24.7%	25.9%
PA	84.5%	17.9%	20.9%	19.3%	26.3%	74.3%	40.1%	18.1%	8.1%	8.0%	63.1%	29.1%	18.3%
RI	85.5%	16.8%	24.0%	13.2%	31.4%	40.6%	25.7%	6.8%	5.3%	2.8%	59.2%	25.3%	16.0%
SC	86.1%	21.4%	25.2%	18.0%	21.5%	81.5%	39.8%	19.0%	10.5%	12.1%	59.6%	26.8%	16.7%
SD	84.9%	15.7%	17.9%	21.7%	29.7%	69.3%	30.6%	15.7%	11.7%	11.3%	60.6%	23.6%	17.6%
TN	85.5%	19.6%	25.9%	26.0%	14.0%	65.0%	39.9%	14.7%	7.8%	2.7%	60.3%	30.5%	17.6%
TX	91.0%	14.6%	26.5%	27.0%	22.9%	76.4%	43.6%	21.4%	6.4%	4.9%	54.5%	27.5%	15.3%
UT	93.8%	10.1%	24.0%	22.6%	37.0%	64.5%	35.7%	16.6%	6.0%	6.2%	71.4%	28.3%	21.0%
VT	90.8%	11.2%	15.7%	22.0%	41.8%	61.9%	32.5%	12.4%	7.6%	9.5%	53.9%	17.1%	15.0%
VA	88.6%	21.5%	24.3%	19.2%	23.6%	75.3%	47.6%	18.2%	6.5%	3.0%	64.7%	36.4%	13.3%
WA	91.4%	11.8%	23.3%	23.4%	32.9%	61.7%	36.3%	13.6%	6.8%	5.0%	64.9%	29.0%	22.5%
WV	84.7%	21.2%	20.5%	21.7%	21.3%	80.6%	43.5%	21.8%	8.7%	6.6%	53.2%	22.3%	15.3%
WI	81.7%	14.7%	20.4%	19.0%	27.6%	62.9%	37.3%	13.7%	5.9%	5.9%	57.1%	23.1%	16.0%
WY	81.4%	14.8%	18.3%	20.0%	28.3%	68.8%	35.4%	18.5%	8.6%	6.2%	72.0%	25.5%	24.7%

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TABLE 3. (CONT'D)

Percent of teachers who participated in the past 12 months in professional development activities focusing on:							
Nat'l	Reading instruction (cont.)		Student discipline and management in the classroom				
	For 17-32 hours	For 33 hours or more	All	For 8 hours or less	For 9-16 hours	For 17-32 hours	For 33 hours or more
Nat'l	9.5%	7.7%	45.7%	32.9%	9.0%	3.1%	2.0%
AL	13.1%	8.8%	48.1%	38.1%	7.0%	1.8%	1.1%
AK	9.7%	7.7%	41.6%	24.3%	9.4%	5.3%	2.6%
AZ	9.9%	9.3%	45.8%	30.0%	12.2%	2.8%	0.9%
AR	12.0%	11.4%	67.9%	47.8%	15.5%	3.4%	1.2%
CA	8.4%	12.1%	39.5%	25.9%	8.5%	3.2%	1.9%
CO	9.5%	8.7%	45.9%	28.4%	11.0%	5.2%	1.3%
CT	8.1%	5.7%	33.2%	27.6%	3.7%	0.8%	1.1%
DE	7.7%	4.2%	51.2%	37.0%	10.2%	2.8%	1.1%
DC	12.6%	15.1%	51.5%	27.7%	10.1%	7.8%	5.9%
FL	13.4%	12.9%	44.4%	29.6%	7.8%	3.2%	3.8%
GA	6.3%	6.0%	39.6%	30.2%	5.7%	1.8%	1.9%
HI	14.2%	8.0%	36.6%	22.2%	7.6%	4.6%	2.2%
ID	9.4%	11.0%	44.1%	24.5%	11.9%	4.9%	2.9%
IL	9.4%	6.7%	46.4%	36.3%	6.2%	2.9%	1.1%
IN	10.6%	6.4%	34.5%	27.3%	4.6%	1.4%	1.2%
IA	18.2%	14.9%	33.7%	22.6%	5.5%	3.4%	2.3%
KS	8.2%	8.0%	48.3%	32.4%	10.9%	3.2%	1.8%
KY	6.2%	7.2%	54.1%	38.8%	10.8%	3.2%	1.4%
LA	10.1%	5.0%	54.6%	34.2%	11.7%	4.8%	3.8%
ME	9.1%	10.3%	28.3%	18.8%	6.2%	1.2%	2.1%
MD	7.7%	5.7%	45.4%	36.1%	6.4%	0.9%	1.9%
MA	11.5%	8.1%	38.4%	24.0%	7.5%	4.5%	2.3%
MI	9.1%	5.0%	41.4%	30.5%	7.1%	1.8%	2.0%
MN	10.9%	9.4%	49.6%	35.2%	7.6%	3.4%	3.3%
MS	7.6%	5.0%	52.1%	37.8%	9.3%	2.6%	2.5%
MO	12.1%	9.8%	59.6%	39.2%	14.2%	3.4%	2.8%
MT	8.2%	6.9%	48.5%	25.6%	13.0%	6.1%	3.8%
NE	8.6%	6.8%	51.6%	34.3%	9.5%	5.1%	2.7%
NV	11.0%	10.1%	41.8%	25.2%	10.8%	3.9%	1.9%
NH	9.6%	11.1%	43.3%	31.7%	7.4%	2.3%	1.9%
NJ	8.7%	3.8%	43.7%	35.1%	6.1%	1.0%	1.5%
NM	7.8%	12.5%	33.6%	21.9%	7.3%	3.1%	1.2%
NY	8.9%	6.4%	36.7%	24.3%	8.8%	1.4%	2.1%
NC	11.1%	8.3%	48.9%	33.2%	9.7%	4.2%	1.8%
ND	8.2%	6.2%	44.6%	27.2%	12.6%	3.4%	1.4%
OH	5.6%	6.0%	42.4%	29.2%	7.5%	4.1%	1.5%
OK	7.6%	5.2%	55.6%	43.3%	8.0%	2.6%	1.6%
OR	14.2%	8.4%	49.0%	31.3%	12.1%	4.4%	1.2%
PA	10.3%	5.5%	41.2%	29.4%	5.7%	3.0%	3.1%
RI	8.3%	9.5%	30.7%	22.4%	4.7%	2.1%	1.6%
SC	7.6%	8.5%	50.6%	35.6%	9.5%	3.0%	2.5%
SD	9.4%	10.0%	43.9%	26.0%	11.2%	4.5%	2.3%
TN	8.2%	4.0%	54.9%	40.1%	9.8%	4.1%	0.8%
TX	7.3%	4.4%	60.7%	43.0%	13.0%	3.1%	1.7%
UT	11.5%	10.6%	52.3%	33.4%	10.4%	4.9%	3.6%
VT	11.1%	10.7%	41.5%	23.0%	9.4%	4.5%	4.6%
VA	8.8%	6.3%	43.8%	32.9%	5.9%	3.1%	1.9%
WA	9.2%	4.2%	41.8%	25.0%	10.9%	3.0%	3.0%
WV	8.7%	6.9%	47.8%	37.4%	6.4%	2.4%	1.5%
WI	10.1%	7.9%	39.2%	23.4%	6.5%	6.5%	2.8%
WY	12.1%	9.8%	51.4%	31.2%	12.2%	4.1%	3.9%

**TABLE 4: FOCUS OF PROFESSIONAL DEVELOPMENT ACTIVITIES
(BY SCHOOL CONTEXT VARIABLES)**

Percent of teachers who participated in the past 12 months in professional development activities focusing on:														
		The content of the subject(s) they teach					Uses of computers for instruction					Reading instruction		
		All ²	For 8 hours or less ²	For 9-16 hours ²	For 17-32 hours ²	For 33 hours or more ²	All ²	For 8 hours or less ²	For 9-16 hours ²	For 17-32 hours ²	For 33 hours or more ²	All ²	For 8 hours or less ²	For 9-16 hours ²
Nat'l		87.5%	18.3%	24.5%	21.0%	23.8%	67.0%	41.0%	15.8%	6.2%	4.8%	61.5%	27.9%	17.5%
School Level	Elem.	91.0%	17.8%	24.9%	21.7%	23.3%	67.2%	42.5%	15.1%	5.8%	4.4%	71.4%	25.4%	18.5%
	Sec	81.3%	19.3%	23.8%	19.7%	24.8%	67.1%	38.3%	17.0%	7.0%	5.4%	43.7%	35.6%	14.7%
Urbanicity	City	90.1%	18.5%	23.2%	22.0%	24.4%	65.9%	41.7%	15.6%	6.1%	4.3%	64.9%	26.4%	18.1%
	Urban Fringe	87.5%	18.3%	25.2%	20.6%	23.6%	68.0%	40.9%	15.8%	6.1%	4.9%	60.6%	28.8%	17.4%
	Small Town/Rural	83.8%	18.3%	24.2%	21.0%	23.4%	65.6%	40.5%	16.1%	6.7%	5.0%	59.3%	27.6%	17.1%
% Minority Enrollment	<5.6%	85.2%	18.4%	24.7%	21.6%	21.7%	66.9%	40.0%	16.3%	6.5%	4.5%	56.1%	27.3%	17.0%
	5.6-16.2%	86.3%	19.7%	23.6%	19.6%	24.0%	67.7%	39.9%	16.4%	6.4%	4.1%	57.7%	28.4%	17.5%
	16.2-37.6%	88.0%	17.5%	24.6%	21.3%	24.4%	70.5%	41.4%	15.8%	6.3%	4.7%	61.9%	28.2%	18.6%
	37.6-78.0%	88.0%	18.0%	24.1%	21.8%	24.1%	67.3%	42.3%	15.2%	5.9%	5.2%	63.0%	29.6%	17.3%
	>78.0%	88.7%	18.4%	25.2%	20.8%	23.9%	63.7%	40.8%	15.6%	6.3%	5.0%	65.2%	26.2%	17.3%
% Free/Reduced Lunch	< 20.0%	86.3%	18.6%	24.7%	20.0%	24.2%	69.0%	39.4%	16.1%	6.5%	4.6%	54.5%	29.3%	17.6%
	20.0-37.96%	87.4%	18.8%	24.4%	20.8%	23.4%	68.4%	41.1%	15.6%	6.2%	4.5%	60.2%	28.8%	18.1%
	37.96-58.02%	86.5%	18.5%	24.2%	21.3%	23.4%	66.9%	42.3%	15.8%	5.9%	5.0%	61.2%	28.2%	17.1%
	>58.02%	89.4%	17.6%	24.6%	21.8%	23.9%	64.4%	41.6%	15.7%	6.3%	4.8%	69.5%	25.8%	17.5%
% LEP	0%	86.3%	20.2%	24.2%	20.2%	22.6%	67.3%	41.9%	15.2%	6.2%	4.5%	59.6%	28.4%	17.5%
	<2.5%	83.9%	19.8%	24.0%	20.2%	23.8%	69.8%	39.9%	15.4%	7.8%	5.5%	47.7%	36.4%	15.0%
	2.5-5%	85.9%	17.8%	24.3%	23.0%	22.6%	69.6%	39.5%	16.4%	7.2%	4.7%	59.2%	29.9%	18.9%
	5-10%	86.9%	15.7%	27.3%	20.5%	24.5%	66.7%	39.1%	16.8%	6.4%	5.5%	63.6%	28.3%	19.3%
	>10%	90.4%	16.3%	24.4%	22.0%	25.2%	65.3%	41.0%	16.3%	5.6%	4.7%	67.7%	25.1%	17.5%

Table continues next page

TABLE 4. (CONT'D)

Percent of teachers who participated in the past 12 months in professional development activities focusing on:						
Reading instruction (cont.)		Student discipline and management in the classroom				
<i>For 17-32 hours²</i>	<i>For 33 hours or more²</i>	All²	<i>For 8 hours or less²</i>	<i>For 9-16 hours²</i>	<i>For 17-32 hours²</i>	<i>For 33 hours or more²</i>
9.5%	7.7%	45.7%	32.9%	9.0%	3.1%	2.0%
10.3%	8.2%	46.1%	32.9%	9.1%	2.9%	2.0%
7.1%	6.0%	43.7%	33.4%	8.6%	3.3%	2.0%
9.4%	8.1%	49.7%	32.2%	9.5%	3.2%	2.4%
9.3%	7.3%	43.6%	33.0%	8.8%	2.9%	1.8%
10.3%	8.5%	45.9%	34.0%	9.0%	3.4%	2.2%
10.5%	6.7%	42.9%	32.5%	8.9%	3.3%	1.6%
9.5%	7.0%	39.7%	31.5%	8.2%	3.3%	2.5%
10.0%	7.2%	43.5%	34.4%	9.1%	2.6%	1.8%
9.3%	7.8%	51.5%	33.6%	9.4%	3.4%	1.9%
8.9%	9.0%	47.5%	32.4%	9.2%	2.9%	2.3%
9.0%	6.1%	38.1%	32.1%	8.5%	2.3%	2.2%
8.6%	7.9%	44.6%	32.5%	8.8%	3.5%	1.9%
10.7%	8.0%	47.2%	34.0%	8.5%	3.2%	2.0%
9.8%	8.6%	52.2%	33.2%	9.8%	3.2%	1.9%
9.7%	7.2%	44.5%	32.7%	8.5%	3.3%	2.1%
6.9%	5.3%	46.5%	35.1%	8.5%	2.9%	2.3%
8.5%	5.8%	45.3%	33.8%	10.2%	2.6%	1.6%
8.5%	7.7%	47.2%	30.5%	11.8%	2.9%	1.9%
10.2%	9.2%	46.6%	33.0%	9.0%	3.0%	1.9%

TABLE 5: FOCUS OF PROFESSIONAL DEVELOPMENT ACTIVITIES IN LAST 3 YEARS (BY STATE)

	Percent of teachers who participated in the past 3 years in professional development activities focusing on: ³ :										Average cumulative number of hours across 6 topics
	Teaching students with disabilities					Teaching limited English proficient students					
	All	For 8 hours or less	For 9-16 hours	For 17-32 hours	For 33 hours or more	All	For 8 hours or less	For 9-16 hours	For 17-32 hours	For 33 hours or more	
Nat'l	42.3%	25.5%	8.7%	3.8%	4.3%	27.9%	15.4%	4.9%	2.9%	4.7%	43.9
AL	46.4%	32.7%	8.0%	2.1%	3.5%	24.5%	20.1%	2.9%	0.9%	0.6%	42.6
AK	39.2%	19.8%	7.9%	5.3%	6.3%	26.3%	16.3%	4.3%	2.1%	3.6%	47.5
AZ	37.9%	23.7%	6.5%	2.7%	5.0%	74.6%	14.6%	18.5%	9.9%	31.7%	55.6
AR	58.2%	38.9%	9.3%	5.1%	5.0%	27.8%	19.6%	4.5%	1.3%	2.4%	55.8
CA	38.3%	22.2%	6.6%	4.5%	4.9%	62.7%	24.5%	12.5%	9.9%	15.7%	52.7
CO	35.5%	22.4%	7.4%	2.8%	2.8%	43.3%	23.1%	9.6%	6.5%	4.0%	48.1
CT	44.0%	31.2%	7.5%	3.3%	2.0%	17.2%	13.0%	1.7%	1.1%	1.4%	35.4
DE	41.3%	25.5%	7.5%	3.7%	4.6%	12.1%	7.4%	2.2%	1.8%	0.8%	39.3
DC	41.2%	17.1%	8.7%	4.7%	10.7%	24.2%	12.2%	2.7%	1.4%	8.0%	53.5
FL	37.2%	20.6%	6.7%	4.7%	5.2%	37.2%	11.5%	5.2%	6.0%	14.5%	54.0
GA	42.8%	22.9%	10.8%	5.1%	3.9%	21.3%	15.9%	2.2%	1.4%	1.8%	39.3
HI	35.6%	16.8%	10.1%	3.6%	5.0%	23.0%	13.8%	4.1%	2.4%	2.6%	44.2
ID	32.3%	17.7%	7.7%	4.0%	2.9%	31.7%	15.3%	8.5%	4.7%	3.3%	45.0
IL	51.8%	31.4%	12.0%	4.1%	4.3%	19.1%	13.9%	3.0%	1.4%	0.7%	38.8
IN	36.7%	24.5%	6.3%	2.6%	3.3%	18.7%	15.0%	2.1%	1.0%	0.6%	33.2
IA	38.9%	20.7%	10.2%	4.6%	3.5%	16.5%	10.8%	3.2%	1.4%	1.2%	44.4
KS	37.8%	23.6%	5.0%	4.7%	4.5%	23.4%	13.0%	3.3%	2.2%	4.9%	44.6
KY	50.5%	36.5%	7.7%	2.7%	3.7%	10.1%	9.1%	0.3%	0.6%	0.1%	40.0
LA	33.8%	19.3%	7.9%	2.3%	4.3%	7.5%	5.1%	0.9%	0.6%	0.9%	39.5
ME	34.0%	17.4%	7.4%	4.1%	5.1%	7.4%	4.5%	1.1%	0.8%	1.0%	43.4
MD	50.4%	32.6%	7.7%	5.7%	4.4%	14.7%	10.7%	2.3%	1.0%	0.7%	40.0
MA	47.6%	23.5%	12.0%	4.9%	7.3%	31.7%	10.8%	8.5%	4.9%	7.4%	49.2
MI	36.9%	22.3%	7.0%	3.3%	4.3%	10.0%	7.8%	0.3%	1.0%	0.8%	38.4
MN	51.7%	32.3%	9.4%	5.4%	4.5%	27.9%	20.1%	4.5%	2.1%	1.1%	46.6
MS	39.1%	27.0%	5.7%	2.8%	3.6%	11.8%	9.7%	1.1%	0.3%	0.6%	34.5
MO	40.4%	25.8%	8.2%	2.2%	4.2%	15.9%	13.0%	1.8%	0.6%	0.5%	45.1
MT	31.2%	18.2%	7.6%	1.8%	3.6%	7.3%	4.4%	1.5%	1.1%	0.2%	41.8
NE	33.8%	20.8%	7.5%	2.7%	2.9%	10.3%	7.2%	1.3%	0.3%	1.4%	38.4
NV	39.8%	21.6%	7.6%	5.7%	5.0%	44.9%	22.2%	11.7%	6.1%	5.0%	48.5
NH	46.2%	24.3%	11.1%	3.6%	7.2%	7.6%	3.5%	1.9%	1.3%	0.9%	47.6
NJ	44.2%	31.0%	6.4%	2.7%	4.0%	16.1%	13.0%	1.4%	0.3%	1.5%	36.8
NM	39.5%	22.5%	8.2%	5.0%	3.8%	39.2%	18.4%	10.9%	5.4%	4.5%	44.7
NY	36.7%	21.2%	8.8%	2.6%	4.1%	14.7%	9.5%	3.0%	1.0%	1.2%	39.0
NC	40.7%	23.2%	9.1%	3.1%	5.4%	28.1%	14.3%	6.5%	1.4%	5.9%	44.9
ND	36.9%	20.8%	7.2%	4.1%	4.9%	8.1%	4.3%	2.2%	0.5%	1.0%	42.4
OH	37.3%	23.9%	7.2%	2.1%	4.1%	6.7%	4.4%	1.3%	0.5%	0.4%	33.1
OK	42.2%	30.2%	6.0%	3.4%	2.6%	21.2%	17.0%	2.5%	1.0%	0.7%	36.1
OR	36.5%	21.1%	7.5%	3.6%	4.2%	51.1%	25.1%	8.5%	6.9%	10.7%	51.3
PA	48.6%	28.1%	10.8%	4.1%	5.6%	20.8%	15.2%	2.0%	0.9%	2.7%	44.9
RI	36.2%	20.3%	8.2%	3.9%	3.8%	14.1%	6.5%	3.0%	1.8%	2.8%	39.2
SC	31.3%	18.8%	7.1%	1.7%	3.6%	21.2%	17.9%	1.8%	0.6%	0.8%	43.5
SD	33.9%	18.9%	7.3%	2.8%	4.9%	9.0%	6.7%	0.9%	0.6%	0.8%	46.7
TN	40.6%	28.1%	7.6%	2.9%	2.0%	14.4%	11.5%	0.7%	1.5%	0.7%	36.7
TX	54.5%	32.2%	13.6%	5.1%	3.7%	46.3%	29.2%	9.0%	3.9%	4.2%	47.2
UT	36.4%	16.7%	8.9%	3.3%	7.5%	36.5%	17.5%	4.5%	5.3%	9.2%	55.5
VT	41.0%	21.7%	8.8%	3.9%	6.5%	11.1%	6.3%	1.9%	0.8%	2.0%	51.1
VA	44.1%	27.5%	9.6%	3.8%	3.2%	16.5%	11.6%	1.4%	1.8%	1.7%	40.5
WA	35.3%	22.3%	4.8%	3.3%	4.8%	31.8%	19.4%	5.1%	3.9%	3.4%	46.5
WV	40.8%	23.0%	9.7%	4.1%	4.0%	6.8%	4.9%	1.4%	0.1%	0.4%	40.7
WI	35.3%	22.2%	5.3%	3.3%	4.5%	13.3%	9.1%	1.6%	0.5%	2.1%	42.0
WY	35.8%	20.4%	7.7%	5.2%	2.5%	20.5%	14.1%	4.2%	1.1%	1.1%	46.8

**TABLE 6: FOCUS OF PROFESSIONAL DEVELOPMENT ACTIVITIES IN LAST 3 YEARS
(BY SCHOOL CONTEXT VARIABLES)**

		Percent of teachers who participated in the past 3 years in professional development activities focusing on:									
		Teaching students with disabilities					Teaching limited-English proficiency students				
		All ²	For 8 hours or less ²	For 9-16 hours ²	For 17-32 hours ²	For 33 hours or more ²	All ²	For 8 hours or less ²	For 9-16 hours ²	For 17-32 hours ²	For 33 hours or more ²
Nat'l		42.3%	25.5%	8.7%	3.8%	4.3%	27.9%	15.4%	4.9%	2.9%	4.7%
School Level	Elem.	26.4%	9.1%	3.8%	4.0%	9.6%	29.9%	19.0%	7.3%	5.0%	7.6%
	Sec	26.3%	8.8%	4.0%	4.5%	10.5%	25.6%	18.8%	7.7%	4.1%	9.0%
Urbanicity	City	25.8%	9.6%	3.8%	4.7%	10.8%	38.9%	20.6%	7.2%	5.6%	8.8%
	Urban Fringe	26.4%	8.7%	4.1%	4.1%	9.8%	26.2%	17.9%	7.9%	4.3%	7.8%
	Small Town/Rural	26.4%	9.0%	3.2%	4.4%	10.5%	17.5%	17.8%	5.7%	3.5%	6.1%
% Minority Enrollment	<5.6%	26.5%	8.6%	3.7%	4.2%	10.0%	6.8%	18.5%	2.1%	1.3%	3.8%
	5.6-16.2%	25.6%	8.3%	4.0%	4.2%	10.1%	15.5%	14.5%	5.0%	2.3%	4.7%
	16.2-37.6%	26.0%	9.8%	3.7%	3.9%	9.4%	28.1%	17.5%	7.0%	2.8%	8.8%
	37.6-78.0%	25.7%	9.8%	3.9%	4.2%	9.8%	36.6%	20.6%	6.5%	5.1%	7.9%
% Free/Reduced Lunch	>78.0%	27.0%	8.1%	4.0%	4.8%	11.3%	39.8%	19.4%	9.4%	6.3%	8.7%
	< 20.0%	27.2%	8.5%	3.6%	3.9%	9.3%	20.2%	18.8%	6.1%	3.7%	7.9%
	20.0-37.96%	25.9%	8.7%	4.1%	4.1%	9.9%	24.9%	18.1%	6.7%	4.1%	8.3%
	37.96-58.02%	25.1%	9.4%	3.9%	4.8%	11.1%	26.4%	18.5%	8.0%	3.4%	8.0%
% LEP	>58.02%	26.6%	9.3%	3.8%	4.3%	10.0%	38.7%	19.6%	8.0%	6.1%	7.7%
	0%	27.7%	8.0%	3.5%	3.8%	9.0%	14.9%	17.7%	5.3%	3.6%	8.6%
	<2.5%	30.2%	8.0%	3.2%	3.0%	6.9%	26.0%	21.0%	6.6%	2.7%	6.4%
	2.5-5%	30.6%	8.4%	2.8%	2.1%	5.0%	34.8%	19.9%	6.4%	2.7%	6.9%
	5-10%	27.2%	8.9%	4.5%	3.1%	7.2%	39.3%	19.4%	7.8%	5.1%	6.1%
>10%	22.9%	10.3%	4.5%	5.7%	13.5%	40.9%	18.8%	8.6%	5.8%	8.5%	

²Statistical significance of differences between categories of each school context variable reported in Tables 24-43

TABLE 7: USEFULNESS OF PROFESSIONAL DEVELOPMENT IN LAST 12 MONTHS (BY STATE)

How useful to teachers were professional development activities attended within the last 12 months with the following foci?										
Nat'l	The content of the subject(s) they teach					Uses of computers for instruction				
	Avg	Not useful = 1	Somewhat useful = 2	Useful = 3	Very Useful = 4	Avg	Not useful = 1	Somewhat useful = 2	Useful = 3	Very Useful = 4
Nat'l	2.93	1.9%	28.3%	44.5%	25.4%	2.85	4.1%	30.5%	41.6%	23.7%
AL	3.05	0.6%	26.4%	40.7%	32.4%	2.89	1.7%	33.6%	38.1%	26.5%
AK	3.03	1.2%	24.1%	45.5%	29.2%	2.78	4.4%	34.5%	39.5%	21.7%
AZ	2.91	1.8%	30.2%	43.1%	24.8%	2.74	5.9%	34.5%	38.8%	20.8%
AR	3.01	0.7%	27.6%	41.2%	30.4%	2.80	3.8%	31.0%	46.5%	18.7%
CA	2.83	2.7%	33.9%	40.7%	22.7%	2.80	7.0%	28.5%	41.5%	23.0%
CO	2.98	1.7%	24.8%	46.9%	26.6%	2.78	4.6%	35.1%	38.3%	22.1%
CT	2.83	3.5%	32.5%	41.3%	22.7%	2.77	6.1%	31.8%	40.8%	21.3%
DE	2.75	3.5%	38.0%	38.7%	19.9%	2.72	6.0%	35.9%	38.5%	19.6%
DC	3.07	1.6%	24.3%	40.1%	34.0%	2.96	4.5%	28.8%	33.3%	33.4%
FL	2.96	1.5%	27.1%	45.1%	26.3%	2.94	4.5%	25.9%	41.3%	28.3%
GA	3.01	1.9%	27.1%	39.4%	31.5%	2.97	4.1%	23.8%	43.3%	28.8%
HI	2.90	1.4%	31.1%	43.8%	23.8%	2.87	3.9%	29.5%	42.3%	24.3%
ID	3.10	1.2%	20.7%	44.4%	33.7%	2.90	4.3%	28.8%	40.0%	27.0%
IL	2.97	1.8%	28.4%	40.9%	28.9%	2.92	1.5%	31.6%	40.1%	26.9%
IN	2.86	1.9%	32.7%	43.6%	21.9%	2.73	3.3%	34.9%	47.5%	14.3%
IA	2.92	1.6%	28.1%	47.1%	23.1%	2.77	4.7%	32.4%	43.8%	19.1%
KS	2.89	3.3%	25.8%	48.9%	22.0%	2.75	5.2%	32.0%	45.6%	17.1%
KY	2.96	0.5%	27.5%	47.3%	24.7%	2.92	2.5%	28.2%	44.0%	25.2%
LA	3.01	1.0%	24.8%	46.4%	27.9%	2.99	3.1%	26.2%	39.4%	31.3%
ME	3.06	2.0%	21.6%	44.4%	32.0%	2.73	5.8%	33.8%	41.6%	18.8%
MD	2.90	2.2%	31.6%	39.7%	26.4%	2.90	4.4%	28.9%	39.0%	27.7%
MA	2.91	2.5%	31.1%	39.8%	26.6%	2.86	2.6%	33.5%	38.9%	25.0%
MI	2.84	3.5%	31.5%	43.0%	22.0%	2.72	3.7%	39.1%	39.1%	18.2%
MN	2.95	1.9%	27.5%	44.6%	26.0%	2.85	3.6%	32.4%	39.7%	24.3%
MS	2.94	3.7%	26.4%	42.2%	27.7%	2.99	4.0%	23.4%	42.2%	30.4%
MO	3.03	0.9%	22.0%	50.1%	27.1%	2.93	2.4%	27.1%	45.5%	25.0%
MT	3.05	0.9%	22.5%	47.1%	29.4%	2.88	2.4%	30.4%	43.9%	23.3%
NE	2.89	1.1%	31.0%	45.3%	22.6%	2.84	2.8%	31.0%	46.2%	20.1%
NV	2.91	1.9%	29.1%	45.5%	23.5%	2.86	3.2%	31.5%	41.1%	24.2%
NH	2.95	1.8%	26.7%	46.0%	25.6%	2.68	5.9%	35.8%	43.2%	15.1%
NJ	2.91	0.7%	29.1%	48.4%	21.8%	2.90	2.1%	31.2%	41.7%	25.0%
NM	2.89	3.5%	29.8%	40.3%	26.4%	2.80	4.8%	34.0%	37.7%	23.6%
NY	2.89	2.0%	29.4%	46.5%	22.1%	2.92	3.2%	30.4%	38.0%	28.4%
NC	2.93	1.6%	26.9%	48.4%	23.1%	2.86	5.1%	27.7%	43.7%	23.5%
ND	2.94	0.9%	27.0%	49.7%	22.4%	2.89	2.1%	30.8%	42.6%	24.5%
OH	2.97	1.1%	25.6%	48.2%	25.1%	2.81	2.5%	32.2%	47.3%	17.9%
OK	2.90	1.4%	30.1%	45.3%	23.2%	2.75	5.2%	33.9%	42.0%	18.9%
OR	2.97	1.5%	25.8%	46.8%	25.8%	2.78	4.4%	36.6%	35.6%	23.5%
PA	2.92	2.6%	27.7%	44.8%	24.9%	2.78	5.6%	31.3%	42.3%	20.8%
RI	2.87	3.5%	25.4%	51.3%	19.8%	2.80	4.7%	27.4%	51.1%	16.8%
SC	2.98	1.3%	27.8%	42.7%	28.2%	3.02	1.4%	26.7%	40.0%	31.9%
SD	3.03	1.4%	21.9%	48.6%	28.2%	2.88	2.6%	31.4%	41.5%	24.5%
TN	2.91	2.7%	28.5%	43.6%	25.2%	2.83	1.9%	34.1%	42.6%	21.4%
TX	2.95	1.3%	28.1%	45.3%	25.3%	2.82	4.9%	30.2%	42.6%	22.3%
UT	3.06	1.7%	20.0%	48.5%	29.8%	2.87	3.8%	28.7%	44.1%	23.4%
VT	3.11	0.7%	20.0%	47.4%	31.9%	2.80	6.1%	32.7%	36.8%	24.5%
VA	2.92	2.8%	27.6%	44.2%	25.4%	2.85	6.2%	27.6%	41.1%	25.1%
WA	2.97	2.8%	22.2%	49.7%	25.2%	2.81	1.7%	37.0%	39.6%	21.7%
WV	2.95	2.9%	24.8%	46.5%	25.8%	2.86	4.7%	29.3%	41.4%	24.6%
WI	3.06	0.7%	23.6%	45.1%	30.6%	2.76	4.1%	35.6%	40.3%	20.0%
WY	3.02	1.1%	23.3%	48.3%	27.3%	2.83	4.2%	29.5%	45.7%	20.6%

TABLE 7. (CONT'D)

How useful to teachers were professional development activities attended within the last 12 months with the following foci?										
	Reading instruction					Student discipline and management in the classroom				
	Avg	Not useful = 1	Somewhat useful = 2	Useful = 3	Very Useful = 4	Avg	Not useful = 1	Somewhat useful = 2	Useful = 3	Very Useful = 4
Nat'l	2.89	4.4%	27.9%	42.4%	25.3%	2.75	5.2%	33.3%	43.3%	18.3%
AL	2.93	4.5%	28.0%	37.5%	30.0%	2.77	4.3%	34.8%	40.8%	20.1%
AK	2.84	6.7%	30.1%	35.9%	27.3%	2.72	7.4%	34.2%	37.9%	20.6%
AZ	2.83	3.1%	34.2%	39.0%	23.7%	2.76	5.9%	32.5%	41.5%	20.1%
AR	2.98	4.2%	22.5%	43.8%	29.4%	2.70	5.0%	33.6%	48.3%	13.2%
CA	2.91	3.1%	29.1%	41.7%	26.1%	2.78	6.7%	31.7%	38.7%	22.9%
CO	2.83	3.1%	29.4%	48.7%	18.8%	2.85	2.8%	28.4%	50.3%	18.6%
CT	2.75	9.3%	30.6%	35.5%	24.5%	2.49	11.2%	40.3%	36.9%	11.5%
DE	2.66	7.5%	35.8%	39.7%	17.0%	2.62	8.4%	34.5%	43.4%	13.7%
DC	3.05	2.6%	22.9%	41.3%	33.2%	2.77	6.1%	37.8%	28.9%	27.3%
FL	2.91	4.9%	27.3%	39.9%	28.0%	2.82	6.5%	30.0%	38.9%	24.6%
GA	3.01	3.1%	24.4%	40.9%	31.6%	2.73	4.3%	34.4%	45.3%	16.0%
HI	2.84	6.4%	26.4%	44.6%	22.7%	2.85	3.6%	24.5%	54.9%	17.0%
ID	3.00	3.9%	24.4%	39.3%	32.4%	2.93	3.7%	24.6%	46.6%	25.1%
IL	2.90	4.3%	29.3%	38.5%	27.8%	2.72	4.8%	36.3%	41.2%	17.7%
IN	2.79	5.3%	34.3%	36.0%	24.4%	2.50	6.5%	47.6%	35.2%	10.7%
IA	2.73	6.7%	33.6%	40.0%	19.8%	2.73	4.8%	31.7%	48.9%	14.7%
KS	2.76	5.0%	32.5%	44.7%	17.9%	2.66	6.7%	34.7%	44.5%	14.1%
KY	2.86	4.1%	28.7%	43.8%	23.3%	2.76	5.2%	32.0%	44.0%	18.8%
LA	2.95	4.5%	25.6%	40.4%	29.5%	2.89	3.7%	28.9%	42.3%	25.1%
ME	2.93	5.5%	24.6%	40.8%	29.0%	2.71	8.4%	33.3%	37.8%	20.6%
MD	2.91	5.2%	26.9%	39.5%	28.4%	2.71	8.9%	35.0%	32.4%	23.7%
MA	2.90	4.5%	28.4%	39.3%	27.8%	2.72	6.9%	35.0%	37.1%	21.1%
MI	2.84	4.2%	26.9%	49.1%	19.8%	2.70	7.4%	31.2%	44.9%	16.5%
MN	2.87	5.3%	27.6%	42.2%	24.9%	2.75	4.3%	32.3%	47.2%	16.2%
MS	2.97	3.2%	26.4%	41.0%	29.4%	2.82	7.4%	27.5%	40.9%	24.3%
MO	2.97	3.8%	23.2%	44.8%	28.1%	2.84	4.9%	25.4%	50.5%	19.1%
MT	2.93	3.6%	23.7%	48.8%	23.9%	2.87	3.3%	28.9%	44.9%	22.9%
NE	2.90	3.9%	26.7%	44.9%	24.5%	2.73	4.1%	35.4%	44.3%	16.2%
NV	2.92	5.0%	25.7%	41.3%	28.0%	2.82	6.0%	28.1%	43.5%	22.4%
NH	2.89	3.0%	29.7%	42.4%	24.9%	2.71	2.8%	40.4%	39.6%	17.1%
NJ	2.92	3.3%	24.9%	48.0%	23.8%	2.68	6.1%	35.4%	43.0%	15.6%
NM	2.88	6.7%	26.6%	38.4%	28.4%	2.72	8.1%	36.9%	29.8%	25.1%
NY	2.94	4.3%	23.3%	46.3%	26.1%	2.76	3.6%	35.6%	42.3%	18.5%
NC	2.80	7.6%	25.3%	45.9%	21.1%	2.73	7.6%	31.3%	41.2%	19.9%
ND	2.84	2.9%	32.4%	42.4%	22.3%	2.83	1.9%	30.6%	49.6%	17.9%
OH	2.91	2.1%	31.3%	40.6%	26.1%	2.72	3.4%	35.2%	47.7%	13.6%
OK	2.91	4.3%	24.0%	48.3%	23.4%	2.68	4.8%	35.2%	46.8%	13.2%
OR	2.77	4.9%	30.8%	46.6%	17.7%	2.85	3.0%	28.9%	48.3%	19.7%
PA	2.80	6.5%	29.8%	41.4%	22.3%	2.66	6.2%	36.3%	42.8%	14.7%
RI	2.89	5.6%	22.8%	49.0%	22.6%	2.69	10.1%	30.1%	40.1%	19.7%
SC	2.87	4.7%	26.4%	45.7%	23.3%	2.79	4.5%	29.8%	48.1%	17.7%
SD	2.96	3.3%	23.6%	47.3%	25.8%	2.84	2.4%	30.2%	48.7%	18.8%
TN	2.74	5.1%	33.4%	43.8%	17.8%	2.71	5.0%	34.1%	45.9%	14.9%
TX	2.91	2.9%	27.9%	44.5%	24.7%	2.75	2.9%	35.1%	46.3%	15.6%
UT	3.03	2.3%	21.5%	47.3%	28.8%	2.92	4.8%	22.1%	49.8%	23.4%
VT	3.09	1.8%	20.8%	44.5%	32.9%	2.73	4.6%	37.0%	39.3%	19.2%
VA	2.90	4.4%	29.1%	38.0%	28.4%	2.66	7.5%	35.6%	40.8%	16.2%
WA	2.80	3.9%	31.8%	44.6%	19.7%	2.87	5.5%	27.9%	40.8%	25.9%
WV	2.95	5.5%	23.7%	41.0%	29.8%	2.74	4.6%	33.3%	45.8%	16.3%
WI	2.87	4.8%	29.3%	40.1%	25.8%	2.90	1.9%	28.6%	46.7%	22.8%
WY	2.84	4.6%	29.3%	43.6%	22.4%	2.73	6.4%	32.9%	41.9%	18.7%

TABLE 8: USEFULNESS OF PROFESSIONAL DEVELOPMENT IN LAST 12 MONTHS (BY SCHOOL CONTEXT VARIABLES)

		How useful to teachers were professional development activities attended within the last 12 months with the following foci?									
		The content of the subject(s) they teach					Uses of computers for instruction				
		Avg. ²	Not useful = 1 ²	Somewhat useful = 2 ²	Useful = 3 ²	Very Useful = 4 ²	Avg. ²	Not useful = 1 ²	Somewhat useful = 2 ²	Useful = 3 ²	Very Useful = 4 ²
Nat'l		2.93	1.9%	28.3%	44.5%	25.4%	2.85	4.1%	30.5%	41.6%	23.7%
School Level	Elem.	2.94	1.5%	27.5%	46.2%	24.8%	2.86	4.0%	29.9%	42.1%	24.0%
	Sec	2.90	2.8%	30.3%	40.8%	26.1%	2.83	4.4%	31.6%	40.8%	23.1%
Urbanicity	City	2.90	2.2%	30.0%	43.6%	24.2%	2.82	5.4%	31.0%	40.0%	23.6%
	Urban Fringe	2.93	1.8%	28.3%	44.5%	25.3%	2.87	3.7%	30.0%	42.3%	24.0%
	Small Town/Rural	2.98	1.6%	25.5%	45.8%	27.1%	2.84	3.6%	31.3%	42.2%	22.9%
% Minority Enrollment	<5.6%	2.96	1.4%	26.5%	46.4%	25.7%	2.83	3.5%	31.4%	43.5%	21.6%
	5.6-16.2%	2.94	2.0%	26.7%	46.3%	25.0%	2.83	3.2%	31.2%	44.7%	21.0%
	16.2-37.6%	2.94	1.9%	28.1%	44.5%	25.5%	2.84	4.0%	31.0%	42.1%	22.9%
	37.6-78.0%	2.91	1.7%	29.9%	44.1%	24.3%	2.82	4.7%	31.3%	41.4%	22.7%
	>78.0%	2.93	2.2%	28.8%	42.8%	26.2%	2.90	4.8%	28.5%	38.5%	28.2%
% Free/Reduced Lunch	< 20.0%	2.91	2.3%	28.3%	45.1%	24.3%	2.84	4.3%	30.9%	41.9%	22.9%
	20.0-37.96%	2.95	1.7%	27.7%	45.0%	25.7%	2.84	3.5%	31.3%	42.8%	22.3%
	37.96-58.02%	2.93	1.9%	28.4%	44.1%	25.5%	2.82	4.7%	30.7%	42.1%	22.5%
	>58.02%	2.94	1.7%	28.5%	44.0%	25.7%	2.89	4.1%	29.5%	40.1%	26.3%
% LEP Enrollment	0%	2.92	1.8%	29.2%	44.2%	24.7%	2.85	3.8%	30.8%	41.6%	23.7%
	<2.5%	2.90	2.1%	31.3%	41.3%	25.3%	2.85	4.6%	28.3%	44.9%	22.2%
	2.5-5%	2.96	2.0%	24.6%	48.3%	25.1%	2.86	3.4%	32.6%	39.0%	25.0%
	5-10%	2.85	2.7%	32.0%	42.6%	22.7%	2.81	4.1%	32.8%	41.5%	21.6%
	>10%	2.97	1.7%	26.2%	45.4%	26.7%	2.85	4.6%	29.9%	41.2%	24.3%

² Statistical significance of differences between categories of each school context variable reported in Tables 44-53

Table continues next page

TABLE 8. (CONT'D)

How useful to teachers were professional development activities attended within the last 12 months with the following foci?									
Reading instruction					Student discipline and management in the classroom				
Avg. ²	Not useful = 1 ²	Somewhat useful = 2 ²	Useful = 3 ²	Very Useful = 4 ²	Avg. ²	Not useful = 1 ²	Somewhat useful = 2 ²	Useful = 3 ²	Very Useful = 4 ²
2.89	4.4%	27.9%	42.4%	25.3%	2.75	5.2%	33.3%	43.3%	18.3%
2.96	3.0%	25.4%	44.3%	27.4%	2.79	4.2%	31.8%	44.8%	19.2%
2.65	8.8%	35.8%	37.0%	18.4%	2.65	7.0%	36.6%	40.5%	15.9%
2.91	3.6%	28.2%	41.3%	26.8%	2.74	5.8%	32.8%	43.4%	18.0%
2.86	4.7%	28.5%	42.6%	24.2%	2.75	5.1%	33.5%	42.8%	18.6%
2.91	4.6%	25.7%	43.6%	26.1%	2.76	4.4%	33.2%	44.3%	18.1%
2.87	5.2%	26.8%	43.3%	24.7%	2.73	4.8%	33.8%	44.6%	16.8%
2.87	4.3%	28.0%	43.6%	24.0%	2.74	4.8%	33.6%	44.5%	17.1%
2.86	5.0%	28.3%	42.5%	24.2%	2.73	5.4%	33.7%	43.9%	17.0%
2.86	4.1%	29.4%	42.6%	23.8%	2.75	5.5%	33.3%	42.2%	18.9%
2.94	3.7%	26.8%	41.2%	28.3%	2.77	5.1%	32.5%	42.6%	19.9%
2.83	5.4%	29.5%	41.6%	23.4%	2.71	5.7%	34.2%	43.2%	16.9%
2.85	4.6%	29.3%	42.1%	23.9%	2.74	4.7%	34.6%	42.2%	18.4%
2.89	4.8%	26.3%	44.1%	24.7%	2.75	4.6%	33.4%	44.7%	17.4%
2.95	3.1%	26.7%	42.4%	27.8%	2.77	5.4%	31.8%	43.0%	19.8%
2.89	4.0%	27.2%	44.0%	24.8%	2.75	4.8%	33.6%	43.2%	18.4%
2.65	7.4%	37.6%	37.9%	17.0%	2.68	5.9%	34.7%	45.1%	14.3%
2.81	5.2%	32.8%	37.4%	24.7%	2.64	8.7%	34.2%	41.2%	16.0%
2.87	5.1%	28.2%	41.8%	25.0%	2.69	5.3%	36.7%	41.3%	16.7%
2.94	3.8%	25.8%	42.6%	27.7%	2.79	4.7%	31.6%	43.6%	20.1%

**TABLE 9: USEFULNESS OF PROFESSIONAL DEVELOPMENT
IN LAST 3 YEARS (BY STATE)**

How useful to teachers were professional development activities attended within the last 3 years with the following foci ² :										
	Teaching students with disabilities					Teaching limited English proficient students				
	Avg	Not useful = 1	Somewhat useful = 2	Useful = 3	Very Useful = 4	Avg	Not useful = 1	Somewhat useful = 2	Useful = 3	Very Useful = 4
Nat'l	2.79	4.3%	32.6%	42.9%	20.3%	2.70	7.9%	34.6%	37.4%	20.2%
AL	2.75	5.3%	33.5%	42.2%	18.9%	2.55	14.2%	35.6%	31.5%	18.7%
AK	2.76	3.6%	35.0%	43.8%	17.7%	2.74	6.1%	34.1%	39.9%	20.0%
AZ	2.76	5.4%	35.0%	38.1%	21.5%	2.68	7.0%	38.0%	35.1%	19.9%
AR	2.70	4.6%	37.4%	41.4%	16.6%	2.55	10.5%	39.9%	33.9%	15.7%
CA	2.74	4.0%	36.5%	40.8%	18.7%	2.77	5.8%	33.0%	40.0%	21.3%
CO	2.75	2.3%	34.7%	48.2%	14.8%	2.70	6.3%	35.7%	40.1%	17.9%
CT	2.64	5.9%	40.3%	37.8%	16.0%	2.54	17.6%	29.9%	33.8%	18.7%
DE	2.73	6.1%	38.5%	32.1%	23.3%	2.69	14.5%	24.8%	38.0%	22.7%
DC	2.94	6.4%	28.1%	30.1%	35.4%	2.81	5.9%	38.8%	24.0%	31.3%
FL	2.83	4.5%	36.0%	32.1%	27.5%	2.74	10.8%	28.1%	37.2%	23.9%
GA	2.86	3.9%	30.0%	42.9%	23.2%	2.62	11.0%	30.8%	43.4%	14.9%
HI	2.91	2.0%	29.7%	44.0%	24.4%	2.64	7.1%	35.9%	42.4%	14.6%
ID	2.86	5.5%	28.9%	40.2%	25.4%	2.76	4.9%	38.3%	32.8%	24.1%
IL	2.81	5.3%	28.9%	44.8%	20.9%	2.65	8.6%	37.8%	33.8%	19.7%
IN	2.71	3.8%	36.7%	44.6%	14.9%	2.38	14.2%	45.8%	27.7%	12.3%
IA	2.74	2.1%	35.2%	49.4%	13.3%	2.61	6.9%	46.1%	26.4%	20.6%
KS	2.70	4.8%	36.0%	43.9%	15.3%	2.67	8.9%	34.0%	38.6%	18.5%
KY	2.85	3.2%	28.0%	48.9%	19.9%	2.23	24.1%	34.0%	36.5%	5.5%
LA	2.95	6.4%	24.1%	37.5%	32.0%	2.48	14.0%	45.9%	17.8%	22.3%
ME	2.83	3.0%	32.2%	43.5%	21.4%	2.75	12.9%	21.6%	42.8%	22.7%
MD	2.87	8.2%	27.8%	32.6%	31.4%	2.45	20.4%	33.0%	27.7%	18.9%
MA	2.70	7.7%	35.9%	34.7%	21.6%	2.67	6.1%	37.1%	40.1%	16.6%
MI	2.75	7.8%	29.3%	43.4%	19.5%	2.50	13.0%	37.7%	35.2%	14.1%
MN	2.82	2.9%	29.4%	50.6%	17.1%	2.74	3.6%	37.3%	40.5%	18.6%
MS	2.83	5.6%	32.0%	36.1%	26.2%	2.74	9.0%	35.0%	28.6%	27.3%
MO	2.88	3.1%	26.2%	50.9%	19.9%	2.60	13.5%	32.1%	35.4%	19.0%
MT	2.75	4.2%	32.6%	47.5%	15.7%	2.58	12.4%	34.5%	36.2%	16.9%
NE	2.82	4.4%	28.9%	47.5%	19.2%	2.60	11.1%	35.3%	36.2%	17.5%
NV	2.73	4.8%	36.6%	39.0%	19.6%	2.75	6.3%	35.4%	35.4%	22.9%
NH	2.86	3.2%	31.2%	42.0%	23.6%	2.73	0.0%	41.2%	44.2%	14.6%
NJ	2.81	2.1%	31.3%	50.1%	16.5%	2.55	9.1%	39.9%	38.2%	12.8%
NM	2.76	5.6%	38.5%	30.4%	25.5%	2.75	5.9%	34.8%	38.1%	21.2%
NY	2.82	2.6%	32.4%	45.6%	19.5%	2.70	3.9%	41.8%	34.8%	19.5%
NC	2.71	5.4%	38.4%	35.8%	20.4%	2.70	10.0%	32.2%	35.2%	22.6%
ND	2.98	1.8%	25.2%	46.2%	26.7%	2.57	15.4%	34.9%	26.9%	22.8%
OH	2.86	3.8%	28.4%	45.7%	22.1%	2.41	11.1%	48.2%	29.7%	11.1%
OK	2.69	6.7%	33.1%	44.8%	15.5%	2.42	15.4%	40.0%	32.2%	12.4%
OR	2.93	1.3%	27.3%	48.4%	23.0%	2.85	3.9%	31.3%	40.6%	24.2%
PA	2.79	4.1%	35.2%	38.2%	22.6%	2.65	10.5%	31.5%	41.0%	17.0%
RI	2.83	3.6%	33.8%	38.7%	23.9%	2.82	7.8%	21.2%	52.5%	18.4%
SC	2.88	2.4%	30.1%	44.8%	22.7%	2.58	10.2%	33.2%	44.8%	11.8%
SD	2.77	3.2%	30.5%	52.2%	14.1%	2.45	12.3%	37.7%	42.9%	7.1%
TN	2.69	7.2%	31.2%	46.7%	14.9%	2.48	14.5%	36.1%	36.8%	12.6%
TX	2.77	3.4%	33.5%	46.2%	16.9%	2.80	5.0%	34.0%	37.5%	23.6%
UT	2.92	3.3%	23.9%	50.1%	22.7%	2.72	8.0%	33.0%	38.1%	20.9%
VT	2.85	3.9%	29.1%	45.6%	21.4%	2.80	3.9%	38.7%	31.2%	26.2%
VA	2.80	4.9%	28.6%	47.9%	18.6%	2.68	11.8%	32.1%	32.0%	24.0%
WA	2.89	4.4%	30.8%	36.3%	28.5%	2.68	8.6%	33.5%	39.2%	18.8%
WV	2.88	3.5%	26.4%	49.2%	20.9%	2.23	17.1%	46.7%	32.3%	3.9%
WI	2.87	3.0%	33.3%	37.8%	26.0%	2.68	7.4%	35.6%	38.4%	18.6%
WY	2.83	4.7%	26.8%	49.2%	19.3%	2.73	7.1%	36.4%	33.3%	23.2%

**TABLE 10: USEFULNESS OF PROFESSIONAL DEVELOPMENT IN LAST 3 YEARS
(BY SCHOOL CONTEXT VARIABLES)**

		How useful to teachers were professional development activities attended within the last 3 years with the following foci?									
		Teaching students with disabilities					Teaching limited-English proficiency students				
		Avg. ²	Not useful = 1 ²	Somewhat useful = 2 ²	Useful = 3 ²	Very Useful = 4 ²	Avg. ²	Not useful = 1 ²	Somewhat useful = 2 ²	Useful = 3 ²	Very Useful = 4 ²
Nat'l		2.79	4.3%	32.6%	42.9%	20.3%	2.70	7.9%	34.6%	37.4%	20.2%
School Level	Elem.	2.83	3.6%	31.5%	43.8%	21.1%	2.75	6.5%	33.6%	38.6%	21.3%
	Sec	2.71	5.8%	35.5%	41.1%	17.6%	2.59	10.9%	37.2%	34.3%	17.6%
Urbanicity	City	2.78	4.8%	33.0%	41.5%	20.8%	2.73	7.3%	34.3%	36.7%	21.8%
	Urban Fringe	2.80	4.2%	31.8%	43.4%	20.6%	2.69	8.1%	34.5%	37.9%	19.5%
	Small Town/Rural	2.77	3.8%	34.2%	43.5%	18.5%	2.64	9.2%	35.6%	37.3%	17.9%
	<5.6%	2.80	3.3%	33.4%	42.7%	20.5%	2.58	12.9%	33.4%	36.6%	17.2%
% Minority Enrollment	5.6-16.2%	2.79	4.2%	33.1%	42.2%	20.4%	2.57	10.9%	38.3%	33.9%	16.9%
	16.2-37.6%	2.78	4.3%	32.4%	43.8%	19.5%	2.62	8.5%	36.5%	39.1%	15.9%
	37.6-78.0%	2.77	3.9%	34.1%	43.0%	19.0%	2.67	8.1%	34.2%	40.1%	17.7%
	>78.0%	2.81	5.1%	30.5%	42.5%	21.9%	2.80	6.2%	33.1%	35.2%	25.4%
% Free/Reduced Lunch	< 20.0%	2.77	3.9%	33.9%	43.2%	19.1%	2.61	9.8%	36.4%	36.6%	17.2%
	20.0-37.96%	2.80	4.4%	32.5%	42.2%	20.9%	2.62	8.7%	37.2%	37.6%	16.5%
	37.96-58.02%	2.79	4.0%	33.4%	42.1%	20.4%	2.67	8.9%	34.1%	38.8%	18.3%
	>58.02%	2.80	4.7%	31.1%	43.6%	20.6%	2.79	6.3%	32.2%	37.3%	24.2%
% LEP	0%	2.74	5.3%	33.9%	42.2%	18.6%	2.55	11.0%	39.6%	32.4%	16.9%
	<2.5%	2.66	5.7%	38.0%	41.1%	15.2%	2.55	11.8%	39.5%	30.5%	18.3%
	2.5-5%	2.71	6.5%	32.8%	43.4%	17.3%	2.65	8.7%	36.0%	37.1%	18.2%
	5-10%	2.74	4.0%	33.6%	46.6%	15.8%	2.52	10.3%	40.4%	36.3%	12.9%
	>10%	2.90	2.6%	29.7%	43.3%	24.5%	2.83	5.2%	30.0%	41.1%	23.8%

² Statistical significance of differences between categories of each school context variable reported in Tables 44-53

TABLE 11: TEACHER ATTITUDES AND SCHOOL CLIMATE (BY STATE)

Extent teachers agreed that: (1=Strongly Agree, 2=Somewhat Agree, 3=Somewhat Disagree, 4=Strongly Disagree)										
	There is a great deal of cooperative effort among staff members					They are given the supports they need to teach students with special needs				
	Avg.	Strongly Agree =1	Somewhat Agree = 2	Somewhat Disagree = 3	Strongly Disagree = 4	Avg.	Strongly Agree =1	Somewhat Agree = 2	Somewhat Disagree = 3	Strongly Disagree = 4
Nat'l	3.21	3.0%	12.9%	44.0%	40.0%	2.78	9.8%	23.5%	45.8%	20.8%
AL	3.22	3.5%	12.5%	42.4%	41.6%	2.90	7.4%	21.0%	45.7%	26.0%
AK	3.24	2.9%	12.2%	43.3%	41.6%	2.69	13.2%	23.4%	44.4%	19.0%
AZ	3.18	3.4%	16.1%	39.7%	40.8%	2.65	14.3%	24.2%	43.4%	18.2%
AR	3.32	1.8%	10.2%	42.4%	45.6%	2.90	5.9%	22.2%	47.9%	24.0%
CA	3.20	3.3%	15.7%	39.2%	41.9%	2.69	11.8%	25.5%	44.6%	18.1%
CO	3.26	3.6%	10.7%	41.9%	43.9%	2.72	10.3%	25.6%	45.7%	18.4%
CT	3.23	2.0%	13.8%	43.5%	40.6%	2.72	9.6%	27.3%	44.3%	18.8%
DE	3.19	3.1%	12.1%	48.0%	36.9%	2.54	14.2%	31.3%	40.4%	14.0%
DC	3.00	9.2%	15.9%	40.1%	34.8%	2.42	27.0%	22.4%	32.3%	18.4%
FL	3.20	3.2%	13.5%	43.7%	39.6%	2.80	10.2%	21.6%	45.8%	22.4%
GA	3.34	1.8%	9.8%	40.6%	47.8%	2.91	9.2%	17.4%	46.3%	27.0%
HI	3.01	6.7%	16.0%	47.0%	30.3%	2.65	12.6%	27.6%	42.1%	17.6%
ID	3.27	2.6%	12.1%	41.3%	44.0%	2.79	6.9%	24.9%	50.2%	18.1%
IL	3.22	3.7%	10.5%	46.4%	39.4%	2.75	9.6%	25.9%	44.7%	19.9%
IN	3.23	2.9%	13.1%	42.5%	41.6%	2.70	11.9%	22.7%	48.7%	16.7%
IA	3.22	2.5%	10.6%	49.3%	37.6%	2.84	6.1%	23.4%	50.4%	20.0%
KS	3.18	4.0%	14.4%	40.9%	40.7%	2.87	5.9%	23.3%	49.1%	21.7%
KY	3.25	1.9%	12.0%	45.6%	40.5%	2.92	7.1%	20.7%	45.6%	26.6%
LA	3.25	4.6%	10.4%	39.9%	45.1%	2.87	9.0%	18.8%	48.0%	24.2%
ME	3.15	2.3%	16.0%	46.3%	35.4%	2.78	8.2%	25.3%	46.5%	19.9%
MD	3.15	3.4%	15.3%	44.5%	36.9%	2.68	13.3%	25.1%	41.6%	19.9%
MA	3.17	3.3%	14.5%	43.7%	38.6%	2.57	14.6%	31.2%	36.6%	17.6%
MI	3.24	3.2%	12.8%	40.8%	43.2%	2.71	11.2%	27.1%	41.3%	20.3%
MN	3.18	3.6%	13.6%	43.5%	39.2%	2.75	8.3%	25.3%	49.5%	16.9%
MS	3.19	3.9%	13.6%	41.8%	40.7%	2.91	8.5%	19.6%	44.4%	27.5%
MO	3.34	2.2%	9.3%	41.0%	47.6%	2.87	6.1%	21.5%	51.4%	21.0%
MT	3.21	2.8%	13.2%	44.4%	39.6%	2.83	6.3%	26.5%	45.2%	22.0%
NE	3.17	2.5%	15.6%	44.4%	37.5%	2.92	5.1%	19.0%	55.0%	20.9%
NV	3.16	4.6%	11.1%	47.9%	36.4%	2.71	8.7%	29.2%	44.7%	17.4%
NH	3.10	3.6%	14.0%	51.3%	31.1%	2.78	8.8%	23.9%	47.6%	19.7%
NJ	3.28	1.1%	10.0%	48.2%	40.7%	2.68	11.7%	25.3%	46.6%	16.4%
NM	3.04	4.4%	18.5%	45.7%	31.4%	2.64	12.9%	27.0%	43.3%	16.9%
NY	3.13	2.5%	15.4%	48.8%	33.3%	2.70	12.2%	25.1%	43.1%	19.6%
NC	3.08	5.2%	16.8%	42.5%	35.5%	2.74	7.5%	27.5%	48.7%	16.4%
ND	3.26	2.9%	11.4%	42.3%	43.5%	3.00	2.9%	18.8%	53.3%	25.0%
OH	3.13	4.4%	13.6%	46.6%	35.4%	2.74	10.7%	23.6%	46.7%	19.0%
OK	3.28	2.9%	9.9%	43.4%	43.8%	2.86	8.4%	21.6%	45.4%	24.6%
OR	3.16	4.4%	14.4%	41.4%	39.8%	2.58	13.0%	29.6%	43.2%	14.1%
PA	3.31	1.9%	10.4%	42.4%	45.3%	2.92	9.2%	17.2%	46.3%	27.3%
RI	3.06	4.5%	18.0%	44.5%	33.0%	2.53	14.1%	31.8%	40.8%	13.3%
SC	3.30	1.6%	10.5%	44.2%	43.7%	2.88	6.5%	22.9%	46.7%	23.9%
SD	3.21	1.8%	14.8%	44.3%	39.1%	2.92	3.8%	22.9%	50.8%	22.5%
TN	3.29	2.2%	11.9%	40.6%	45.4%	2.78	9.6%	22.5%	48.2%	19.6%
TX	3.21	3.2%	11.7%	45.9%	39.2%	2.92	7.3%	19.5%	46.8%	26.4%
UT	3.37	2.3%	7.6%	41.3%	48.9%	2.71	11.5%	23.0%	48.0%	17.5%
VT	3.12	3.1%	13.1%	52.8%	31.1%	2.79	7.3%	26.2%	46.6%	19.9%
VA	3.17	2.7%	15.0%	45.1%	37.2%	2.80	9.2%	23.5%	45.4%	21.9%
WA	3.29	1.4%	9.7%	47.6%	41.3%	2.48	13.0%	33.7%	45.6%	7.7%
WV	3.23	2.1%	10.9%	48.7%	38.3%	2.82	9.8%	22.3%	44.0%	23.9%
WI	3.11	2.8%	15.2%	50.3%	31.6%	2.77	8.0%	24.2%	50.3%	17.5%
WY	3.16	3.3%	14.7%	44.8%	37.1%	3.00	4.4%	17.3%	51.7%	26.6%

**TABLE 12: TEACHER ATTITUDES AND SCHOOL CLIMATE
(BY SCHOOL CONTEXT VARIABLES)**

		Extent teachers agreed that: (1=Strongly Agree, 2=Somewhat Agree, 3=Somewhat Disagree, 4=Strongly Disagree)									
		There is a great deal of cooperative effort among staff members					They are given the supports they need to teach students with special needs				
		Avg. ²	Strongly Agree =1 ²	Somewhat Agree = 2 ²	Somewhat Disagree = 3 ²	Strongly Disagree = 4 ²	Avg. ²	Strongly Agree =1 ²	Somewhat Agree = 2 ²	Somewhat Disagree = 3 ²	Strongly Disagree = 4 ²
Nat'l		3.21	3.0%	12.9%	44.0%	40.0%	84.1%	2.78	9.8%	23.5%	45.8%
School Level	Elem.	3.27	2.6%	11.5%	42.1%	43.9%	85.9%	2.76	10.6%	23.9%	44.7%
	Sec	3.10	3.6%	15.6%	48.1%	32.7%	80.8%	2.80	8.6%	23.3%	47.6%
Urbanicity	City	3.15	3.9%	14.3%	44.6%	37.2%	81.8%	2.67	12.7%	25.9%	43.0%
	Urban Fringe	3.25	2.5%	11.9%	43.8%	41.7%	85.5%	2.81	8.8%	22.9%	46.8%
	Small Town/Rural	3.19	3.1%	13.9%	44.0%	39.1%	83.0%	2.83	8.7%	22.1%	47.0%
% Minority Enrollment	<5.6%	3.24	2.5%	12.7%	43.7%	41.2%	84.9%	2.86	8.3%	20.8%	47.3%
	5.6-16.2%	3.25	2.7%	11.4%	44.0%	42.0%	86.0%	2.84	8.1%	22.4%	47.0%
	16.2-37.6%	3.30	2.4%	10.3%	42.3%	44.9%	87.3%	2.84	7.7%	22.8%	47.7%
	37.6-78.0%	3.20	3.3%	13.0%	44.4%	39.3%	83.7%	2.76	9.9%	24.8%	44.9%
	>78.0%	3.12	3.7%	16.0%	45.3%	35.0%	80.3%	2.66	13.3%	25.2%	43.6%
% Free/Reduced Lunch	< 20.0%	3.25	2.8%	11.4%	43.6%	42.3%	85.8%	2.85	7.7%	22.0%	47.9%
	20.0-37.96%	3.22	2.3%	13.4%	44.2%	40.1%	84.3%	2.83	8.1%	23.4%	46.0%
	37.96-58.02%	3.19	3.4%	13.5%	43.7%	39.3%	83.1%	2.76	10.5%	22.9%	46.6%
	>58.02%	3.18	3.3%	13.7%	44.7%	38.2%	82.9%	2.68	12.3%	25.8%	43.3%
% LEP	0%	3.24	3.0%	12.1%	43.3%	41.7%	85.0%	2.80	9.2%	22.7%	46.9%
	<2.5%	3.16	3.8%	12.3%	48.5%	35.4%	83.9%	2.73	10.1%	24.6%	47.5%
	2.5-5%	3.18	3.2%	13.0%	46.1%	37.7%	83.7%	2.72	9.6%	25.4%	48.4%
	5-10%	3.19	2.8%	14.6%	43.6%	39.1%	82.7%	2.70	10.3%	26.4%	46.7%
	>10%	3.20	2.8%	13.9%	43.5%	39.8%	83.3%	2.79	10.5%	23.3%	43.3%

² Statistical significance of differences between categories of each school context variable reported in Tables 54-58

TABLE 13. THE RELATIONSHIP BETWEEN HOURS OF PARTICIPATION AND USEFULNESS RATINGS – CONTENT OF THE SUBJECT(S) TAUGHT

(Crosstabulation – Proportion of teachers rating professional development by the number of hours of participation reported)

	Not useful	Somewhat useful	Useful	Very Useful
8 hours or less	0.0443	0.4279	0.4128	0.1151
9-16 hours	0.0156	0.3391	0.4650	0.1803
17-32 hours	0.0115	0.2398	0.4887	0.2600
33 hours or more	0.0085	0.1494	0.4109	0.4313
Total	0.0187	0.2826	0.4450	0.2537

Pearson:

Uncorrected $\chi^2(9) = 3143.0794$

Design-based $F(7.85, 682.74) = 101.3199$ $P = 0.0000$

TABLE 14. THE RELATIONSHIP BETWEEN HOURS OF PARTICIPATION AND USEFULNESS RATINGS – USES OF COMPUTERS FOR INSTRUCTION

(Crosstabulation – Proportion of teachers rating professional development by the number of hours of participation reported)

	Not useful	Somewhat useful	Useful	Very Useful
8 hours or less	0.0599	0.3837	0.4016	0.1549
9-16 hours	0.0118	0.2259	0.4698	0.2926
17-32 hours	0.0143	0.1589	0.4746	0.3523
33 hours or more	0.0150	0.0787	0.2934	0.6129
Total	0.0414	0.3052	0.4165	0.2369

Pearson:

Uncorrected $\chi^2(9) = 2821.0705$

Design-based $F(7.54, 656.23) = 90.6208$ $P = 0.0000$

TABLE 15. THE RELATIONSHIP BETWEEN HOURS OF PARTICIPATION AND USEFULNESS RATINGS – READING INSTRUCTION

(Crosstabulation – Proportion of teachers rating professional development by the number of hours of participation reported)

	Not useful	Somewhat useful	Useful	Very Useful
8 hours or less	0.0702	0.3912	0.3999	0.1387
9-16 hours	0.0326	0.2305	0.4992	0.2377
17-32 hours	0.0137	0.1674	0.4457	0.3732
33 hours or more	0.0084	0.1179	0.3174	0.5563
Total	0.0436	0.2790	0.4245	0.2530

Pearson:

Uncorrected $\chi^2(9) = 2759.5702$

Design-based $F(7.49, 651.99) = 93.9647$ $P = 0.0000$

TABLE 16. THE RELATIONSHIP BETWEEN HOURS OF PARTICIPATION AND USEFULNESS RATINGS – STUDENT DISCIPLINE AND CLASSROOM MANAGEMENT

(Crosstabulation – Proportion of teachers rating professional development by the number of hours of participation reported)

	Not useful	Somewhat useful	Useful	Very Useful
8 hours or less	0.0642	0.3819	0.4249	0.1290
9-16 hours	0.0275	0.2693	0.4841	0.2191
17-32 hours	0.0148	0.1503	0.4354	0.3995
33 hours or more	0.0123	0.1040	0.3348	0.5489
Total	0.0517	0.3327	0.4328	0.1828

Pearson:

Uncorrected $\chi^2(9) = 1511.9794$

Design-based $F(7.55, 656.80) = 56.1388$ $P = 0.0000$

TABLE 17. THE RELATIONSHIP BETWEEN HOURS OF PARTICIPATION AND USEFULNESS RATINGS – TEACHING DISABLED STUDENTS

(Crosstabulation – Proportion of teachers rating professional development by the number of hours of participation reported)

	Not useful	Somewhat useful	Useful	Very Useful
8 hours or less	0.0617	0.3996	0.4207	0.1180
9-16 hours	0.0176	0.2765	0.4691	0.2367
17-32 hours	0.0061	0.1997	0.4569	0.3373
33 hours or more	0.0121	0.0977	0.3717	0.5185
Total	0.0427	0.3258	0.4289	0.2027

Pearson:

Uncorrected $\chi^2(9) = 1845.4369$

Design-based $F(7.68, 667.73) = 65.3673$ $P = 0.0000$

TABLE 18. THE RELATIONSHIP BETWEEN HOURS OF PARTICIPATION AND USEFULNESS RATINGS – TEACHING LIMITED-ENGLISH PROFICIENT (LEP) STUDENTS

(Crosstabulation – Proportion of teachers rating professional development by the number of hours of participation reported)

	Not useful	Somewhat useful	Useful	Very Useful
8 hours or less	0.1037	0.4421	0.3367	0.1175
9-16 hours	0.0520	0.2575	0.4752	0.2153
17-32 hours	0.0365	0.2090	0.4144	0.3402
33 hours or more	0.0530	0.2074	0.3638	0.3759
Total	0.0791	0.3458	0.3736	0.2015

Pearson:

Uncorrected $\chi^2(9) = 833.5232$

Design-based $F(7.54, 655.62) = 23.9762$ $P = 0.0000$

TABLE 19. DIFFERENCES IN PARTICIPATION IN PROFESSIONAL DEVELOPMENT FOR TEACHERS IN FIRST YEAR OF TEACHING BY SCHOOL LEVEL (ELEMENTARY VS. SECONDARY)

Types of support for professional development participation	Mean Diff (Elem - Sec)	Std Error	t	P> t
1) Percent of teachers who participated in induction program during first year of teaching	0.007	0.0178	0.37	0.711
a) Worked closely with master or mentor teacher in first year of teaching	0.009	0.0163	0.56	0.576
b) Common Planning Time with teachers in their subject	0.210***	0.0207	10.11	0.000
c) Seminars or classes for beginning teachers	0.046*	0.0182	2.53	0.013
d) Regular supportive communication with principal, other administrators, or department chair	0.006	0.0142	0.41	0.680
e) Reduced teaching schedule or number of preparations	-0.059***	0.0137	-4.32	0.000
f) Extra classroom assistance (e.g., teacher aide)	0.090***	0.0161	5.61	0.000

*Difference is significant (p<.05)

**Difference is significant (p<.01)

***Difference is significant (p<.001)

TABLE 20. DIFFERENCES IN PARTICIPATION IN PROFESSIONAL DEVELOPMENT FOR TEACHERS IN FIRST YEAR OF TEACHING BY SCHOOL URBANICITY

1-LARGE TOWN/CENTRAL "URBAN", 2-URBAN FRINGE "SUBURBAN", 3-SMALL TOWN/RURAL)

Types of formal professional development activities	Urbanicity (A)	Urbanicity (B)	Mean Diff (A-B)	Std Error	t	P> t
1) Percent of teachers who participated in induction program during first year of teaching	1) Urban	2) Suburban	-0.059**	0.0188	-3.14	0.002
	1) Urban	3) Rural	0.005	0.0237	0.22	0.829
	2) Suburban	3) Rural	0.064**	0.0208	3.09	0.003
a) Worked closely with master or mentor teacher in first year of teaching	1) Urban	2) Suburban	-0.003	0.0201	-0.14	0.891
	1) Urban	3) Rural	-0.005	0.0231	-0.20	0.843
	2) Suburban	3) Rural	-0.002	0.0193	-0.09	0.925
b) Common Planning Time with teachers in their subject	1) Urban	2) Suburban	0.007	0.0280	0.25	0.803
	1) Urban	3) Rural	0.102**	0.0344	2.98	0.004
	2) Suburban	3) Rural	0.095**	0.0294	3.24	0.002
c) Seminars or classes for beginning teachers	1) Urban	2) Suburban	-0.005	0.0236	-0.20	0.842
	1) Urban	3) Rural	0.080**	0.0298	2.70	0.008
	2) Suburban	3) Rural	0.085**	0.0241	3.53	0.001
d) Regular supportive communication with principal, other administrators, or department chair	1) Urban	2) Suburban	-0.012	0.0211	-0.55	0.582
	1) Urban	3) Rural	-0.022	0.0241	-0.89	0.375
	2) Suburban	3) Rural	-0.010	0.0190	-0.52	0.606
e) Reduced teaching schedule or number of preparations	1) Urban	2) Suburban	0.023	0.0161	1.40	0.166
	1) Urban	3) Rural	0.030	0.0160	1.91	0.060
	2) Suburban	3) Rural	0.008	0.0124	0.64	0.526
f) Extra classroom assistance (e.g., teacher aide)	1) Urban	2) Suburban	0.015	0.0235	0.65	0.517
	1) Urban	3) Rural	-0.009	0.0331	-0.27	0.786
	2) Suburban	3) Rural	-0.024	0.0263	-0.92	0.359

* Difference is significant (p<.05)

**Difference is significant (p<.01)

***Difference is significant (p<.001)

TABLE 21. DIFFERENCES IN PARTICIPATION IN PROFESSIONAL DEVELOPMENT FOR TEACHERS IN FIRST YEAR OF TEACHING BY SCHOOL MINORITY ENROLLMENT

Topic of professional development activities	Percent Minority Enrollment (A)	Percent Minority Enrollment (B)	Mean Diff (A-B)	Std Error	t	P> t
1) Percent of teachers who participated in induction program during first year of teaching	1) <5.6%	2) 5.6-16.2%	-0.022	0.0290	-0.74	0.459
	1) <5.6%	3) 16.2-37.6%	-0.036	0.0293	-1.22	0.226
	1) <5.6%	4) 37.6-78.0%	-0.017	0.0276	-0.62	0.539
	1) <5.6%	5) >78.0%	0.065*	0.0270	2.41	0.018
	2) 5.6-16.2%	3) 16.2-37.6%	-0.014	0.0291	-0.49	0.628
	2) 5.6-16.2%	4) 37.6-78.0%	0.005	0.0265	0.17	0.865
	2) 5.6-16.2%	5) >78.0%	0.087**	0.0271	3.20	0.002
	3) 16.2-37.6%	4) 44.6-77.0%	0.019	0.0231	0.81	0.422
	3) 16.2-37.6%	5) >78.0%	0.101***	0.0271	3.72	0.000
a) Worked closely with master or mentor teacher in first year of teaching	4) 37.6-78.0%	5) >78.0%	0.082**	0.0288	2.86	0.005
	1) <5.6%	2) 5.6-16.2%	0.056	0.0314	1.78	0.079
	1) <5.6%	3) 16.2-37.6%	0.061	0.0311	1.97	0.052
	1) <5.6%	4) 37.6-78.0%	0.075*	0.0291	2.58	0.012
	1) <5.6%	5) >78.0%	0.118***	0.0285	4.12	0.000
	2) 5.6-16.2%	3) 16.2-37.6%	0.006	0.0224	0.25	0.805
	2) 5.6-16.2%	4) 37.6-78.0%	0.019	0.0275	0.70	0.485
	2) 5.6-16.2%	5) >78.0%	0.062*	0.0263	2.35	0.021
	3) 16.2-37.6%	4) 44.6-77.0%	0.014	0.0263	0.52	0.603
b) Common Planning Time with teachers in their subject	3) 16.2-37.6%	5) >78.0%	0.056*	0.0244	2.30	0.024
	4) 37.6-78.0%	5) >78.0%	0.042	0.0270	1.57	0.119
	1) <5.6%	2) 5.6-16.2%	-0.022	0.0359	-0.60	0.550
	1) <5.6%	3) 16.2-37.6%	-0.102**	0.0370	-2.75	0.007
	1) <5.6%	4) 37.6-78.0%	-0.122**	0.0362	-3.36	0.001
	1) <5.6%	5) >78.0%	-0.125**	0.0363	-3.45	0.001
	2) 5.6-16.2%	3) 16.2-37.6%	-0.080*	0.0314	-2.56	0.012
	2) 5.6-16.2%	4) 37.6-78.0%	-0.100**	0.0302	-3.31	0.001
	2) 5.6-16.2%	5) >78.0%	-0.104**	0.0316	-3.28	0.001
c) Seminars or classes for beginning teachers	3) 16.2-37.6%	4) 44.6-77.0%	-0.020	0.0301	-0.65	0.515
	3) 16.2-37.6%	5) >78.0%	-0.023	0.0324	-0.72	0.473
	4) 37.6-78.0%	5) >78.0%	-0.004	0.0285	-0.13	0.898
	1) <5.6%	2) 5.6-16.2%	-0.032	0.0295	-1.07	0.287
	1) <5.6%	3) 16.2-37.6%	-0.102***	0.0258	-3.94	0.000
	1) <5.6%	4) 37.6-78.0%	-0.104***	0.0242	-4.30	0.000
	1) <5.6%	5) >78.0%	-0.026	0.0293	-0.89	0.378
	2) 5.6-16.2%	3) 16.2-37.6%	-0.070*	0.0286	-2.45	0.016
	2) 5.6-16.2%	4) 37.6-78.0%	-0.072**	0.0265	-2.73	0.008
2) 5.6-16.2%	5) >78.0%	0.006	0.0302	0.19	0.853	
3) 16.2-37.6%	4) 44.6-77.0%	-0.002	0.0193	-0.11	0.911	
3) 16.2-37.6%	5) >78.0%	0.076**	0.0281	2.70	0.008	
4) 37.6-78.0%	5) >78.0%	0.078**	0.0261	2.99	0.004	

Table continues next page

TABLE 21 (CONTINUED). DIFFERENCES IN PARTICIPATION IN PROFESSIONAL DEVELOPMENT FOR TEACHERS IN FIRST YEAR OF TEACHING BY SCHOOL MINORITY ENROLLMENT

Topic of professional development activities	Percent Minority Enrollment (A)	Percent Minority Enrollment (B)	Mean Diff (A-B)	Std Error	t	P> t
d) Regular supportive communication with principal, other administrators, or department chair	1) <5.6%	2) 5.6-16.2%	0.003	0.0246	0.12	0.903
	1) <5.6%	3) 16.2-37.6%	0.002	0.0246	0.09	0.925
	1) <5.6%	4) 37.6-78.0%	0.020	0.0258	0.77	0.446
	1) <5.6%	5) >78.0%	0.072**	0.0243	2.96	0.004
	2) 5.6-16.2%	3) 16.2-37.6%	-0.001	0.0223	-0.03	0.976
	2) 5.6-16.2%	4) 37.6-78.0%	0.017	0.0241	0.69	0.489
	2) 5.6-16.2%	5) >78.0%	0.069*	0.0263	2.62	0.010
	3) 16.2-37.6%	4) 44.6-77.0%	0.017	0.0242	0.72	0.474
	3) 16.2-37.6%	5) >78.0%	0.070**	0.0212	3.29	0.001
	4) 37.6-78.0%	5) >78.0%	0.052	0.0265	1.97	0.052
e) Reduced teaching schedule or number of preparations	1) <5.6%	2) 5.6-16.2%	0.005	0.0180	0.27	0.788
	1) <5.6%	3) 16.2-37.6%	-0.019	0.0223	-0.85	0.397
	1) <5.6%	4) 37.6-78.0%	-0.019	0.0186	-1.03	0.307
	1) <5.6%	5) >78.0%	-0.026	0.0223	-1.16	0.251
	2) 5.6-16.2%	3) 16.2-37.6%	-0.024	0.0204	-1.17	0.247
	2) 5.6-16.2%	4) 37.6-78.0%	-0.024	0.0166	-1.44	0.153
	2) 5.6-16.2%	5) >78.0%	-0.031	0.0196	-1.56	0.122
	3) 16.2-37.6%	4) 44.6-77.0%	0.000	0.0217	-0.01	0.995
	3) 16.2-37.6%	5) >78.0%	-0.007	0.0217	-0.31	0.756
	4) 37.6-78.0%	5) >78.0%	-0.007	0.0192	-0.34	0.731
f) Extra classroom assistance (e.g., teacher aide)	1) <5.6%	2) 5.6-16.2%	-0.028	0.0277	-1.00	0.320
	1) <5.6%	3) 16.2-37.6%	-0.050	0.0295	-1.68	0.096
	1) <5.6%	4) 37.6-78.0%	-0.038	0.0293	-1.31	0.194
	1) <5.6%	5) >78.0%	-0.058*	0.0277	-2.11	0.038
	2) 5.6-16.2%	3) 16.2-37.6%	-0.022	0.0331	-0.66	0.511
	2) 5.6-16.2%	4) 37.6-78.0%	-0.011	0.0314	-0.34	0.738
	2) 5.6-16.2%	5) >78.0%	-0.031	0.0293	-1.05	0.298
	3) 16.2-37.6%	4) 44.6-77.0%	0.011	0.0357	0.32	0.752
	3) 16.2-37.6%	5) >78.0%	-0.009	0.0337	-0.26	0.793
	4) 37.6-78.0%	5) >78.0%	-0.020	0.0344	-0.59	0.559

* Difference is significant ($p < .05$) **Difference is significant ($p < .01$) ***Difference is significant ($p < .001$)

TABLE 22. DIFFERENCES IN PARTICIPATION IN PROFESSIONAL DEVELOPMENT FOR TEACHERS IN FIRST YEAR OF TEACHING BY SCHOOL POVERTY

(Percent of Students Enrolled in the Free and Reduced Lunch Program)

Types of support for professional development participation	Percent FRL Enrollment (A)	Percent FRL Enrollment (B)	Mean Diff (A-B)	Std Error	t	P> t
1) Percent of teachers who participated in induction program during first year of teaching	1) <20.0%	2) 20.0-37.96%	0.039	0.0252	1.57	0.121
	1) <20.0%	3) 37.96-58.02%	0.072**	0.0238	3.03	0.003
	1) <20.0%	4) >58.02%	0.108***	0.0247	4.37	0.000
	2) 20.0-37.96%	3) 37.96-58.02%	0.033	0.0254	1.29	0.200
	2) 20.0-37.96%	4) >58.02%	0.069*	0.0270	2.54	0.013
	3) 37.96-58.02%	4) >58.02%	0.036	0.0286	1.25	0.213
a) Worked closely with master or mentor teacher in first year of teaching	1) <20.0%	2) 20.0-37.96%	0.026	0.0265	0.98	0.329
	1) <20.0%	3) 37.96-58.02%	0.020	0.0214	0.92	0.361
	1) <20.0%	4) >58.02%	0.048	0.0276	1.74	0.085
	2) 20.0-37.96%	3) 37.96-58.02%	-0.006	0.0221	-0.29	0.774
	2) 20.0-37.96%	4) >58.02%	0.022	0.0241	0.91	0.364
b) Common Planning Time with teachers in their subject	3) 37.96-58.02%	4) >58.02%	0.028	0.0235	1.21	0.230
	1) <20.0%	2) 20.0-37.96%	-0.034	0.0293	-1.17	0.245
	1) <20.0%	3) 37.96-58.02%	-0.006	0.0245	-0.25	0.802
	1) <20.0%	4) >58.02%	-0.119***	0.0322	-3.69	0.000
	2) 20.0-37.96%	3) 37.96-58.02%	0.028	0.0286	0.98	0.328
c) Seminars or classes for beginning teachers	2) 20.0-37.96%	4) >58.02%	-0.085**	0.0319	-2.65	0.009
	3) 37.96-58.02%	4) >58.02%	-0.113***	0.0294	-3.83	0.000
	1) <20.0%	2) 20.0-37.96%	-0.011	0.0256	-0.44	0.661
	1) <20.0%	3) 37.96-58.02%	0.028	0.0272	1.02	0.310
	1) <20.0%	4) >58.02%	0.024	0.0244	1.00	0.322
	2) 20.0-37.96%	3) 37.96-58.02%	0.039	0.0240	1.63	0.108
d) Regular supportive communication with principal, other administrators, or department chair	2) 20.0-37.96%	4) >58.02%	0.036	0.0218	1.63	0.106
	3) 37.96-58.02%	4) >58.02%	-0.003	0.0269	-0.13	0.899
	1) <20.0%	2) 20.0-37.96%	0.018	0.0227	0.77	0.443
	1) <20.0%	3) 37.96-58.02%	0.016	0.0222	0.74	0.464
	1) <20.0%	4) >58.02%	0.049*	0.0204	2.39	0.019
	2) 20.0-37.96%	3) 37.96-58.02%	-0.001	0.0226	-0.05	0.957
e) Reduced teaching schedule or number of preparations	2) 20.0-37.96%	4) >58.02%	0.031	0.0227	1.38	0.170
	3) 37.96-58.02%	4) >58.02%	0.033	0.0212	1.54	0.128
	1) <20.0%	2) 20.0-37.96%	0.038	0.0201	1.91	0.060
	1) <20.0%	3) 37.96-58.02%	0.013	0.0206	0.65	0.517
	1) <20.0%	4) >58.02%	0.012	0.0188	0.66	0.513
	2) 20.0-37.96%	3) 37.96-58.02%	-0.025	0.0186	-1.34	0.183
	2) 20.0-37.96%	4) >58.02%	-0.026	0.0178	-1.46	0.148
	3) 37.96-58.02%	4) >58.02%	-0.001	0.0183	-0.06	0.954

Table continues next page

TABLE 22 (CONTINUED). DIFFERENCES IN PARTICIPATION IN PROFESSIONAL DEVELOPMENT FOR TEACHERS IN FIRST YEAR OF TEACHING BY SCHOOL POVERTY (PERCENT OF STUDENTS ENROLLED IN THE FREE AND REDUCED LUNCH PROGRAM)

Types of support for professional development participation	Percent FRL Enrollment (A)	Percent FRL Enrollment (B)	Mean Diff (A-B)	Std Error	t	P> t
f) Extra classroom assistance (e.g., teacher aide)	1) <20.0%	2) 20.0-37.96%	-0.020	0.0296	-0.68	0.496
	1) <20.0%	3) 37.96-58.02%	-0.047	0.0296	-1.60	0.114
	1) <20.0%	4) >58.02%	-0.090**	0.0278	-3.24	0.002
	2) 20.0-37.96%	3) 37.96-58.02%	-0.027	0.0277	-0.98	0.332
	2) 20.0-37.96%	4) >58.02%	-0.070*	0.0282	-2.48	0.015
	3) 37.96-58.02%	4) >58.02%	-0.043	0.0303	-1.41	0.161

* Difference is significant (p<.05) **Difference is significant (p<.01) ***Difference is significant (p<.001)

TABLE 23. DIFFERENCES IN PARTICIPATION IN PROFESSIONAL DEVELOPMENT FOR TEACHERS IN FIRST YEAR OF TEACHING BY SCHOOL LEP (LIMITED ENGLISH PROFICIENT) ENROLLMENT

Topic of professional development activities	Percent LEP Enrollment (A)	Percent LEP Enrollment (B)	Mean Diff (A-B)	Std Error	t	P> t
1) Percent of teachers who participated in induction program during first year of teaching	1) 0%	2) 0.0-2.5%	-0.006	0.0270	-0.24	0.813
	1) 0%	3) 2.5-5%	-0.030	0.0294	-1.02	0.309
	1) 0%	4) 5-10%	0.027	0.0399	0.68	0.498
	1) 0%	5) >10%	0.006	0.0221	0.27	0.786
	2) 0.0-2.5%	3) 2.5-5%	-0.024	0.0344	-0.69	0.493
	2) 0.0-2.5%	4) 5-10%	0.034	0.0478	0.70	0.484
	2) 0.0-2.5%	5) >10%	0.012	0.0300	0.41	0.680
	3) 2.5-5%	4) 5-10%	0.057	0.0464	1.23	0.220
	3) 2.5-5%	5) >10%	0.036	0.0332	1.09	0.280
	4) 5-10%	5) >10%	-0.021	0.0424	-0.50	0.619
a) Worked closely with master or mentor teacher in first year of teaching	1) 0%	2) 0.0-2.5%	0.038	0.0277	1.37	0.175
	1) 0%	3) 2.5-5%	-0.002	0.0318	-0.06	0.950
	1) 0%	4) 5-10%	0.056	0.0404	1.38	0.171
	1) 0%	5) >10%	0.022	0.0219	1.00	0.322
	2) 0.0-2.5%	3) 2.5-5%	-0.040	0.0407	-0.98	0.330
	2) 0.0-2.5%	4) 5-10%	0.018	0.0469	0.38	0.704
	2) 0.0-2.5%	5) >10%	-0.016	0.0315	-0.51	0.612
	3) 2.5-5%	4) 5-10%	0.058	0.0471	1.23	0.223
	3) 2.5-5%	5) >10%	0.024	0.0361	0.66	0.510
	4) 5-10%	5) >10%	-0.034	0.0405	-0.84	0.405
b) Common Planning Time with teachers in their subject	1) 0%	2) 0.0-2.5%	0.024	0.0354	0.68	0.498
	1) 0%	3) 2.5-5%	0.004	0.0408	0.10	0.923
	1) 0%	4) 5-10%	-0.028	0.0444	-0.62	0.536
	1) 0%	5) >10%	-0.053*	0.0231	-2.31	0.023
	2) 0.0-2.5%	3) 2.5-5%	-0.020	0.0518	-0.39	0.699
	2) 0.0-2.5%	4) 5-10%	-0.052	0.0498	-1.04	0.303
	2) 0.0-2.5%	5) >10%	-0.077*	0.0353	-2.19	0.031
	3) 2.5-5%	4) 5-10%	-0.032	0.0548	-0.58	0.566
	3) 2.5-5%	5) >10%	-0.057	0.0460	-1.25	0.216
	4) 5-10%	5) >10%	-0.026	0.0487	-0.53	0.599
c) Seminars or classes for beginning teachers	1) 0%	2) 0.0-2.5%	-0.031	0.0272	-1.15	0.254
	1) 0%	3) 2.5-5%	-0.013	0.0284	-0.46	0.647
	1) 0%	4) 5-10%	-0.024	0.0407	-0.59	0.554
	1) 0%	5) >10%	-0.043*	0.0185	-2.34	0.022
	2) 0.0-2.5%	3) 2.5-5%	0.018	0.0337	0.54	0.591
	2) 0.0-2.5%	4) 5-10%	0.007	0.0425	0.17	0.869
	2) 0.0-2.5%	5) >10%	-0.012	0.0325	-0.37	0.712
	3) 2.5-5%	4) 5-10%	-0.011	0.0444	-0.25	0.803
	3) 2.5-5%	5) >10%	-0.030	0.0314	-0.96	0.339
	4) 5-10%	5) >10%	-0.019	0.0419	-0.45	0.650

Table continues next page

TABLE 23 (CONTINUED). DIFFERENCES IN PARTICIPATION IN PROFESSIONAL DEVELOPMENT FOR TEACHERS IN FIRST YEAR OF TEACHING BY SCHOOL LEP (LIMITED ENGLISH PROFICIENT) ENROLLMENT

Topic of professional development activities	Percent LEP Enrollment (A)	Percent LEP Enrollment (B)	Mean Diff (A-B)	Std Error	t	P> t
d) Regular supportive communication with principal, other administrators, or department chair	1) 0%	2) 0.0-2.5%	0.000	0.0277	0.01	0.994
	1) 0%	3) 2.5-5%	0.026	0.0297	0.89	0.377
	1) 0%	4) 5-10%	0.061	0.0396	1.53	0.130
	1) 0%	5) >10%	0.042*	0.0185	2.27	0.026
	2) 0.0-2.5%	3) 2.5-5%	0.026	0.0337	0.78	0.440
	2) 0.0-2.5%	4) 5-10%	0.060	0.0464	1.30	0.197
	2) 0.0-2.5%	5) >10%	0.042	0.0298	1.40	0.164
	3) 2.5-5%	4) 5-10%	0.034	0.0407	0.84	0.403
	3) 2.5-5%	5) >10%	0.016	0.0312	0.50	0.618
	4) 5-10%	5) >10%	-0.019	0.0368	-0.50	0.615
e) Reduced teaching schedule or number of preparations	1) 0%	2) 0.0-2.5%	-0.056*	0.0242	-2.31	0.023
	1) 0%	3) 2.5-5%	-0.067	0.0312	-2.13	0.036
	1) 0%	4) 5-10%	-0.022	0.0269	-0.81	0.421
	1) 0%	5) >10%	-0.026	0.0141	-1.87	0.065
	2) 0.0-2.5%	3) 2.5-5%	-0.011	0.0360	-0.29	0.769
	2) 0.0-2.5%	4) 5-10%	0.034	0.0385	0.89	0.378
	2) 0.0-2.5%	5) >10%	0.030	0.0267	1.11	0.270
	3) 2.5-5%	4) 5-10%	0.045	0.0378	1.18	0.239
	3) 2.5-5%	5) >10%	0.040	0.0373	1.08	0.283
	4) 5-10%	5) >10%	-0.004	0.0331	-0.13	0.894
f) Extra classroom assistance (e.g., teacher aide)	1) 0%	2) 0.0-2.5%	0.100***	0.0238	4.19	0.000
	1) 0%	3) 2.5-5%	0.059	0.0308	1.92	0.058
	1) 0%	4) 5-10%	0.066	0.0391	1.69	0.095
	1) 0%	5) >10%	-0.052*	0.0206	-2.53	0.013
	2) 0.0-2.5%	3) 2.5-5%	-0.041	0.0341	-1.20	0.235
	2) 0.0-2.5%	4) 5-10%	-0.034	0.0413	-0.82	0.417
	2) 0.0-2.5%	5) >10%	-0.152***	0.0251	-6.05	0.000
	3) 2.5-5%	4) 5-10%	0.007	0.0439	0.16	0.874
	3) 2.5-5%	5) >10%	-0.111**	0.0348	-3.20	0.002
	4) 5-10%	5) >10%	-0.118**	0.0402	-2.94	0.004

* Difference is significant (p<.05) **Difference is significant (p<.01) ***Difference is significant (p<.001)

TABLE 24. DIFFERENCES IN PARTICIPATION IN PROFESSIONAL DEVELOPMENT ON 4 TOPICS IN THE LAST 12 MONTHS BY SCHOOL GRADE LEVEL (ELEMENTARY VS. SECONDARY)

Topic of professional development activities	Mean Diff (Elem - Sec)	Std Error	t	P> t
1) the content of the subject(s) they teach	0.097***	0.0064	15.12	0.000
2) uses of computers for instruction	0.002	0.0108	0.15	0.884
3) reading instruction	0.277***	0.0115	24.06	0.000
4) student discipline and management in the classroom	0.024*	0.0114	2.11	0.038

*Difference is significant (p<.05)

**Difference is significant (p<.01)

***Difference is significant (p<.001)

TABLE 25. DIFFERENCES IN PARTICIPATION IN PROFESSIONAL DEVELOPMENT IN THE LAST 3 YEARS ON 2 TOPICS BY SCHOOL LEVEL (ELEMENTARY VS. SECONDARY)

Types of formal professional development activities	Mean Diff (Elem - Sec)	Std Error	t	P> t
1) teaching students with disabilities	0.020	0.0105	1.92	0.058
2) teaching limited-English proficient students	0.043***	0.0113	3.83	0.000

*Difference is significant (p<.05)

**Difference is significant (p<.01)

***Difference is significant (p<.001)

TABLE 26. DIFFERENCES IN PARTICIPATION IN PROFESSIONAL DEVELOPMENT ON 4 TOPICS IN THE LAST 12 MONTHS BY SCHOOL URBANICITY

(1-LARGE TOWN/CENTRAL "URBAN", 2-URBAN FRINGE "SUBURBAN", 3-SMALL TOWN/RURAL)

Topic of professional development activities	Urbanicity (A)	Urbanicity (B)	Mean Diff (A-B)	Std Error	t	P> t
1) the content of the subject(s) they teach	1) Urban	2) Suburban	0.026**	0.0081	3.25	0.002
	1) Urban	3) Rural	0.063***	0.0092	6.91	0.000
	2) Suburban	3) Rural	0.037***	0.0078	4.75	0.000
2) uses of computers for instruction	1) Urban	2) Suburban	-0.021	0.0147	-1.45	0.151
	1) Urban	3) Rural	0.003	0.0135	0.24	0.814
	2) Suburban	3) Rural	0.025	0.0130	1.89	0.062
3) reading instruction	1) Urban	2) Suburban	0.043*	0.0164	2.63	0.010
	1) Urban	3) Rural	0.056**	0.0182	3.09	0.003
	2) Suburban	3) Rural	0.013	0.0151	0.87	0.387
4) student discipline and management in the classroom	1) Urban	2) Suburban	0.061***	0.0148	4.14	0.000
	1) Urban	3) Rural	0.038*	0.0169	2.26	0.026
	2) Suburban	3) Rural	-0.023	0.0161	-1.44	0.154

* Difference is significant (p<.05)

**Difference is significant (p<.01)

***Difference is significant (p<.001)

TABLE 27. DIFFERENCES IN PARTICIPATION IN PROFESSIONAL DEVELOPMENT ON 2 TOPICS IN THE LAST 3 YEARS BY SCHOOL URBANICITY

(1-LARGE TOWN/CENTRAL "URBAN", 2-URBAN FRINGE "SUBURBAN", 3-SMALL TOWN/RURAL)

Topic of professional development activities	Urbanicity (A)	Urbanicity (B)	Mean Diff (A-B)	Std Error	t	P> t
1) teaching students with disabilities	1) Urban	2) Suburban	-0.003	0.0146	-0.19	0.852
	1) Urban	3) Rural	0.003	0.0171	0.20	0.846
	2) Suburban	3) Rural	0.006	0.0131	0.47	0.642
2) teaching limited-English proficient students	1) Urban	2) Suburban	0.126***	0.0155	8.17	0.000
	1) Urban	3) Rural	0.213***	0.0170	12.55	0.000
	2) Suburban	3) Rural	0.087***	0.0144	6.07	0.000

* Difference is significant (p<.05) **Difference is significant (p<.01) ***Difference is significant (p<.001)

TABLE 28. DIFFERENCES IN PARTICIPATION IN PROFESSIONAL DEVELOPMENT ON 4 TOPICS IN THE LAST 12 MONTHS BY SCHOOL MINORITY ENROLLMENT

Topic of professional development activities	Percent Minority Enrollment (A)	Percent Minority Enrollment (B)	Mean Diff (A-B)	Std Error	t	P> t
1) the content of the subject(s) they teach	1) <5.6%	2) 5.6-16.2%	-0.011	0.0120	-0.89	0.376
	1) <5.6%	3) 16.2-37.6%	0.028*	0.0115	-2.42	0.018
	1) <5.6%	4) 37.6-78.0%	-0.028**	0.0098	-2.84	0.006
	1) <5.6%	5) >78.0%	-0.035**	0.0119	-2.92	0.004
	2) 5.6-16.2%	3) 16.2-37.6%	-0.017	0.0108	-1.61	0.112
	2) 5.6-16.2%	4) 37.6-78.0%	-0.017	0.0103	-1.68	0.097
	2) 5.6-16.2%	5) >78.0%	-0.024*	0.0102	-2.37	0.020
	3) 16.2-37.6%	4) 44.6-77.0%	0.000	0.0098	0.01	0.992
	3) 16.2-37.6%	5) >78.0%	-0.007	0.0104	-0.66	0.514
	4) 37.6-78.0%	5) >78.0%	-0.007	0.0095	-0.73	0.468
2) uses of computers for instruction	1) <5.6%	2) 5.6-16.2%	-0.008	0.0178	-0.44	0.659
	1) <5.6%	3) 16.2-37.6%	-0.036*	0.0178	-2.04	0.045
	1) <5.6%	4) 37.6-78.0%	-0.004	0.0168	-0.26	0.799
	1) <5.6%	5) >78.0%	0.032*	0.0158	2.04	0.045
	2) 5.6-16.2%	3) 16.2-37.6%	-0.028	0.0158	-1.80	0.076
	2) 5.6-16.2%	4) 37.6-78.0%	0.004	0.0165	0.22	0.828
	2) 5.6-16.2%	5) >78.0%	0.040*	0.0170	2.36	0.020
	3) 16.2-37.6%	4) 44.6-77.0%	0.032	0.0169	1.90	0.061
	3) 16.2-37.6%	5) >78.0%	0.068***	0.0174	3.94	0.000
	4) 37.6-78.0%	5) >78.0%	0.036*	0.0176	2.07	0.041
3) reading instruction	1) <5.6%	2) 5.6-16.2%	-0.016	0.0201	-0.78	0.437
	1) <5.6%	3) 16.2-37.6%	-0.058*	0.0218	-2.65	0.010
	1) <5.6%	4) 37.6-78.0%	-0.068**	0.0218	-3.14	0.002
	1) <5.6%	5) >78.0%	-0.091***	0.0227	-3.99	0.000
	2) 5.6-16.2%	3) 16.2-37.6%	-0.042	0.0215	-1.96	0.053
	2) 5.6-16.2%	4) 37.6-78.0%	-0.053**	0.0183	-2.88	0.005
	2) 5.6-16.2%	5) >78.0%	-0.075***	0.0206	-3.65	0.000
	3) 16.2-37.6%	4) 44.6-77.0%	-0.011	0.0204	-0.52	0.608
	3) 16.2-37.6%	5) >78.0%	-0.033	0.0215	-1.53	0.129
	4) 37.6-78.0%	5) >78.0%	-0.022	0.0184	-1.22	0.227
4) student discipline and management in the classroom	1) <5.6%	2) 5.6-16.2%	0.032	0.0178	1.77	0.080
	1) <5.6%	3) 16.2-37.6%	-0.006	0.0169	-0.36	0.722
	1) <5.6%	4) 37.6-78.0%	-0.087***	0.0183	-4.73	0.000
	1) <5.6%	5) >78.0%	-0.047*	0.0198	-2.35	0.021
	2) 5.6-16.2%	3) 16.2-37.6%	-0.038*	0.0182	-2.07	0.042
	2) 5.6-16.2%	4) 37.6-78.0%	-0.118***	0.0169	-7.01	0.000
	2) 5.6-16.2%	5) >78.0%	-0.078***	0.0198	-3.96	0.000
	3) 16.2-37.6%	4) 44.6-77.0%	-0.081***	0.0173	-4.65	0.000
	3) 16.2-37.6%	5) >78.0%	-0.041*	0.0192	-2.12	0.037
	4) 37.6-78.0%	5) >78.0%	0.040*	0.0179	2.24	0.028

* Difference is significant (p<.05) **Difference is significant (p<.01) ***Difference is significant (p<.001)

TABLE 29. DIFFERENCES IN PARTICIPATION IN PROFESSIONAL DEVELOPMENT IN THE LAST 3 YEARS ON 2 TOPICS BY SCHOOL MINORITY ENROLLMENT

Types of support for professional development participation	Percent Minority Enrollment (A)	Percent Minority Enrollment (B)	Mean Diff (A-B)	Std Error	t	P> t
1) teaching students with disabilities	1) <5.6%	2) 5.6-16.2%	0.001	0.0189	0.03	0.978
	1) <5.6%	3) 16.2-37.6%	-0.033	0.0180	-1.85	0.068
	1) <5.6%	4) 37.6-78.0%	-0.022	0.0180	-1.22	0.226
	1) <5.6%	5) >78.0%	0.015	0.0185	0.80	0.426
	2) 5.6-16.2%	3) 16.2-37.6%	-0.034*	0.0161	-2.10	0.038
	2) 5.6-16.2%	4) 37.6-78.0%	-0.022	0.0156	-1.44	0.152
	2) 5.6-16.2%	5) >78.0%	0.014	0.0185	0.77	0.442
	3) 16.2-37.6%	4) 44.6-77.0%	0.011	0.0157	0.72	0.472
	3) 16.2-37.6%	5) >78.0%	0.048**	0.0175	2.74	0.007
	4) 37.6-78.0%	5) >78.0%	0.037*	0.0172	2.14	0.036
2) teaching limited-English proficient students	1) <5.6%	2) 5.6-16.2%	-0.087***	0.0132	-6.62	0.000
	1) <5.6%	3) 16.2-37.6%	-0.213***	0.0151	-14.12	0.000
	1) <5.6%	4) 37.6-78.0%	-0.298***	0.0184	-16.23	0.000
	1) <5.6%	5) >78.0%	-0.330***	0.0163	-20.26	0.000
	2) 5.6-16.2%	3) 16.2-37.6%	-0.126***	0.0152	-8.24	0.000
	2) 5.6-16.2%	4) 37.6-78.0%	-0.211***	0.0157	-13.41	0.000
	2) 5.6-16.2%	5) >78.0%	-0.243***	0.0153	-15.85	0.000
	3) 16.2-37.6%	4) 44.6-77.0%	-0.085***	0.0181	-4.73	0.000
	3) 16.2-37.6%	5) >78.0%	-0.117***	0.0208	-5.63	0.000
	4) 37.6-78.0%	5) >78.0%	-0.032	0.0216	-1.47	0.146

* Difference is significant (p<.05) **Difference is significant (p<.01) ***Difference is significant (p<.001)

TABLE 30. DIFFERENCES IN PARTICIPATION IN PROFESSIONAL DEVELOPMENT ON 4 TOPICS IN THE LAST 12 MONTHS BY SCHOOL POVERTY (PERCENT OF STUDENTS ENROLLED IN THE FREE AND REDUCED LUNCH PROGRAM–FRL)

Topic of professional development activities	Percent FRL Enrollment (A)	Percent FRL Enrollment (B)	Mean Diff (A-B)	Std Error	t	P> t
1) the content of the subject(s) they teach	1) <20.0%	2) 20.0-37.96%	-0.011	0.0097	-1.17	0.246
	1) <20.0%	3) 37.96-58.02%	-0.002	0.0091	-0.23	0.820
	1) <20.0%	4) >58.02%	-0.031**	0.0088	-3.56	0.001
	2) 20.0-37.96%	3) 37.96-58.02%	0.009	0.0088	1.05	0.296
	2) 20.0-37.96%	4) >58.02%	-0.020*	0.0095	-2.08	0.040
	3) 37.96-58.02%	4) >58.02%	-0.029**	0.0091	-3.20	0.002
2) uses of computers for instruction	1) <20.0%	2) 20.0-37.96%	0.006	0.0129	0.47	0.641
	1) <20.0%	3) 37.96-58.02%	0.021	0.0134	1.56	0.123
	1) <20.0%	4) >58.02%	0.046**	0.0148	3.13	0.002
	2) 20.0-37.96%	3) 37.96-58.02%	0.015	0.0146	1.02	0.310
	2) 20.0-37.96%	4) >58.02%	0.040*	0.0172	2.34	0.021
	3) 37.96-58.02%	4) >58.02%	0.025	0.0159	1.60	0.113
3) reading instruction	1) <20.0%	2) 20.0-37.96%	-0.057**	0.0172	-3.30	0.001
	1) <20.0%	3) 37.96-58.02%	-0.067***	0.0157	-4.23	0.000
	1) <20.0%	4) >58.02%	-0.150***	0.0171	-8.76	0.000
	2) 20.0-37.96%	3) 37.96-58.02%	-0.010	0.0177	-0.56	0.577
	2) 20.0-37.96%	4) >58.02%	-0.093***	0.0185	-5.03	0.000
	3) 37.96-58.02%	4) >58.02%	-0.083***	0.0175	-4.76	0.000
4) student discipline and management in the classroom	1) <20.0%	2) 20.0-37.96%	-0.066***	0.0172	-3.81	0.000
	1) <20.0%	3) 37.96-58.02%	-0.091***	0.0176	-5.19	0.000
	1) <20.0%	4) >58.02%	-0.141***	0.0180	-7.82	0.000
	2) 20.0-37.96%	3) 37.96-58.02%	-0.026	0.0190	-1.35	0.181
	2) 20.0-37.96%	4) >58.02%	-0.075***	0.0176	-4.28	0.000
	3) 37.96-58.02%	4) >58.02%	-0.050**	0.0160	-3.09	0.003

* Difference is significant (p<.05) **Difference is significant (p<.01) ***Difference is significant (p<.001)

TABLE 31. DIFFERENCES IN PARTICIPATION IN PROFESSIONAL DEVELOPMENT IN THE LAST 3 YEARS ON 2 TOPICS BY SCHOOL POVERTY (PERCENT OF STUDENTS ENROLLED IN THE FREE AND REDUCED LUNCH PROGRAM - FRL)

Topic of professional development activities	Percent FRL Enrollment (A)	Percent FRL Enrollment (B)	Mean Diff (A-B)	Std Error	t	P> t
1) teaching students with disabilities	1) <20.0%	2) 20.0-37.96%	0.016	0.0144	1.12	0.266
	1) <20.0%	3) 37.96-58.02%	-0.003	0.0156	-0.18	0.854
	1) <20.0%	4) >58.02%	0.016	0.0155	1.02	0.309
	2) 20.0-37.96%	3) 37.96-58.02%	-0.019	0.0131	-1.45	0.151
	2) 20.0-37.96%	4) >58.02%	0.000	0.0155	-0.01	0.989
	3) 37.96-58.02%	4) >58.02%	0.019	0.0142	1.32	0.191
2) teaching limited-English proficient students	1) <20.0%	2) 20.0-37.96%	-0.047**	0.0171	-2.76	0.007
	1) <20.0%	3) 37.96-58.02%	-0.062***	0.0154	-4.04	0.000
	1) <20.0%	4) >58.02%	-0.185***	0.0165	-11.22	0.000
	2) 20.0-37.96%	3) 37.96-58.02%	-0.015	0.0181	-0.82	0.414
	2) 20.0-37.96%	4) >58.02%	-0.138***	0.0195	-7.09	0.000
	3) 37.96-58.02%	4) >58.02%	-0.123***	0.0168	-7.35	0.000

* Difference is significant (p<.05) **Difference is significant (p<.01) ***Difference is significant (p<.001)

TABLE 32. DIFFERENCES IN PARTICIPATION IN PROFESSIONAL DEVELOPMENT ON 4 TOPICS IN THE LAST 12 MONTHS BY SCHOOL LEP (LIMITED ENGLISH PROFICIENT) ENROLLMENT

Topic of professional development activities	Percent LEP Enrollment (A)	Percent LEP Enrollment (B)	Mean Diff (A-B)	Std Error	t	P> t
1) the content of the subject(s) they teach	1) 0%	2) 0.0-2.5%	0.024*	0.0099	2.43	0.017
	1) 0%	3) 2.5-5%	0.004	0.0105	0.34	0.736
	1) 0%	4) 5-10%	-0.006	0.0123	-0.49	0.622
	1) 0%	5) >10%	-0.041***	0.0073	-5.68	0.000
	2) 0.0-2.5%	3) 2.5-5%	-0.021	0.0140	-1.47	0.146
	2) 0.0-2.5%	4) 5-10%	-0.030*	0.0141	-2.15	0.034
	2) 0.0-2.5%	5) >10%	-0.065***	0.0105	-6.21	0.000
	3) 2.5-5%	4) 5-10%	-0.010	0.0174	-0.55	0.581
	3) 2.5-5%	5) >10%	-0.045*	0.0140	-3.21	0.002
	4) 5-10%	5) >10%	-0.035**	0.0121	-2.91	0.005
2) uses of computers for instruction	1) 0%	2) 0.0-2.5%	-0.025	0.0150	-1.63	0.106
	1) 0%	3) 2.5-5%	-0.023	0.0204	-1.13	0.263
	1) 0%	4) 5-10%	0.006	0.0170	0.37	0.712
	1) 0%	5) >10%	0.020	0.0125	1.64	0.105
	2) 0.0-2.5%	3) 2.5-5%	0.002	0.0231	0.07	0.946
	2) 0.0-2.5%	4) 5-10%	0.031	0.0215	1.43	0.155
	2) 0.0-2.5%	5) >10%	0.045**	0.0152	2.95	0.004
	3) 2.5-5%	4) 5-10%	0.029	0.0252	1.16	0.250
	3) 2.5-5%	5) >10%	0.043*	0.0205	2.11	0.038
	4) 5-10%	5) >10%	0.014	0.0199	0.71	0.480
3) reading instruction	1) 0%	2) 0.0-2.5%	0.120***	0.0168	7.12	0.000
	1) 0%	3) 2.5-5%	0.004	0.0233	0.19	0.849
	1) 0%	4) 5-10%	-0.040	0.0202	-1.96	0.053
	1) 0%	5) >10%	-0.081***	0.0117	-6.91	0.000
	2) 0.0-2.5%	3) 2.5-5%	-0.115***	0.0271	-4.25	0.000
	2) 0.0-2.5%	4) 5-10%	-0.159***	0.0263	-6.05	0.000
	2) 0.0-2.5%	5) >10%	-0.201***	0.0187	-10.72	0.000
	3) 2.5-5%	4) 5-10%	-0.044	0.0307	-1.44	0.153
	3) 2.5-5%	5) >10%	-0.086***	0.0233	-3.67	0.000
	4) 5-10%	5) >10%	-0.041	0.0234	-1.77	0.081
4) student discipline and management in the classroom	1) 0%	2) 0.0-2.5%	-0.020	0.0197	-1.02	0.313
	1) 0%	3) 2.5-5%	-0.008	0.0227	-0.37	0.709
	1) 0%	4) 5-10%	-0.027	0.0196	-1.37	0.175
	1) 0%	5) >10%	-0.021	0.0142	-1.49	0.139
	2) 0.0-2.5%	3) 2.5-5%	0.012	0.0263	0.44	0.662
	2) 0.0-2.5%	4) 5-10%	-0.007	0.0280	-0.24	0.809
	2) 0.0-2.5%	5) >10%	-0.001	0.0232	-0.05	0.959
	3) 2.5-5%	4) 5-10%	-0.018	0.0253	-0.72	0.473
	3) 2.5-5%	5) >10%	-0.013	0.0253	-0.50	0.616
	4) 5-10%	5) >10%	0.006	0.0210	0.26	0.792

* Difference is significant (p<.05) **Difference is significant (p<.01) ***Difference is significant (p<.001)

TABLE 33. DIFFERENCES IN PARTICIPATION IN PROFESSIONAL DEVELOPMENT IN THE LAST 3 YEARS ON 2 TOPICS BY SCHOOL LEP (LIMITED ENGLISH PROFICIENT) ENROLLMENT

Types of support for professional development participation	Percent LEP Enrollment (A)	Percent LEP Enrollment (B)	Mean Diff (A-B)	Std Error	t	P> t
1) teaching students with disabilities	1) 0%	2) 0.0-2.5%	-0.020	0.0177	-1.14	0.255
	1) 0%	3) 2.5-5%	0.021	0.0212	0.98	0.329
	1) 0%	4) 5-10%	0.006	0.0208	0.28	0.776
	1) 0%	5) >10%	-0.082***	0.0122	-6.72	0.000
	2) 0.0-2.5%	3) 2.5-5%	0.041	0.0256	1.60	0.113
	2) 0.0-2.5%	4) 5-10%	0.026	0.0248	1.06	0.294
	2) 0.0-2.5%	5) >10%	-0.061***	0.0165	-3.74	0.000
	3) 2.5-5%	4) 5-10%	-0.015	0.0269	-0.55	0.582
	3) 2.5-5%	5) >10%	-0.103***	0.0207	-4.96	0.000
	4) 5-10%	5) >10%	-0.088***	0.0219	-4.01	0.000
2) teaching limited-English proficient students	1) 0%	2) 0.0-2.5%	-0.110***	0.0179	-6.15	0.000
	1) 0%	3) 2.5-5%	-0.198***	0.0209	-9.48	0.000
	1) 0%	4) 5-10%	-0.243***	0.0215	-11.34	0.000
	1) 0%	5) >10%	-0.260***	0.0119	-21.88	0.000
	2) 0.0-2.5%	3) 2.5-5%	-0.088**	0.0272	-3.23	0.002
	2) 0.0-2.5%	4) 5-10%	-0.133	0.0269	-4.96	0.000
	2) 0.0-2.5%	5) >10%	-0.150	0.0198	-7.56	0.000
	3) 2.5-5%	4) 5-10%	-0.045	0.0261	-1.73	0.087
	3) 2.5-5%	5) >10%	-0.062**	0.0219	-2.81	0.006
	4) 5-10%	5) >10%	-0.016	0.0211	-0.78	0.437

* Difference is significant (p<.05) **Difference is significant (p<.01) ***Difference is significant (p<.001)

TABLE 34. DIFFERENCES IN 33+ HOURS OF PARTICIPATION IN PROFESSIONAL DEVELOPMENT ON 4 TOPICS IN THE LAST 12 MONTHS BY SCHOOL GRADE LEVEL (ELEMENTARY VS. SECONDARY)

Topic of professional development activities	Mean Diff (Elem - Sec)	Std Error	t	P> t
1) the content of the subject(s) they teach	-0.015	0.0085	1.81	0.073
2) uses of computers for instruction	-0.010*	0.0039	-2.54	0.013
3) reading instruction	0.022***	0.0048	4.66	0.000
4) student discipline and management in the classroom	-0.001	0.0026	-0.27	0.785

*Difference is significant (p<.05)

**Difference is significant (p<.01)

***Difference is significant (p<.001)

TABLE 35. DIFFERENCES IN 33+ HOURS OF PARTICIPATION IN PROFESSIONAL DEVELOPMENT IN THE LAST 3 YEARS ON 2 TOPICS BY SCHOOL LEVEL (ELEMENTARY VS. SECONDARY)

Types of formal professional development activities	Mean Diff (Elem - Sec)	Std Error	t	P> t
1) teaching students with disabilities	-0.005	0.0042	-1.16	0.248
2) teaching limited-English proficient students	-0.014	0.0082	-1.69	0.094

TABLE 36. DIFFERENCES IN 33+ HOURS OF PARTICIPATION IN PROFESSIONAL DEVELOPMENT ON 4 TOPICS IN THE LAST 12 MONTHS BY SCHOOL URBANICITY

(1-LARGE TOWN/CENTRAL "URBAN", 2-URBAN FRINGE "SUBURBAN", 3-SMALL TOWN/RURAL)

Topic of professional development activities	Urbanicity (A)	Urbanicity (B)	Mean Diff (A-B)	Std Error	t	P> t
1) the content of the subject(s) they teach	1) Urban	2) Suburban	0.008	0.0096	0.81	0.423
	1) Urban	3) Rural	0.010	0.0110	0.87	0.384
	2) Suburban	3) Rural	0.002	0.0104	0.18	0.860
2) uses of computers for instruction	1) Urban	2) Suburban	-0.005	0.0057	-0.90	0.373
	1) Urban	3) Rural	-0.007	0.0081	-0.84	0.402
	2) Suburban	3) Rural	-0.002	0.0059	-0.29	0.770
3) reading instruction	1) Urban	2) Suburban	0.009	0.0067	1.32	1.320
	1) Urban	3) Rural	-0.004	0.0083	-0.49	0.624
	2) Suburban	3) Rural	-0.013	0.0084	-1.54	0.127
4) student discipline and management in the classroom	1) Urban	2) Suburban	0.006	0.0035	1.61	0.111
	1) Urban	3) Rural	0.002	0.0045	0.36	0.723
	2) Suburban	3) Rural	-0.004	0.0030	-1.32	0.190

TABLE 37. DIFFERENCES IN 33+ HOURS OF PARTICIPATION IN PROFESSIONAL DEVELOPMENT ON 2 TOPICS IN THE LAST 3 YEARS BY SCHOOL URBANICITY

(1-LARGE TOWN/CENTRAL "URBAN", 2-URBAN FRINGE "SUBURBAN", 3-SMALL TOWN/RURAL)

Topic of professional development activities	Urbanicity (A)	Urbanicity (B)	Mean Diff (A-B)	Std Error	t	P> t
1) teaching students with disabilities	1) Urban	2) Suburban	0.006	0.0065	0.92	0.363
	1) Urban	3) Rural	0.003	0.0067	0.40	0.691
	2) Suburban	3) Rural	-0.003	0.0043	-0.75	0.456
2) teaching limited-English proficient students	1) Urban	2) Suburban	0.010	0.0094	1.02	0.312
	1) Urban	3) Rural	0.026	0.0148	1.77	0.080
	2) Suburban	3) Rural	0.017	0.0122	1.37	0.176

TABLE 38. DIFFERENCES IN PARTICIPATION IN 33+ HOURS OF PROFESSIONAL DEVELOPMENT ON 4 TOPICS IN THE LAST 12 MONTHS BY SCHOOL MINORITY ENROLLMENT

Topic of professional development activities	Percent Minority Enrollment (A)	Percent Minority Enrollment (B)	Mean Diff (A-B)	Std Error	t	P> t
1) the content of the subject(s) they teach	1) <5.6%	2) 5.6-16.2%	-0.023	0.0119	-1.91	0.059
	1) <5.6%	3) 16.2-37.6%	-0.027*	0.0131	-2.09	0.040
	1) <5.6%	4) 37.6-78.0%	-0.024	0.0132	-1.80	0.076
	1) <5.6%	5) >78.0%	-0.022	0.0124	-1.77	0.080
	2) 5.6-16.2%	3) 16.2-37.6%	-0.005	0.0132	-0.34	0.732
	2) 5.6-16.2%	4) 37.6-78.0%	-0.001	0.0134	-0.08	0.940
	2) 5.6-16.2%	5) >78.0%	0.001	0.0131	0.06	0.953
	3) 16.2-37.6%	4) 44.6-77.0%	0.004	0.0142	0.25	0.805
	3) 16.2-37.6%	5) >78.0%	0.005	0.0146	0.36	0.719
	4) 37.6-78.0%	5) >78.0%	0.002	0.0141	0.13	0.900
2) uses of computers for instruction	1) <5.6%	2) 5.6-16.2%	0.003	0.0057	0.56	0.580
	1) <5.6%	3) 16.2-37.6%	-0.002	0.0074	-0.29	0.775
	1) <5.6%	4) 37.6-78.0%	-0.008	0.0062	-1.25	0.215
	1) <5.6%	5) >78.0%	-0.005	0.0075	-0.72	0.470
	2) 5.6-16.2%	3) 16.2-37.6%	-0.005	0.0064	-0.82	0.412
	2) 5.6-16.2%	4) 37.6-78.0%	-0.011	0.0056	-1.96	0.054
	2) 5.6-16.2%	5) >78.0%	-0.009	0.0068	-1.27	0.208
	3) 16.2-37.6%	4) 44.6-77.0%	-0.006	0.0072	-0.78	0.436
	3) 16.2-37.6%	5) >78.0%	-0.003	0.0090	-0.37	0.713
	4) 37.6-78.0%	5) >78.0%	0.002	0.0078	0.29	0.769
3) reading instruction	1) <5.6%	2) 5.6-16.2%	-0.003	0.0088	-0.29	0.773
	1) <5.6%	3) 16.2-37.6%	-0.005	0.0081	-0.67	0.503
	1) <5.6%	4) 37.6-78.0%	-0.011	0.0090	-1.20	0.234
	1) <5.6%	5) >78.0%	-0.023**	0.0086	-2.68	0.009
	2) 5.6-16.2%	3) 16.2-37.6%	-0.003	0.0089	-0.33	0.746
	2) 5.6-16.2%	4) 37.6-78.0%	-0.008	0.0086	-0.95	0.344
	2) 5.6-16.2%	5) >78.0%	-0.020*	0.0086	-2.37	0.020
	3) 16.2-37.6%	4) 44.6-77.0%	-0.005	0.0088	-0.60	0.547
	3) 16.2-37.6%	5) >78.0%	-0.018	0.0091	-1.91	0.059
	4) 37.6-78.0%	5) >78.0%	-0.012	0.0082	-1.48	0.143
4) student discipline and management in the classroom	1) <5.6%	2) 5.6-16.2%	-0.008	0.0045	-1.85	0.068
	1) <5.6%	3) 16.2-37.6%	-0.002	0.0029	-0.64	0.526
	1) <5.6%	4) 37.6-78.0%	-0.003	0.0041	-0.61	0.545
	1) <5.6%	5) >78.0%	-0.007	0.0039	-1.90	0.061
	2) 5.6-16.2%	3) 16.2-37.6%	0.007	0.0045	1.46	0.149
	2) 5.6-16.2%	4) 37.6-78.0%	0.006	0.0049	1.20	0.232
	2) 5.6-16.2%	5) >78.0%	0.001	0.0051	0.21	0.834
	3) 16.2-37.6%	4) 44.6-77.0%	-0.001	0.0042	-0.16	0.877
	3) 16.2-37.6%	5) >78.0%	-0.006	0.0039	-1.40	0.165
	4) 37.6-78.0%	5) >78.0%	-0.005	0.0039	0.214	-1.25

* Difference is significant (p<.05) **Difference is significant (p<.01) ***Difference is significant (p<.001)

TABLE 39. DIFFERENCES IN PARTICIPATION IN 33+ HOURS OF PROFESSIONAL DEVELOPMENT IN THE LAST 3 YEARS ON 2 TOPICS BY SCHOOL MINORITY ENROLLMENT

Types of support for professional development participation	Percent Minority Enrollment (A)	Percent Minority Enrollment (B)	Mean Diff (A-B)	Std Error	t	P> t
1) teaching students with disabilities	1) <5.6%	2) 5.6-16.2%	0.000	0.0060	0.05	0.961
	1) <5.6%	3) 16.2-37.6%	0.003	0.0052	0.52	0.603
	1) <5.6%	4) 37.6-78.0%	0.000	0.0065	-0.04	0.971
	1) <5.6%	5) >78.0%	-0.007	0.0064	-1.01	0.315
	2) 5.6-16.2%	3) 16.2-37.6%	0.002	0.0066	0.37	0.714
	2) 5.6-16.2%	4) 37.6-78.0%	-0.001	0.0071	-0.07	0.940
	2) 5.6-16.2%	5) >78.0%	-0.007	0.0076	-0.89	0.377
	3) 16.2-37.6%	4) 44.6-77.0%	-0.003	0.0064	-0.46	0.646
	3) 16.2-37.6%	5) >78.0%	-0.009	0.0067	-1.38	0.172
	4) 37.6-78.0%	5) >78.0%	-0.006	0.0071	-0.88	0.379
2) teaching limited-English proficient students	1) <5.6%	2) 5.6-16.2%	-0.009	0.0230	-0.41	0.685
	1) <5.6%	3) 16.2-37.6%	-0.050*	0.0246	-2.04	0.045
	1) <5.6%	4) 37.6-78.0%	-0.041	0.0224	-1.84	0.069
	1) <5.6%	5) >78.0%	-0.050*	0.0231	-2.16	0.033
	2) 5.6-16.2%	3) 16.2-37.6%	-0.041*	0.0163	-2.49	0.014
	2) 5.6-16.2%	4) 37.6-78.0%	-0.032*	0.0157	-2.03	0.046
	2) 5.6-16.2%	5) >78.0%	-0.041**	0.0142	-2.85	0.005
	3) 16.2-37.6%	4) 44.6-77.0%	0.009	0.0152	0.58	0.565
	3) 16.2-37.6%	5) >78.0%	0.000	0.0132	0.02	0.986
	4) 37.6-78.0%	5) >78.0%	-0.009	0.0113	-0.75	0.453

* Difference is significant (p<.05) **Difference is significant (p<.01) ***Difference is significant (p<.001)

TABLE 40. DIFFERENCES IN 33+ HOURS OF PARTICIPATION IN PROFESSIONAL DEVELOPMENT ON 4 TOPICS IN THE LAST 12 MONTHS BY SCHOOL POVERTY (PERCENT OF STUDENTS ENROLLED IN THE FREE AND REDUCED LUNCH PROGRAM - FRL)

Topic of professional development activities	Percent FRL Enrollment (A)	Percent FRL Enrollment (B)	Mean Diff (A-B)	Std Error	t	P> t
1) the content of the subject(s) they teach	1) <20.0%	2) 20.0-37.96%	0.008	0.0140	0.58	0.565
	1) <20.0%	3) 37.96-58.02%	0.008	0.0129	0.59	0.557
	1) <20.0%	4) >58.02%	0.004	0.0117	0.30	0.767
	2) 20.0-37.96%	3) 37.96-58.02%	0.000	0.0136	-0.03	0.974
	2) 20.0-37.96%	4) >58.02%	-0.005	0.0127	-0.36	0.717
	3) 37.96-58.02%	4) >58.02%	-0.004	0.0132	-0.31	0.754
2) uses of computers for instruction	1) <20.0%	2) 20.0-37.96%	0.001	0.0054	0.21	0.834
	1) <20.0%	3) 37.96-58.02%	-0.004	0.0057	-0.62	0.537
	1) <20.0%	4) >58.02%	-0.002	0.0065	-0.26	0.799
	2) 20.0-37.96%	3) 37.96-58.02%	-0.005	0.0069	-0.68	0.500
	2) 20.0-37.96%	4) >58.02%	-0.003	0.0068	-0.42	0.678
	3) 37.96-58.02%	4) >58.02%	0.002	0.0075	0.25	0.805
3) reading instruction	1) <20.0%	2) 20.0-37.96%	-0.017*	0.0083	-2.09	0.040
	1) <20.0%	3) 37.96-58.02%	-0.019*	0.0083	-2.24	0.027
	1) <20.0%	4) >58.02%	-0.024**	0.0081	-2.98	0.004
	2) 20.0-37.96%	3) 37.96-58.02%	-0.001	0.0079	-0.18	0.859
	2) 20.0-37.96%	4) >58.02%	-0.007	0.0082	-0.84	0.402
	3) 37.96-58.02%	4) >58.02%	-0.006	0.0078	-0.71	0.480
4) student discipline and management in the classroom	1) <20.0%	2) 20.0-37.96%	0.003	0.0055	0.51	0.612
	1) <20.0%	3) 37.96-58.02%	0.002	0.0052	0.32	0.753
	1) <20.0%	4) >58.02%	0.003	0.0048	0.66	0.508
	2) 20.0-37.96%	3) 37.96-58.02%	-0.001	0.0044	-0.26	0.799
	2) 20.0-37.96%	4) >58.02%	0.000	0.0036	0.10	0.917
	3) 37.96-58.02%	4) >58.02%	0.002	0.0039	0.39	0.696

* Difference is significant (p<.05) **Difference is significant (p<.01) ***Difference is significant (p<.001)

TABLE 41. DIFFERENCES IN 33+ HOURS OF PARTICIPATION IN PROFESSIONAL DEVELOPMENT IN THE LAST 3 YEARS ON 2 TOPICS BY SCHOOL POVERTY (PERCENT OF STUDENTS ENROLLED IN THE FREE AND REDUCED LUNCH PROGRAM - FRL)

Topic of professional development activities	Percent FRL Enrollment (A)	Percent FRL Enrollment (B)	Mean Diff (A-B)	Std Error	t	P> t
1) teaching students with disabilities	1) <20.0%	2) 20.0-37.96%	-0.003	0.0055	-0.50	0.617
	1) <20.0%	3) 37.96-58.02%	-0.009	0.0057	-1.60	0.114
	1) <20.0%	4) >58.02%	-0.004	0.0058	-0.71	0.481
	2) 20.0-37.96%	3) 37.96-58.02%	-0.006	0.0062	-1.03	0.305
	2) 20.0-37.96%	4) >58.02%	-0.001	0.0058	-0.23	0.816
	3) 37.96-58.02%	4) >58.02%	0.005	0.0063	0.80	0.425
2) teaching limited-English proficient students	1) <20.0%	2) 20.0-37.96%	-0.004	0.0156	-0.28	0.779
	1) <20.0%	3) 37.96-58.02%	-0.002	0.0170	-0.11	0.915
	1) <20.0%	4) >58.02%	0.001	0.0140	0.10	0.920
	2) 20.0-37.96%	3) 37.96-58.02%	0.003	0.0160	0.16	0.872
	2) 20.0-37.96%	4) >58.02%	0.006	0.0148	0.39	0.696
	3) 37.96-58.02%	4) >58.02%	0.003	0.0129	0.25	0.803

TABLE 42. DIFFERENCES IN 33+ HOURS OF PARTICIPATION IN PROFESSIONAL DEVELOPMENT ON 4 TOPICS IN THE LAST 12 MONTHS BY SCHOOL LEP (LIMITED ENGLISH PROFICIENT) ENROLLMENT

Topic of professional development activities	Percent LEP Enrollment (A)	Percent LEP Enrollment (B)	Mean Diff (A-B)	Std Error	t	P> t
1) the content of the subject(s) they teach	1) 0%	2) 0.0-2.5%	-0.013	0.0145	-0.87	0.388
	1) 0%	3) 2.5-5%	-0.001	0.0183	-0.03	0.976
	1) 0%	4) 5-10%	-0.020	0.0194	-1.02	0.313
	1) 0%	5) >10%	-0.026*	0.0125	-2.10	0.039
	2) 0.0-2.5%	3) 2.5-5%	0.012	0.0203	0.59	0.556
	2) 0.0-2.5%	4) 5-10%	-0.007	0.0209	-0.34	0.734
	2) 0.0-2.5%	5) >10%	-0.014	0.0160	-0.86	0.393
	3) 2.5-5%	4) 5-10%	-0.019	0.0224	-0.85	0.397
	3) 2.5-5%	5) >10%	-0.026	0.0191	-1.35	0.181
	4) 5-10%	5) >10%	-0.007	0.0210	-0.32	0.752
2) uses of computers for instruction	1) 0%	2) 0.0-2.5%	-0.011	0.0087	-1.24	0.219
	1) 0%	3) 2.5-5%	-0.002	0.0084	-0.25	0.804
	1) 0%	4) 5-10%	-0.010	0.0112	-0.90	0.372
	1) 0%	5) >10%	-0.003	0.0058	-0.49	0.624
	2) 0.0-2.5%	3) 2.5-5%	0.009	0.0113	0.77	0.446
	2) 0.0-2.5%	4) 5-10%	0.001	0.0128	0.06	0.955
	2) 0.0-2.5%	5) >10%	0.008	0.0093	0.85	0.397
	3) 2.5-5%	4) 5-10%	-0.008	0.0118	-0.67	0.503
	3) 2.5-5%	5) >10%	-0.001	0.0093	-0.08	0.937
	4) 5-10%	5) >10%	0.007	0.0117	0.61	0.542
3) reading instruction	1) 0%	2) 0.0-2.5%	0.019*	0.0083	2.28	0.025
	1) 0%	3) 2.5-5%	0.014	0.0100	1.38	0.170
	1) 0%	4) 5-10%	-0.006	0.0087	-0.64	0.526
	1) 0%	5) >10%	-0.020**	0.0071	-2.89	0.005
	2) 0.0-2.5%	3) 2.5-5%	-0.005	0.0117	-0.44	0.662
	2) 0.0-2.5%	4) 5-10%	-0.025*	0.0112	-2.18	0.032
	2) 0.0-2.5%	5) >10%	-0.039***	0.0096	-4.10	0.000
	3) 2.5-5%	4) 5-10%	-0.019	0.0125	-1.55	0.124
	3) 2.5-5%	5) >10%	-0.034**	0.0114	-2.99	0.004
	4) 5-10%	5) >10%	-0.015	0.0095	-1.57	0.119
4) student discipline and management in the classroom	1) 0%	2) 0.0-2.5%	-0.002	0.0061	-0.34	0.735
	1) 0%	3) 2.5-5%	0.006	0.0042	1.30	0.197
	1) 0%	4) 5-10%	0.002	0.0057	0.37	0.712
	1) 0%	5) >10%	0.002	0.0030	0.68	0.501
	2) 0.0-2.5%	3) 2.5-5%	0.008	0.0072	1.05	0.296
	2) 0.0-2.5%	4) 5-10%	0.004	0.0081	0.52	0.607
	2) 0.0-2.5%	5) >10%	0.004	0.0067	0.61	0.542
	3) 2.5-5%	4) 5-10%	-0.003	0.0061	-0.56	0.577
	3) 2.5-5%	5) >10%	-0.004	0.0044	-0.79	0.433
	4) 5-10%	5) >10%	0.000	0.0050	-0.01	0.990

* Difference is significant (p<.05) **Difference is significant (p<.01) ***Difference is significant (p<.001)

TABLE 43. DIFFERENCES IN 33+ HOURS OF PARTICIPATION IN PROFESSIONAL DEVELOPMENT IN THE LAST 3 YEARS ON 2 TOPICS BY SCHOOL LEP (LIMITED ENGLISH PROFICIENT) ENROLLMENT (CONTINUED)

Types of support for professional development participation	Percent LEP Enrollment (A)	Percent LEP Enrollment (B)	Mean Diff (A-B)	Std Error	t	P> t
1) teaching students with disabilities	1) 0%	2) 0.0-2.5%	0.007	0.0077	0.94	0.350
	1) 0%	3) 2.5-5%	0.016**	0.0048	3.42	0.001
	1) 0%	4) 5-10%	0.007	0.0063	1.08	0.283
	1) 0%	5) >10%	-0.020***	0.0046	-4.24	0.000
	2) 0.0-2.5%	3) 2.5-5%	0.009	0.0080	1.14	0.258
	2) 0.0-2.5%	4) 5-10%	0.000	0.0090	-0.04	0.964
	2) 0.0-2.5%	5) >10%	-0.027**	0.0081	-3.28	0.001
	3) 2.5-5%	4) 5-10%	-0.010	0.0071	-1.34	0.183
	3) 2.5-5%	5) >10%	-0.036***	0.0058	-6.17	0.000
	4) 5-10%	5) >10%	-0.026***	0.0070	-3.77	0.000
2) teaching limited-English proficient students	1) 0%	2) 0.0-2.5%	0.022	0.0173	1.26	0.210
	1) 0%	3) 2.5-5%	0.017	0.0168	1.00	0.318
	1) 0%	4) 5-10%	0.025	0.0129	1.92	0.059
	1) 0%	5) >10%	0.000	0.0127	0.02	0.981
	2) 0.0-2.5%	3) 2.5-5%	-0.005	0.0173	-0.28	0.777
	2) 0.0-2.5%	4) 5-10%	0.003	0.0172	0.17	0.866
	2) 0.0-2.5%	5) >10%	-0.022	0.0132	-1.63	0.107
	3) 2.5-5%	4) 5-10%	0.008	0.0177	0.44	0.659
	3) 2.5-5%	5) >10%	-0.017	0.0147	-1.13	0.260
	4) 5-10%	5) >10%	-0.024	0.0137	-1.78	0.079

* Difference is significant (p<.05) **Difference is significant (p<.01) ***Difference is significant (p<.001)

TABLE 44. DIFFERENCES IN AVERAGE RATING OF “VALUE OF PROFESSIONAL DEVELOPMENT” ON 4 TOPICS IN THE LAST 12 MONTHS BY SCHOOL GRADE LEVEL (ELEMENTARY VS. SECONDARY)

Topic of professional development activities	Mean Diff (Elem - Sec)	Std Error	t	P> t
1) the content of the subject(s) they teach	0.042*	0.0163	2.59	0.011
2) uses of computers for instruction	0.033	0.0191	1.71	0.091
3) reading instruction	0.311***	0.0218	14.25	0.000
4) student discipline and management in the classroom	0.138***	0.0194	7.11	0.000

*Difference is significant (p<.05) **Difference is significant (p<.01) ***Difference is significant (p<.001)

TABLE 45. DIFFERENCES IN AVERAGE RATING OF “VALUE OF PROFESSIONAL DEVELOPMENT” IN THE LAST 3 YEARS ON 2 TOPICS BY SCHOOL LEVEL (ELEMENTARY VS. SECONDARY)

Types of formal professional development activities	Mean Diff (Elem - Sec)	Std Error	t	P> t
1) teaching students with disabilities	0.120***	0.0195	6.15	0.000
2) teaching limited-English proficient students	0.162***	0.0351	4.61	0.000

*Difference is significant (p<.05) **Difference is significant (p<.01) ***Difference is significant (p<.001)

TABLE 46. DIFFERENCES IN AVERAGE RATING OF “VALUE OF PROFESSIONAL DEVELOPMENT” ON 4 TOPICS IN THE LAST 12 MONTHS BY SCHOOL URBANICITY

(1-LARGE TOWN/CENTRAL “URBAN”, 2-URBAN FRINGE “SUBURBAN”, 3-SMALL TOWN/RURAL)

Topic of professional development activities	Urbanicity (A)	Urbanicity (B)	Mean Diff (A-B)	Std Error	t	P> t
1) the content of the subject(s) they teach	1) Urban	2) Suburban	-0.036	0.0247	-1.47	0.145
	1) Urban	3) Rural	-0.086**	0.0256	-3.38	0.001
	2) Suburban	3) Rural	-0.050*	0.0248	-2.02	0.047
2) uses of computers for instruction	1) Urban	2) Suburban	-0.047	0.0288	-1.65	0.103
	1) Urban	3) Rural	-0.025	0.0323	-0.77	0.442
	2) Suburban	3) Rural	0.022	0.0271	0.83	0.410
3) reading instruction	1) Urban	2) Suburban	0.049	0.0314	1.57	0.120
	1) Urban	3) Rural	0.001	0.0377	0.02	0.985
	2) Suburban	3) Rural	-0.049	0.0357	-1.36	0.177
4) student discipline and management in the classroom	1) Urban	2) Suburban	-0.013	0.0291	-0.44	0.658
	1) Urban	3) Rural	-0.025	0.0283	-0.87	0.389
	2) Suburban	3) Rural	-0.012	0.0276	-0.42	0.674

* Difference is significant (p<.05) **Difference is significant (p<.01) ***Difference is significant (p<.001)

TABLE 47. DIFFERENCES IN AVERAGE RATING OF “VALUE OF PROFESSIONAL DEVELOPMENT” ON 2 TOPICS IN THE LAST 3 YEARS BY SCHOOL URBANICITY

(1-LARGE TOWN/CENTRAL “URBAN”, 2-URBAN FRINGE “SUBURBAN”, 3-SMALL TOWN/RURAL)

Topic of professional development activities	Urbanicity (A)	Urbanicity (B)	Mean Diff (A-B)	Std Error	t	P> t
1) teaching students with disabilities	1) Urban	2) Suburban	-0.022	0.0320	-0.69	0.495
	1) Urban	3) Rural	0.016	0.0374	0.44	0.661
	2) Suburban	3) Rural	0.038	0.0326	1.18	0.243
2) teaching limited-English proficient students	1) Urban	2) Suburban	0.041	0.0398	1.02	0.309
	1) Urban	3) Rural	0.090	0.0683	1.32	0.192
	2) Suburban	3) Rural	0.049	0.0755	0.65	0.516

* Difference is significant (p<.05) **Difference is significant (p<.01) ***Difference is significant (p<.001)

TABLE 48. DIFFERENCES IN AVERAGE RATING OF “VALUE OF PROFESSIONAL DEVELOPMENT” ON 4 TOPICS IN THE LAST 12 MONTHS BY SCHOOL MINORITY ENROLLMENT

Topic of professional development activities	Percent Minority Enrollment (A)	Percent Minority Enrollment (B)	Mean Diff (A-B)	Std Error	t	P> t
1) the content of the subject(s) they teach	1) <5.6%	2) 5.6-16.2%	0.020	0.0283	0.69	0.490
	1) <5.6%	3) 16.2-37.6%	0.027	0.0295	0.91	0.366
	1) <5.6%	4) 37.6-78.0%	0.053	0.0291	1.82	0.073
	1) <5.6%	5) >78.0%	0.034	0.0305	1.10	0.275
	2) 5.6-16.2%	3) 16.2-37.6%	0.007	0.0252	0.28	0.778
	2) 5.6-16.2%	4) 37.6-78.0%	0.033	0.0263	1.26	0.211
	2) 5.6-16.2%	5) >78.0%	0.014	0.0306	0.45	0.651
	3) 16.2-37.6%	4) 44.6-77.0%	0.026	0.0262	1.00	0.322
	3) 16.2-37.6%	5) >78.0%	0.007	0.0302	0.22	0.823
	4) 37.6-78.0%	5) >78.0%	-0.019	0.0307	-0.63	0.532
2) uses of computers for instruction	1) <5.6%	2) 5.6-16.2%	-0.003	0.0331	-0.08	0.940
	1) <5.6%	3) 16.2-37.6%	-0.006	0.0347	-0.18	0.857
	1) <5.6%	4) 37.6-78.0%	0.012	0.0313	0.37	0.711
	1) <5.6%	5) >78.0%	-0.069	0.0420	-1.64	0.105
	2) 5.6-16.2%	3) 16.2-37.6%	-0.004	0.0305	-0.12	0.902
	2) 5.6-16.2%	4) 37.6-78.0%	0.014	0.0325	0.43	0.666
	2) 5.6-16.2%	5) >78.0%	-0.066	0.0397	-1.67	0.099
	3) 16.2-37.6%	4) 44.6-77.0%	0.018	0.0360	0.50	0.621
	3) 16.2-37.6%	5) >78.0%	-0.063	0.0381	-1.64	0.105
	4) 37.6-78.0%	5) >78.0%	-0.080*	0.0400	-2.01	0.047
3) reading instruction	1) <5.6%	2) 5.6-16.2%	0.001	0.0412	0.01	0.988
	1) <5.6%	3) 16.2-37.6%	0.015	0.0485	0.31	0.758
	1) <5.6%	4) 37.6-78.0%	0.012	0.0382	0.33	0.745
	1) <5.6%	5) >78.0%	-0.067	0.0402	-1.66	0.101
	2) 5.6-16.2%	3) 16.2-37.6%	0.014	0.0418	0.34	0.732
	2) 5.6-16.2%	4) 37.6-78.0%	0.012	0.0389	0.30	0.762
	2) 5.6-16.2%	5) >78.0%	-0.067	0.0405	-1.66	0.100
	3) 16.2-37.6%	4) 44.6-77.0%	-0.003	0.0405	-0.06	0.950
	3) 16.2-37.6%	5) >78.0%	-0.082	0.0438	-1.86	0.066
	4) 37.6-78.0%	5) >78.0%	-0.079*	0.0382	-2.07	0.041
4) student discipline and management in the classroom	1) <5.6%	2) 5.6-16.2%	-0.004	0.0410	-0.10	0.923
	1) <5.6%	3) 16.2-37.6%	0.009	0.0410	0.21	0.832
	1) <5.6%	4) 37.6-78.0%	-0.012	0.0403	-0.30	0.764
	1) <5.6%	5) >78.0%	-0.038	0.0428	-0.89	0.374
	2) 5.6-16.2%	3) 16.2-37.6%	0.013	0.0388	0.33	0.744
	2) 5.6-16.2%	4) 37.6-78.0%	-0.008	0.0377	-0.22	0.829
	2) 5.6-16.2%	5) >78.0%	-0.034	0.0421	-0.81	0.418
	3) 16.2-37.6%	4) 44.6-77.0%	-0.021	0.0337	-0.62	0.537
	3) 16.2-37.6%	5) >78.0%	-0.047	0.0389	-1.21	0.230
	4) 37.6-78.0%	5) >78.0%	-0.026	0.0411	-0.64	0.526

* Difference is significant (p<.05) **Difference is significant (p<.01) ***Difference is significant (p<.001)

TABLE 49. DIFFERENCES IN AVERAGE RATING OF “VALUE OF PROFESSIONAL DEVELOPMENT” IN THE LAST 3 YEARS ON 2 TOPICS BY SCHOOL MINORITY ENROLLMENT

Types of support for professional development participation	Percent Minority Enrollment (A)	Percent Minority Enrollment (B)	Mean Diff (A-B)	Std Error	t	P> t
1) teaching students with disabilities	1) <5.6%	2) 5.6-16.2%	0.015	0.0402	0.38	0.704
	1) <5.6%	3) 16.2-37.6%	0.020	0.0389	0.51	0.612
	1) <5.6%	4) 37.6-78.0%	0.034	0.0349	0.96	0.338
	1) <5.6%	5) >78.0%	-0.009	0.0391	-0.23	0.818
	2) 5.6-16.2%	3) 16.2-37.6%	0.004	0.0445	0.10	0.921
	2) 5.6-16.2%	4) 37.6-78.0%	0.018	0.0428	0.43	0.670
	2) 5.6-16.2%	5) >78.0%	-0.024	0.0481	-0.51	0.614
	3) 16.2-37.6%	4) 44.6-77.0%	0.014	0.0403	0.34	0.732
	3) 16.2-37.6%	5) >78.0%	-0.029	0.0388	-0.74	0.461
	4) 37.6-78.0%	5) >78.0%	-0.043	0.0429	-0.99	0.323
2) teaching limited-English proficient students	1) <5.6%	2) 5.6-16.2%	0.012	0.0803	0.15	0.879
	1) <5.6%	3) 16.2-37.6%	-0.043	0.0840	-0.52	0.607
	1) <5.6%	4) 37.6-78.0%	-0.093	0.0717	-1.30	0.197
	1) <5.6%	5) >78.0%	-0.218*	0.0827	-2.64	0.010
	2) 5.6-16.2%	3) 16.2-37.6%	-0.056	0.0595	-0.93	0.353
	2) 5.6-16.2%	4) 37.6-78.0%	-0.105	0.0596	-1.77	0.080
	2) 5.6-16.2%	5) >78.0%	-0.231***	0.0605	-3.81	0.000
	3) 16.2-37.6%	4) 44.6-77.0%	-0.050	0.0582	-0.86	0.394
	3) 16.2-37.6%	5) >78.0%	-0.175**	0.0523	-3.35	0.001
	4) 37.6-78.0%	5) >78.0%	-0.125*	0.0560	-2.23	0.028

* Difference is significant (p<.05) **Difference is significant (p<.01) ***Difference is significant (p<.001)

TABLE 50. DIFFERENCES IN AVERAGE RATING OF “VALUE OF PROFESSIONAL DEVELOPMENT” ON 4 TOPICS IN THE LAST 12 MONTHS BY SCHOOL POVERTY (PERCENT OF STUDENTS ENROLLED IN THE FREE AND REDUCED LUNCH PROGRAM - FRL)

Topic of professional development activities	Percent FRL Enrollment (A)	Percent FRL Enrollment (B)	Mean Diff (A-B)	Std Error	t	P> t
1) the content of the subject(s) they teach	1) <20.0%	2) 20.0-37.96%	-0.033	0.0221	-1.49	0.139
	1) <20.0%	3) 37.96-58.02%	-0.019	0.0229	-0.85	0.398
	1) <20.0%	4) >58.02%	-0.024	0.0241	-1.00	0.319
	2) 20.0-37.96%	3) 37.96-58.02%	0.014	0.0240	0.57	0.572
	2) 20.0-37.96%	4) >58.02%	0.009	0.0281	0.32	0.753
	3) 37.96-58.02%	4) >58.02%	-0.005	0.0252	-0.19	0.852
2) uses of computers for instruction	1) <20.0%	2) 20.0-37.96%	-0.004	0.0302	-0.15	0.882
	1) <20.0%	3) 37.96-58.02%	0.011	0.0269	0.41	0.686
	1) <20.0%	4) >58.02%	-0.050	0.0347	-1.44	0.153
	2) 20.0-37.96%	3) 37.96-58.02%	0.015	0.0310	0.50	0.621
	2) 20.0-37.96%	4) >58.02%	-0.046	0.0363	-1.26	0.213
	3) 37.96-58.02%	4) >58.02%	-0.061*	0.0302	-2.02	0.046
3) reading instruction	1) <20.0%	2) 20.0-37.96%	-0.022	0.0428	-0.52	0.602
	1) <20.0%	3) 37.96-58.02%	-0.056	0.0355	-1.59	0.116
	1) <20.0%	4) >58.02%	-0.117**	0.0364	-3.23	0.002
	2) 20.0-37.96%	3) 37.96-58.02%	-0.034	0.0342	-0.99	0.323
	2) 20.0-37.96%	4) >58.02%	-0.095**	0.0348	-2.73	0.008
	3) 37.96-58.02%	4) >58.02%	-0.061*	0.0304	-2.01	0.048
4) student discipline and management in the classroom	1) <20.0%	2) 20.0-37.96%	-0.031	0.0475	-0.65	0.515
	1) <20.0%	3) 37.96-58.02%	-0.035	0.0359	-0.97	0.335
	1) <20.0%	4) >58.02%	-0.059*	0.0270	-2.19	0.031
	2) 20.0-37.96%	3) 37.96-58.02%	-0.004	0.0464	-0.08	0.937
	2) 20.0-37.96%	4) >58.02%	-0.028	0.0483	-0.58	0.563
	3) 37.96-58.02%	4) >58.02%	-0.024	0.0337	-0.72	0.472

* Difference is significant (p<.05) **Difference is significant (p<.01) ***Difference is significant (p<.001)

TABLE 51. DIFFERENCES IN AVERAGE RATING OF “VALUE OF PROFESSIONAL DEVELOPMENT” IN THE LAST 3 YEARS ON 2 TOPICS BY SCHOOL POVERTY (PERCENT OF STUDENTS ENROLLED IN THE FREE AND REDUCED LUNCH PROGRAM - FRL)

Topic of professional development activities	Percent FRL Enrollment (A)	Percent FRL Enrollment (B)	Mean Diff (A-B)	Std Error	t	P> t
1) teaching students with disabilities	1) <20.0%	2) 20.0-37.96%	-0.022	0.0341	-0.64	0.526
	1) <20.0%	3) 37.96-58.02%	-0.016	0.0300	-0.55	0.587
	1) <20.0%	4) >58.02%	-0.027	0.0376	-0.72	0.475
	2) 20.0-37.96%	3) 37.96-58.02%	0.005	0.0331	0.16	0.871
	2) 20.0-37.96%	4) >58.02%	-0.005	0.0388	-0.13	0.893
	3) 37.96-58.02%	4) >58.02%	-0.011	0.0368	-0.29	0.774
2) teaching limited-English proficient students	1) <20.0%	2) 20.0-37.96%	-0.006	0.0580	-0.10	0.923
	1) <20.0%	3) 37.96-58.02%	-0.053	0.0552	-0.96	0.338
	1) <20.0%	4) >58.02%	-0.182**	0.0513	-3.55	0.001
	2) 20.0-37.96%	3) 37.96-58.02%	-0.048	0.0531	-0.90	0.371
	2) 20.0-37.96%	4) >58.02%	-0.176***	0.0442	-4.00	0.000
	3) 37.96-58.02%	4) >58.02%	-0.129*	0.0514	-2.50	0.014

* Difference is significant (p<.05) **Difference is significant (p<.01) ***Difference is significant (p<.001)

TABLE 52. DIFFERENCES IN AVERAGE RATING OF “VALUE OF PROFESSIONAL DEVELOPMENT” ON 4 TOPICS IN THE LAST 12 MONTHS BY SCHOOL LEP (LIMITED ENGLISH PROFICIENT) ENROLLMENT

Topic of professional development activities	Percent LEP Enrollment (A)	Percent LEP Enrollment (B)	Mean Diff (A-B)	Std Error	t	P> t
1) the content of the subject(s) they teach	1) 0%	2) 0.0-2.5%	0.020	0.0276	0.73	0.465
	1) 0%	3) 2.5-5%	-0.046	0.0295	-1.54	0.126
	1) 0%	4) 5-10%	0.065	0.0362	1.79	0.076
	1) 0%	5) >10%	-0.053*	0.0241	-2.18	0.032
	2) 0.0-2.5%	3) 2.5-5%	-0.066	0.0353	-1.86	0.066
	2) 0.0-2.5%	4) 5-10%	0.045	0.0432	1.03	0.304
	2) 0.0-2.5%	5) >10%	-0.073*	0.0284	-2.57	0.012
	3) 2.5-5%	4) 5-10%	0.111*	0.0461	2.40	0.019
	3) 2.5-5%	5) >10%	-0.007	0.0327	-0.22	0.830
	4) 5-10%	5) >10%	-0.118**	0.0442	-2.66	0.009
2) uses of computers for instruction	1) 0%	2) 0.0-2.5%	0.006	0.0374	0.16	0.872
	1) 0%	3) 2.5-5%	-0.005	0.0414	-0.13	0.900
	1) 0%	4) 5-10%	0.046	0.0500	0.93	0.355
	1) 0%	5) >10%	0.000	0.0294	0.00	0.997
	2) 0.0-2.5%	3) 2.5-5%	-0.011	0.0504	-0.22	0.823
	2) 0.0-2.5%	4) 5-10%	0.040	0.0573	0.70	0.483
	2) 0.0-2.5%	5) >10%	-0.006	0.0432	-0.14	0.891
	3) 2.5-5%	4) 5-10%	0.052	0.0617	0.84	0.405
	3) 2.5-5%	5) >10%	0.005	0.0470	0.11	0.910
	4) 5-10%	5) >10%	-0.046	0.0582	-0.80	0.428
3) reading instruction	1) 0%	2) 0.0-2.5%	0.249***	0.0424	5.88	0.000
	1) 0%	3) 2.5-5%	0.081	0.0555	1.45	0.150
	1) 0%	4) 5-10%	0.029	0.0490	0.58	0.561
	1) 0%	5) >10%	-0.048	0.0278	-1.72	0.090
	2) 0.0-2.5%	3) 2.5-5%	-0.169*	0.0707	-2.39	0.019
	2) 0.0-2.5%	4) 5-10%	-0.221**	0.0613	-3.60	0.001
	2) 0.0-2.5%	5) >10%	-0.297***	0.0481	-6.17	0.000
	3) 2.5-5%	4) 5-10%	-0.052	0.0796	-0.65	0.515
	3) 2.5-5%	5) >10%	-0.128	0.0655	-1.96	0.053
	4) 5-10%	5) >10%	-0.076	0.0495	-1.54	0.126
4) student discipline and management in the classroom	1) 0%	2) 0.0-2.5%	0.074	0.0419	1.77	0.080
	1) 0%	3) 2.5-5%	0.108	0.0662	1.63	0.107
	1) 0%	4) 5-10%	0.057	0.0517	1.10	0.273
	1) 0%	5) >10%	-0.039	0.0295	-1.33	0.186
	2) 0.0-2.5%	3) 2.5-5%	0.034	0.0646	0.52	0.605
	2) 0.0-2.5%	4) 5-10%	-0.017	0.0597	-0.29	0.773
	2) 0.0-2.5%	5) >10%	-0.114*	0.0465	-2.44	0.017
	3) 2.5-5%	4) 5-10%	-0.051	0.0838	-0.61	0.546
	3) 2.5-5%	5) >10%	-0.147*	0.0693	-2.13	0.036
	4) 5-10%	5) >10%	-0.096	0.0604	-1.59	0.115

* Difference is significant (p<.05) **Difference is significant (p<.01) ***Difference is significant (p<.001)

TABLE 53. DIFFERENCES IN AVERAGE RATING OF “VALUE OF PROFESSIONAL DEVELOPMENT” IN THE LAST 3 YEARS ON 2 TOPICS BY SCHOOL LEP (LIMITED ENGLISH PROFICIENT) ENROLLMENT

Types of support for professional development participation	Percent LEP Enrollment (A)	Percent LEP Enrollment (B)	Mean Diff (A-B)	Std Error	t	P> t
1) teaching students with disabilities	1) 0%	2) 0.0-2.5%	0.083*	0.0407	2.05	0.044
	1) 0%	3) 2.5-5%	0.027	0.0587	0.46	0.648
	1) 0%	4) 5-10%	0.001	0.0519	0.01	0.989
	1) 0%	5) >10%	-0.155***	0.0258	-6.01	0.000
	2) 0.0-2.5%	3) 2.5-5%	-0.056	0.0629	-0.90	0.372
	2) 0.0-2.5%	4) 5-10%	-0.083	0.0519	-1.59	0.115
	2) 0.0-2.5%	5) >10%	-0.238***	0.0389	-6.12	0.000
	3) 2.5-5%	4) 5-10%	-0.026	0.0698	-0.37	0.709
	3) 2.5-5%	5) >10%	-0.182**	0.0590	-3.08	0.003
	4) 5-10%	5) >10%	-0.156**	0.0510	-3.05	0.003
2) teaching limited-English proficient students	1) 0%	2) 0.0-2.5%	-0.001	0.0662	-0.01	0.991
	1) 0%	3) 2.5-5%	-0.097	0.0651	-1.50	0.138
	1) 0%	4) 5-10%	0.034	0.0576	0.58	0.561
	1) 0%	5) >10%	-0.283***	0.0547	-5.18	0.000
	2) 0.0-2.5%	3) 2.5-5%	-0.097	0.0805	-1.20	0.233
	2) 0.0-2.5%	4) 5-10%	0.034	0.0642	0.54	0.594
	2) 0.0-2.5%	5) >10%	-0.282***	0.0603	-4.68	0.000
	3) 2.5-5%	4) 5-10%	0.131	0.0759	1.73	0.088
	3) 2.5-5%	5) >10%	-0.186**	0.0684	-2.71	0.008
	4) 5-10%	5) >10%	-0.317***	0.0557	-5.69	0.000

* Difference is significant (p<.05) **Difference is significant (p<.01) ***Difference is significant (p<.001)

TABLE 54. DIFFERENCES IN TEACHER ATTITUDES AND SCHOOL CLIMATE BY SCHOOL LEVEL (ELEMENTARY VS. SECONDARY)

Types of formal professional development activities	Mean Diff (Elem - Sec)	Std Error	t	P> t
1) There is a great deal of cooperative effort among staff members	-0.010***	0.0033	-2.98	0.004
2. They are given the supports they need to teach students with special needs	0.019*	0.0045	4.20	0.000

*Difference is significant (p<.05)

**Difference is significant (p<.01)

***Difference is significant (p<.001)

TABLE 55. DIFFERENCES IN TEACHER ATTITUDES AND SCHOOL CLIMATE BY SCHOOL URBANICITY (1-LARGE TOWN/CENTRAL "URBAN", 2-URBAN FRINGE "SUBURBAN", 3-SMALL TOWN/RURAL)

Topic of professional development activities	Urbanicity (A)	Urbanicity (B)	Mean Diff (A-B)	Std Error	t	P> t
1) There is a great deal of cooperative effort among staff members	1) Urban	2) Suburban	-0.097***	0.0226	-4.31	0.000
	1) Urban	3) Rural	-0.040	0.0254	-1.57	0.121
	2) Suburban	3) Rural	0.057*	0.0228	2.52	0.014
2. They are given the supports they need to teach students with special needs	1) Urban	2) Suburban	-0.140***	0.0256	-5.46	0.000
	1) Urban	3) Rural	-0.155***	0.0277	-5.60	0.000
	2) Suburban	3) Rural	-0.015	0.0219	-0.70	0.485

* Difference is significant (p<.05) **Difference is significant (p<.01) ***Difference is significant (p<.001)

NOTE: REMEMBER THAT HIGHER NUMBERS INDICATE LOWER LEVELS OF AGREEMENT. 1=Strongly Agree, 4=Strongly Disagree

TABLE 56. DIFFERENCES IN TEACHER ATTITUDES AND SCHOOL CLIMATE BY SCHOOL MINORITY ENROLLMENT

Types of support for professional development participation	Percent Minority Enrollment (A)	Percent Minority Enrollment (B)	Mean Diff (A-B)	Std Error	t	P> t
1) There is a great deal of cooperative effort among staff members	1) <5.6%	2) 5.6-16.2%	-0.017	0.0261	-0.64	0.521
	1) <5.6%	3) 16.2-37.6%	-0.062*	0.0264	-2.36	0.021
	1) <5.6%	4) 37.6-78.0%	0.038	0.0280	1.35	0.181
	1) <5.6%	5) >78.0%	0.121***	0.0248	4.87	0.000
	2) 5.6-16.2%	3) 16.2-37.6%	-0.045	0.0288	-1.58	0.119
	2) 5.6-16.2%	4) 37.6-78.0%	0.055	0.0326	1.68	0.097
	2) 5.6-16.2%	5) >78.0%	0.138***	0.0272	5.06	0.000
	3) 16.2-37.6%	4) 44.6-77.0%	0.100**	0.0286	3.49	0.001
	3) 16.2-37.6%	5) >78.0%	0.183***	0.0272	6.73	0.000
	4) 37.6-78.0%	5) >78.0%	0.083**	0.0304	2.73	0.008
2. They are given the supports they need to teach students with special needs	1) <5.6%	2) 5.6-16.2%	0.025	0.0329	0.76	0.449
	1) <5.6%	3) 16.2-37.6%	0.027	0.0295	0.93	0.354
	1) <5.6%	4) 37.6-78.0%	0.108**	0.0341	3.19	0.002
	1) <5.6%	5) >78.0%	0.203***	0.0337	6.04	0.000
	2) 5.6-16.2%	3) 16.2-37.6%	0.002	0.0299	0.08	0.934
	2) 5.6-16.2%	4) 37.6-78.0%	0.083**	0.0310	2.69	0.009
	2) 5.6-16.2%	5) >78.0%	0.178***	0.0358	4.99	0.000
	3) 16.2-37.6%	4) 44.6-77.0%	0.081**	0.0267	3.04	0.003
	3) 16.2-37.6%	5) >78.0%	0.176***	0.0341	5.16	0.000
	4) 37.6-78.0%	5) >78.0%	0.095**	0.0343	2.76	0.007

* Difference is significant (p<.05) **Difference is significant (p<.01) ***Difference is significant (p<.001)

TABLE 57. DIFFERENCES IN TEACHER ATTITUDES AND SCHOOL CLIMATE BY SCHOOL POVERTY (PERCENT OF STUDENTS ENROLLED IN THE FREE AND REDUCED LUNCH PROGRAM - FRL)

Topic of professional development activities	Percent FRL Enrollment (A)	Percent FRL Enrollment (B)	Mean Diff (A-B)	Std Error	t	P> t
1) There is a great deal of cooperative effort among staff members	1) <20.0%	2) 20.0-37.96%	0.032	0.0261	1.22	0.224
	1) <20.0%	3) 37.96-58.02%	0.063*	0.0250	2.54	0.013
	1) <20.0%	4) >58.02%	0.075**	0.0261	2.86	0.005
	2) 20.0-37.96%	3) 37.96-58.02%	0.032	0.0262	1.20	0.233
	2) 20.0-37.96%	4) >58.02%	0.043	0.0240	1.79	0.078
	3) 37.96-58.02%	4) >58.02%	0.011	0.0261	0.43	0.665
2. They are given the supports they need to teach students with special needs	1) <20.0%	2) 20.0-37.96%	0.024	0.0297	0.80	0.429
	1) <20.0%	3) 37.96-58.02%	0.092**	0.0304	3.02	0.003
	1) <20.0%	4) >58.02%	0.171***	0.0302	5.67	0.000
	2) 20.0-37.96%	3) 37.96-58.02%	0.068**	0.0252	2.69	0.008
	2) 20.0-37.96%	4) >58.02%	0.148***	0.0301	4.91	0.000
	3) 37.96-58.02%	4) >58.02%	0.080**	0.0284	2.81	0.006

* Difference is significant (p<.05) **Difference is significant (p<.01) ***Difference is significant (p<.001)

TABLE 58. DIFFERENCES IN TEACHER ATTITUDES AND SCHOOL CLIMATE BY SCHOOL LEP (LIMITED ENGLISH PROFICIENT) ENROLLMENT

Types of support for professional development participation	Percent LEP Enrollment (A)	Percent LEP Enrollment (B)	Mean Diff (A-B)	Std Error	t	P> t
1) There is a great deal of cooperative effort among staff members	1) 0%	2) 0.0-2.5%	0.081**	0.0262	3.10	0.003
	1) 0%	3) 2.5-5%	0.055	0.0385	1.44	0.154
	1) 0%	4) 5-10%	0.047	0.0367	1.29	0.202
	1) 0%	5) >10%	0.033	0.0207	1.61	0.110
	2) 0.0-2.5%	3) 2.5-5%	-0.026	0.0473	-0.55	0.585
	2) 0.0-2.5%	4) 5-10%	-0.034	0.0394	-0.87	0.389
	2) 0.0-2.5%	5) >10%	-0.048	0.0290	-1.65	0.102
	3) 2.5-5%	4) 5-10%	-0.008	0.0475	-0.17	0.863
	3) 2.5-5%	5) >10%	-0.022	0.0377	-0.58	0.561
	4) 5-10%	5) >10%	-0.014	0.0380	-0.36	0.718
2. They are given the supports they need to teach students with special needs	1) 0%	2) 0.0-2.5%	0.073*	0.0292	2.49	0.015
	1) 0%	3) 2.5-5%	0.085*	0.0322	2.64	0.010
	1) 0%	4) 5-10%	0.105**	0.0295	3.57	0.001
	1) 0%	5) >10%	0.017	0.0238	0.73	0.467
	2) 0.0-2.5%	3) 2.5-5%	0.012	0.0378	0.32	0.746
	2) 0.0-2.5%	4) 5-10%	0.033	0.0371	0.88	0.381
	2) 0.0-2.5%	5) >10%	-0.055	0.0346	-1.60	0.113
	3) 2.5-5%	4) 5-10%	0.020	0.0424	0.48	0.631
	3) 2.5-5%	5) >10%	-0.068	0.0360	-1.88	0.064
	4) 5-10%	5) >10%	-0.088*	0.0332	-2.65	0.010

* Difference is significant (p<.05) **Difference is significant (p<.01) ***Difference is significant (p<.001)

TABLE 59. AVERAGE CUMULATIVE HOURS OF PROFESSIONAL DEVELOPMENT ACROSS SIX TOPICS BY SCHOOL LEVEL (ELEMENTARY VS. SECONDARY)

School Level	Average Total Hours of Professional Development	Standard Error	95% Confidence Interval	
Elementary	46.329	0.5497	45.237	47.422
Secondary	39.266	0.4458	38.380	40.152

Note: An explanation of how “average cumulative hours of professional development” is provided in Appendix A: Dataset and Methodology

TABLE 60. DIFFERENCE IN AVERAGE CUMULATIVE HOURS OF PROFESSIONAL DEVELOPMENT ACROSS SIX TOPICS BY SCHOOL LEVEL (ELEMENTARY VS. SECONDARY)

	Mean Diff (Elem - Sec)	Std Error	t	P> t
Average Cumulative Hours of Professional Development	7.063***	.6966	10.14	0.000

*Difference is significant (p<.05)

**Difference is significant (p<.01)

***Difference is significant (p<.001)

TABLE 61. AVERAGE CUMULATIVE HOURS OF PROFESSIONAL DEVELOPMENT ACROSS SIX TOPICS BY SCHOOL URBANICITY

(1-LARGE TOWN/CENTRAL “URBAN”, 2-URBAN FRINGE “SUBURBAN”, 3-SMALL TOWN/RURAL)

School Level	Average Total Hours of Professional Development	Standard Error	95% Confidence Interval	
Urban	47.161	0.8376	45.496	48.825
Suburban	43.074	0.5493	41.982	44.165
Rural	41.560	0.7179	40.133	42.986

TABLE 62. DIFFERENCE IN AVERAGE CUMULATIVE HOURS OF PROFESSIONAL DEVELOPMENT ACROSS SIX TOPICS BY SCHOOL URBANICITY

(1-LARGE TOWN/CENTRAL “URBAN”, 2-URBAN FRINGE “SUBURBAN”, 3-SMALL TOWN/RURAL)

	Urbanicity (A)	Urbanicity (B)	Mean Diff (A-B)	Std Error	t	P> t
Average Cumulative Hours of Professional Development	1) Urban	2) Suburban	4.087***	1.0076	4.06	0.000
	1) Urban	3) Rural	5.601***	1.1316	4.95	0.000
	2) Suburban	3) Rural	1.514	0.9581	1.58	0.118

* Difference is significant (p<.05) **Difference is significant (p<.01) ***Difference is significant (p<.001)

TABLE 63. AVERAGE CUMULATIVE HOURS OF PROFESSIONAL DEVELOPMENT ACROSS SIX TOPICS BY SCHOOL MINORITY ENROLLMENT

Percent Minority Enrollment	Average Total Hours of Professional Development	Standard Error	95% Confidence Interval	
1) <5.6%	38.916	0.7873	37.351	40.481
2) 5.6-16.2%	40.472	0.7366	39.008	41.936
3) 16.2-37.6%	44.244	0.8484	42.557	45.930
4) 37.6-78.0%	45.980	0.8110	44.368	47.592
5) >78.0%	46.656	0.9082	44.851	48.461

TABLE 64. DIFFERENCES IN AVERAGE CUMULATIVE HOURS OF PROFESSIONAL DEVELOPMENT ACROSS SIX TOPICS BY SCHOOL MINORITY ENROLLMENT

	Percent Minority Enrollment (A)	Percent Minority Enrollment (B)	Mean Diff (A-B)	Std Error	t	P> t
Average Cumulative Hours of Professional Development	1) <5.6%	2) 5.6-16.2%	-1.556	1.0395	-1.50	0.138
	1) <5.6%	3) 16.2-37.6%	-5.327***	1.1433	-4.66	0.000
	1) <5.6%	4) 37.6-78.0%	-7.064***	1.1499	-6.14	0.000
	1) <5.6%	5) >78.0%	-7.740***	1.2337	-6.27	0.000
	2) 5.6-16.2%	3) 16.2-37.6%	-3.772**	1.0838	-3.48	0.001
	2) 5.6-16.2%	4) 37.6-78.0%	-5.508***	0.9729	-5.66	0.000
	2) 5.6-16.2%	5) >78.0%	-6.184***	1.2354	-5.01	0.000
	3) 16.2-37.6%	4) 44.6-77.0%	-1.737	1.2715	-1.37	0.176
	3) 16.2-37.6%	5) >78.0%	-2.412	1.3446	-1.79	0.076
	4) 37.6-78.0%	5) >78.0%	-0.676	1.0733	-0.63	0.531

* Difference is significant (p<.05) **Difference is significant (p<.01) ***Difference is significant (p<.001)

TABLE 65. AVERAGE CUMULATIVE HOURS OF PROFESSIONAL DEVELOPMENT ACROSS SIX TOPICS BY SCHOOL POVERTY

(Percent of Students Enrolled in the Free and Reduced Lunch Program - FRL)

Percent FRL Enrollment	Average Total Hours of Professional Development	Standard Error	95% Confidence Interval	
1) <20.0%	40.617	0.6131	39.398	41.835
2) 20.0-37.96%	42.883	0.7499	41.393	44.374
3) 37.96-58.02%	43.888	0.7678	42.362	45.414
4) >58.02%	47.588	0.7691	46.059	49.116

TABLE 66. AVERAGE CUMULATIVE HOURS OF PROFESSIONAL DEVELOPMENT ACROSS SIX TOPICS BY SCHOOL POVERTY (PERCENT OF STUDENTS ENROLLED IN THE FREE AND REDUCED LUNCH PROGRAM - FRL)

	Percent FRL Enrollment (A)	Percent FRL Enrollment (B)	Mean Diff (A-B)	Std Error	t	P> t
Average Cumulative Hours of Professional Development	1) <20.0%	2) 20.0-37.96%	-2.267*	0.9674	-2.34	0.021
	1) <20.0%	3) 37.96-58.02%	-3.272**	0.9933	-3.29	0.001
	1) <20.0%	4) >58.02%	-6.971***	0.9489	-7.35	0.000
	2) 20.0-37.96%	3) 37.96-58.02%	-1.005	1.0556	-0.95	0.344
	2) 20.0-37.96%	4) >58.02%	-4.704***	1.0818	-4.35	0.000
	3) 37.96-58.02%	4) >58.02%	-3.699**	1.0289	-3.60	0.001

TABLE 67. AVERAGE CUMULATIVE HOURS OF PROFESSIONAL DEVELOPMENT ACROSS SIX TOPICS BY SCHOOL LEP (LIMITED ENGLISH PROFICIENT) ENROLLMENT

Percent LEP Enrollment	Average Total Hours of Professional Development	Standard Error	95% Confidence Interval	
1) 0%	40.336	0.5051	39.332	41.340
2) 0.0-2.5%	39.049	0.9598	37.141	40.957
3) 2.5-5%	41.701	1.4429	38.834	44.570
4) 5-10%	44.821	1.1062	42.622	47.020
5) >10%	49.890	0.7920	48.316	51.464

TABLE 69. DIFFERENCES IN AVERAGE CUMULATIVE HOURS OF PROFESSIONAL DEVELOPMENT ACROSS SIX TOPICS BY SCHOOL LEP (LIMITED ENGLISH PROFICIENT) ENROLLMENT

	Percent LEP Enrollment (A)	Percent LEP Enrollment (B)	Mean Diff (A-B)	Std Error	t	P> t
Average Cumulative Hours of Professional Development	1) 0%	2) 0.0-2.5%	1.287	0.9922	1.30	0.198
	1) 0%	3) 2.5-5%	-1.366	1.6230	-0.84	0.402
	1) 0%	4) 5-10%	-4.485**	1.2600	-3.56	0.001
	1) 0%	5) >10%	-9.554***	0.9374	-10.19	0.000
	2) 0.0-2.5%	3) 2.5-5%	-2.653	1.6589	-1.60	0.113
	2) 0.0-2.5%	4) 5-10%	-5.772***	1.4076	-4.10	0.000
	2) 0.0-2.5%	5) >10%	-10.840***	1.2203	-8.88	0.000
	3) 2.5-5%	4) 5-10%	-3.119	1.6523	-1.89	0.062
	3) 2.5-5%	5) >10%	-8.188***	1.6695	-4.90	0.000
	4) 5-10%	5) >10%	-5.069***	1.2780	-3.97	0.000

TABLE 69. PARTICIPATION IN PROFESSIONAL DEVELOPMENT ON THE CONTENT OF THE SUBJECT(S) TAUGHT BY CERTIFICATION AREA

Certification Area	Percentage of Teachers	Standard Error ¹	95% Confidence Interval	
Early Childhood or General Elem	93.7%	0.0049	0.927	0.946
Special Education	91.4%	0.0070	0.900	0.928
Arts and Music	82.5%	0.0152	0.794	0.855
English and Language Arts	89.1%	0.0083	0.874	0.907
ESL or Bilingual Education	93.4%	0.0337	0.867	1.001
Foreign Languages	73.6%	0.0255	0.685	0.787
Health or Physical Education	80.3%	0.0163	0.770	0.835
Mathematics	83.2%	0.0109	0.810	0.853
Natural Sciences	78.4%	0.0122	0.760	0.808
Social Sciences	79.2%	0.0138	0.764	0.819
Vocational, Career, or Technical	83.6%	0.0115	0.813	0.859
All Others	83.9%	0.0180	0.803	0.875

¹Standard errors have not been converted to percentages

TABLE 70. PARTICIPATION IN PROFESSIONAL DEVELOPMENT ON THE CONTENT OF THE SUBJECT(S) TAUGHT BY SCHOOL LEVEL (ELEMENTARY VS. SECONDARY) AND YEARS OF TEACHING EXPERIENCE

Certification Area	Percentage of Teachers	Standard Error ¹	95% Confidence Interval	
Elementary: 0-2 years	87.1%	0.0134	0.845	0.898
Elementary: 3-5 years	90.4%	0.0115	0.881	0.926
Elementary: 6-10 years	91.2%	0.0102	0.891	0.932
Elementary: 11-20 years	92.1%	0.0093	0.903	0.940
Elementary: 21+ years	92.4%	0.0086	0.907	0.941
Secondary: 0-2 years	77.0%	0.0153	0.740	0.801
Secondary: 3-5 years	81.1%	0.0097	0.791	0.830
Secondary: 6-10 years	83.2%	0.0088	0.815	0.850
Secondary: 11-20 years	81.4%	0.0091	0.796	0.832
Secondary: 21+ years	81.8%	0.0096	0.799	0.837

¹Standard errors have not been converted to percentages

TABLE 71. TOP PRIORITIES FOR PROFESSIONAL DEVELOPMENT – TEACHING STUDENTS WITH SPECIAL NEEDS, BY SCHOOL LEVEL (ELEMENTARY VS. SECONDARY)

(Percentage of teachers ranking Teaching Students with Special Needs as the top priority for further professional development)

School Level	Percent ranking this topic the top priority	Standard Error ¹	95% Confidence Interval	
Elementary	16.7%	0.0059	0.155	0.179
Secondary	11.9%	0.0031	0.112	0.125

¹Standard errors have not been converted to percentages

TABLE 72. DIFFERENCES IN TOP PRIORITIES FOR PROFESSIONAL DEVELOPMENT – TEACHING STUDENTS WITH SPECIAL NEEDS, BY SCHOOL LEVEL (ELEMENTARY VS. SECONDARY)

	Mean Diff (Elem - Sec)	Std Error	t	P> t
Teaching Students with Special Needs as a top priority for further professional development	0.0485***	.0068	7.10	0.000

*Difference is significant (p<.05)

**Difference is significant (p<.01)

***Difference is significant (p<.001)

TABLE 73. TOP PRIORITIES FOR PROFESSIONAL DEVELOPMENT – USE OF TECHNOLOGY IN INSTRUCTION, BY SCHOOL LEVEL (ELEMENTARY VS. SECONDARY)

(Percentage of teachers ranking Use of Technology for Instruction as the top priority for further professional development)

School Level	Percent ranking this topic the top priority	Standard Error ¹	95% Confidence Interval	
Elementary	11.3%	0.0053	0.102	0.123
Secondary	16.1%	0.0047	0.152	0.170

¹ Standard errors have not been converted to percentages

TABLE 74. DIFFERENCES IN TOP PRIORITIES FOR PROFESSIONAL DEVELOPMENT – USE OF TECHNOLOGY IN INSTRUCTION, BY SCHOOL LEVEL (ELEMENTARY VS. SECONDARY)

	Mean Diff (Elem - Sec)	Std Error	t	P> t
Use of Technology in Instruction as a top priority for further professional development	-0.0484***	0.0070	-6.93	0.000

*Difference is significant (p<.05)

**Difference is significant (p<.01)

***Difference is significant (p<.001)

TABLE 75. TOP PRIORITIES FOR PROFESSIONAL DEVELOPMENT – CONTENT, BY SCHOOL LEVEL (ELEMENTARY VS. SECONDARY)

(Percentage of teachers ranking Content of the subject(s) I teach as the top priority for further professional development)

School Level	Percent ranking this topic the top priority	Standard Error ¹	95% Confidence Interval	
Elementary	20.3%	0.0061	.191	.215
Secondary	24.2%	0.0047	.232	.251

¹ Standard errors have not been converted to percentages

TABLE 76. DIFFERENCES IN TOP PRIORITIES FOR PROFESSIONAL DEVELOPMENT – CONTENT, BY SCHOOL LEVEL (ELEMENTARY VS. SECONDARY)

	Mean Diff (Elem - Sec)	Std Error	t	P> t
Content of the subject(s) taught as a top priority for further professional development	-0.0386***	0.0073	-5.31	0.000

*Difference is significant (p<.05)

**Difference is significant (p<.01)

***Difference is significant (p<.001)

TABLE 77. TOP PRIORITIES FOR PROFESSIONAL DEVELOPMENT – STUDENT DISCIPLINE AND CLASSROOM MANAGEMENT BY SCHOOL URBANICITY

(1-LARGE TOWN/CENTRAL “URBAN”, 2-URBAN FRINGE “SUBURBAN”, 3-SMALL TOWN/RURAL)
(Percentage of teachers ranking Student discipline and classroom management as the top priority for further professional development)

School Level	Percent ranking this topic the top priority	Standard Error ¹	95% Confidence Interval	
Urban	21.6%	0.0095	0.197	0.235
Suburban	18.4%	0.0068	0.170	0.197
Rural	20.5%	0.0089	0.187	0.222

¹ Standard errors have not been converted to percentages

TABLE 78. DIFFERENCE IN TOP PRIORITIES FOR PROFESSIONAL DEVELOPMENT – STUDENT DISCIPLINE AND CLASSROOM MANAGEMENT BY SCHOOL URBANICITY

(1-LARGE TOWN/CENTRAL “URBAN”, 2-URBAN FRINGE “SUBURBAN”, 3-SMALL TOWN/RURAL)

	Urbanicity (A)	Urbanicity (B)	Mean Diff (A-B)	Std Error	t	P> t
Student discipline/ classroom management as a top priority for further professional development	1) Urban	2) Suburban	0.0325**	0.0114	2.86	0.005
	1) Urban	3) Rural	0.0117	0.0136	0.86	0.393
	2) Suburban	3) Rural	-0.0207	0.0111	-1.87	0.066

* Difference is significant (p<.05) **Difference is significant (p<.01) ***Difference is significant (p<.001)

TABLE 79. TOP PRIORITIES FOR PROFESSIONAL DEVELOPMENT – TEACHING LEP STUDENTS BY SCHOOL URBANICITY

(1-LARGE TOWN/CENTRAL “URBAN”, 2-URBAN FRINGE “SUBURBAN”, 3-SMALL TOWN/RURAL)
(Percentage of teachers ranking Teaching limited-English proficient students as the top priority for further professional development)

School Level	Percent ranking this topic the top priority	Standard Error ¹	95% Confidence Interval	
Urban	9.3%	0.0066	0.080	0.106
Suburban	4.9%	0.0047	0.039	0.058
Rural	3.2%	0.0062	0.020	0.044

¹ Standard errors have not been converted to percentages

TABLE 80. DIFFERENCE IN TOP PRIORITIES FOR PROFESSIONAL DEVELOPMENT – TEACHING LEP STUDENTS BY SCHOOL URBANICITY

(1-LARGE TOWN/CENTRAL “URBAN”, 2-URBAN FRINGE “SUBURBAN”, 3-SMALL TOWN/RURAL)

	Urbanicity (A)	Urbanicity (B)	Mean Diff (A-B)	Std Error	t	P> t
Teaching LEP students as a top priority for further professional development	1) Urban	2) Suburban	0.0441***	0.0080	5.49	0.000
	1) Urban	3) Rural	0.0610***	0.0091	6.69	0.000
	2) Suburban	3) Rural	0.0169*	0.0079	2.13	0.036

* Difference is significant (p<.05) **Difference is significant (p<.01) ***Difference is significant (p<.001)

**TABLE 81. TOP PRIORITIES FOR PROFESSIONAL DEVELOPMENT –
CONTENT BY SCHOOL URBANICITY**

(1-LARGE TOWN/CENTRAL “URBAN”, 2-URBAN FRINGE “SUBURBAN”, 3-SMALL TOWN/RURAL)
(Percentage of teachers ranking Content of the subject(s) taught as the top priority for further professional development)

School Level	Percent ranking this topic the top priority	Standard Error ¹	95% Confidence Interval	
Urban	18.1%	0.0090	0.163	0.199
Suburban	22.3%	0.0060	0.212	0.235
Rural	24.5%	0.0077	0.229	0.260

¹ Standard errors have not been converted to percentages

**TABLE 82. DIFFERENCE IN TOP PRIORITIES FOR PROFESSIONAL DEVELOPMENT –
CONTENT BY SCHOOL URBANICITY**

(1-LARGE TOWN/CENTRAL “URBAN”, 2-URBAN FRINGE “SUBURBAN”, 3-SMALL TOWN/RURAL)

	Urbanicity (A)	Urbanicity (B)	Mean Diff (A-B)	Std Error	t	P> t
Content of the subject(s) taught as a top priority for further professional development	1) Urban	2) Suburban	-0.0429***	0.0107	-4.02	0.000
	1) Urban	3) Rural	0.0610***	0.0114	-5.62	0.000
	2) Suburban	3) Rural	0.0169*	0.0106	-1.99	0.049

* Difference is significant (p<.05) **Difference is significant (p<.01) ***Difference is significant (p<.001)

**TABLE 83. TOP PRIORITIES FOR PROFESSIONAL DEVELOPMENT – STUDENT DISCIPLINE
AND CLASSROOM MANAGEMENT BY SCHOOL MINORITY ENROLLMENT**

Percent Minority Enrollment	Percent ranking this topic the top priority	Standard Error ¹	95% Confidence Interval	
1) <5.6%	16.8%	0.0117	0.145	0.192
2) 5.6-16.2%	14.7%	0.0081	0.131	0.164
3) 16.2-37.6%	18.1%	0.0078	0.165	0.196
4) 37.6-78.0%	22.8%	0.0100	0.208	0.248
5) >78.0%	22.8%	0.0124	0.203	0.253

¹ Standard errors have not been converted to percentages

TABLE 84. DIFFERENCES IN TOP PRIORITIES FOR PROFESSIONAL DEVELOPMENT – STUDENT DISCIPLINE AND CLASSROOM MANAGEMENT BY SCHOOL MINORITY ENROLLMENT

	Percent Minority Enrollment (A)	Percent Minority Enrollment (B)	Mean Diff (A-B)	Std Error	t	P> t
Student discipline and classroom management as a top priority for further professional development	1) <5.6%	2) 5.6-16.2%	0.0209	0.0138	1.51	0.135
	1) <5.6%	3) 16.2-37.6%	-0.0123	0.0149	-0.82	0.412
	1) <5.6%	4) 37.6-78.0%	-0.0597***	0.0162	-3.69	0.000
	1) <5.6%	5) >78.0%	-0.0597**	0.0167	-3.58	0.001
	2) 5.6-16.2%	3) 16.2-37.6%	-0.0331**	0.0122	-2.72	0.008
	2) 5.6-16.2%	4) 37.6-78.0%	-0.0806***	0.0133	-6.04	0.000
	2) 5.6-16.2%	5) >78.0%	-0.0806***	0.0144	-5.60	0.000
	3) 16.2-37.6%	4) 44.6-77.0%	-0.0474***	0.0119	-3.97	0.000
	3) 16.2-37.6%	5) >78.0%	-0.0474**	0.0145	-3.27	0.002
	4) 37.6-78.0%	5) >78.0%	-0.0000	0.0161	-0.00	1.000

* Difference is significant (p<.05) **Difference is significant (p<.01) ***Difference is significant (p<.001)

TABLE 85. TOP PRIORITIES FOR PROFESSIONAL DEVELOPMENT – TEACHING LEP STUDENTS BY SCHOOL MINORITY ENROLLMENT

Percent Minority Enrollment	Percent ranking this topic the top priority	Standard Error ¹	95% Confidence Interval	
1) <5.6%	1.1%	0.0055	-0.000	0.022
2) 5.6-16.2%	1.9%	0.0034	0.013	0.026
3) 16.2-37.6%	3.6%	0.0047	0.027	0.046
4) 37.6-78.0%	7.0%	0.0077	0.055	0.086
5) >78.0%	11.1%	0.0096	0.093	0.131

¹ Standard errors have not been converted to percentages

TABLE 86. DIFFERENCES IN TOP PRIORITIES FOR PROFESSIONAL DEVELOPMENT – TEACHING LEP STUDENTS BY SCHOOL MINORITY ENROLLMENT

	Percent Minority Enrollment (A)	Percent Minority Enrollment (B)	Mean Diff (A-B)	Std Error	t	P> t
Teaching LEP students as a top priority for further professional development	1) <5.6%	2) 5.6-16.2%	-0.0086	0.0064	-1.36	0.178
	1) <5.6%	3) 16.2-37.6%	-0.0253**	0.0079	-3.21	0.002
	1) <5.6%	4) 37.6-78.0%	-0.0594***	0.0093	-6.41	0.000
	1) <5.6%	5) >78.0%	-0.1009***	0.0106	-9.56	0.000
	2) 5.6-16.2%	3) 16.2-37.6%	-0.0167**	0.0060	-2.78	0.007
	2) 5.6-16.2%	4) 37.6-78.0%	-0.0507***	0.0084	-6.01	0.000
	2) 5.6-16.2%	5) >78.0%	-0.0923***	0.0108	-8.58	0.000
	3) 16.2-37.6%	4) 44.6-77.0%	-0.0341**	0.0095	-3.60	0.001
	3) 16.2-37.6%	5) >78.0%	-0.0756***	0.0106	-7.12	0.000
	4) 37.6-78.0%	5) >78.0%	-0.0415***	0.0114	-3.63	0.000

* Difference is significant (p<.05) **Difference is significant (p<.01) ***Difference is significant (p<.001)

TABLE 87. TOP PRIORITIES FOR PROFESSIONAL DEVELOPMENT – CONTENT OF THE SUBJECT(S) TAUGHT BY SCHOOL MINORITY ENROLLMENT

Percent Minority Enrollment	Percent ranking this topic the top priority	Standard Error ¹	95% Confidence Interval	
1) <5.6%	27.2%	0.0096	0.253	0.291
2) 5.6-16.2%	25.4%	0.0100	0.234	0.273
3) 16.2-37.6%	23.3%	0.0091	0.214	0.251
4) 37.6-78.0%	20.0%	0.0097	0.180	0.219
5) >78.0%	16.3%	0.0077	0.148	0.179

¹ Standard errors have not been converted to percentages

TABLE 88. DIFFERENCES IN TOP PRIORITIES FOR PROFESSIONAL DEVELOPMENT – CONTENT OF THE SUBJECT(S) TAUGHT BY SCHOOL MINORITY ENROLLMENT

	Percent Minority Enrollment (A)	Percent Minority Enrollment (B)	Mean Diff (A-B)	Std Error	t	P> t
Content of the subject(s) taught as a top priority for further professional development	1) <5.6%	2) 5.6-16.2%	0.0183	0.0143	1.28	0.202
	1) <5.6%	3) 16.2-37.6%	0.0395**	0.0140	2.82	0.006
	1) <5.6%	4) 37.6-78.0%	0.0722***	0.0140	5.16	0.000
	1) <5.6%	5) >78.0%	0.1087***	0.0129	8.40	0.000
	2) 5.6-16.2%	3) 16.2-37.6%	0.0212	0.0125	1.70	0.093
	2) 5.6-16.2%	4) 37.6-78.0%	0.0539***	0.0141	3.83	0.000
	2) 5.6-16.2%	5) >78.0%	0.0904***	0.0130	6.93	0.000
	3) 16.2-37.6%	4) 44.6-77.0%	0.0327*	0.0126	2.59	0.011
	3) 16.2-37.6%	5) >78.0%	0.0692***	0.0114	6.06	0.000
	4) 37.6-78.0%	5) >78.0%	0.0365**	0.0117	3.13	0.002

* Difference is significant (p<.05) **Difference is significant (p<.01) ***Difference is significant (p<.001)

TABLE 89. TOP PRIORITIES FOR PROFESSIONAL DEVELOPMENT – STUDENT DISCIPLINE AND CLASSROOM MANAGEMENT BY SCHOOL POVERTY (PERCENT OF STUDENTS ENROLLED IN THE FREE AND REDUCED LUNCH PROGRAM - FRL)

Percent FRL Enrollment	Percent ranking this topic the top priority	Standard Error ¹	95% Confidence Interval	
1) <20.0%	14.5%	0.0061	0.133	0.157
2) 20.0-37.96%	18.7%	0.0077	0.172	0.202
3) 37.96-58.02%	20.9%	0.0075	0.194	0.224
4) >58.02%	24.1%	0.0111	0.219	0.263

¹ Standard errors have not been converted to percentages

TABLE 90. DIFFERENCES IN TOP PRIORITIES FOR PROFESSIONAL DEVELOPMENT – STUDENT DISCIPLINE AND CLASSROOM MANAGEMENT BY SCHOOL POVERTY (PERCENT OF STUDENTS ENROLLED IN THE FREE AND REDUCED LUNCH PROGRAM - FRL)

	Percent FRL Enrollment (A)	Percent FRL Enrollment (B)	Mean Diff (A-B)	Std Error	t	P> t
Student Discipline and Classroom Management as a top priority for further professional development	1) <20.0%	2) 20.0-37.96%	-0.0423***	0.0098	-4.32	0.000
	1) <20.0%	3) 37.96-58.02%	-0.0640***	0.0092	-6.92	0.000
	1) <20.0%	4) >58.02%	-0.0961***	0.0123	-7.81	0.000
	2) 20.0-37.96%	3) 37.96-58.02%	-0.0217*	0.0108	-2.02	0.047
	2) 20.0-37.96%	4) >58.02%	-0.0538***	0.0117	-4.62	0.000
	3) 37.96-58.02%	4) >58.02%	-0.0321*	0.0137	-2.34	0.022

* Difference is significant (p<.05) **Difference is significant (p<.01) ***Difference is significant (p<.001)

TABLE 91. TOP PRIORITIES FOR PROFESSIONAL DEVELOPMENT – TEACHING LEP STUDENTS BY SCHOOL POVERTY (PERCENT OF STUDENTS ENROLLED IN THE FREE AND REDUCED LUNCH PROGRAM - FRL)

Percent FRL Enrollment	Percent ranking this topic the top priority	Standard Error ¹	95% Confidence Interval	
1) <20.0%	3.0%	0.0037	0.023	0.038
2) 20.0-37.96%	3.5%	0.0045	0.026	0.044
3) 37.96-58.02%	4.5%	0.0049	0.036	0.055
4) >58.02%	10.9%	0.0097	0.089	0.128

¹ Standard errors have not been converted to percentages

TABLE 92. DIFFERENCES IN TOP PRIORITIES FOR PROFESSIONAL DEVELOPMENT – TEACHING LEP STUDENTS BY SCHOOL POVERTY (PERCENT OF STUDENTS ENROLLED IN THE FREE AND REDUCED LUNCH PROGRAM - FRL)

	Percent FRL Enrollment (A)	Percent FRL Enrollment (B)	Mean Diff (A-B)	Std Error	t	P> t
Teaching LEP students as a top priority for further professional development	1) <20.0%	2) 20.0-37.96%	-0.0050	0.0058	-0.86	0.394
	1) <20.0%	3) 37.96-58.02%	-0.0151*	0.0065	-2.33	0.022
	1) <20.0%	4) >58.02%	-0.0784***	0.0102	-7.70	0.000
	2) 20.0-37.96%	3) 37.96-58.02%	-0.0101	0.0065	-1.55	0.124
	2) 20.0-37.96%	4) >58.02%	-0.0734***	0.0111	-6.62	0.000
	3) 37.96-58.02%	4) >58.02%	-0.0633***	0.0106	-5.97	0.000

* Difference is significant (p<.05) **Difference is significant (p<.01) ***Difference is significant (p<.001)

TABLE 93. TOP PRIORITIES FOR PROFESSIONAL DEVELOPMENT – USES OF TECHNOLOGY IN INSTRUCTION BY SCHOOL POVERTY (PERCENT OF STUDENTS ENROLLED IN THE FREE AND REDUCED LUNCH PROGRAM – FRL)

Percent FRL Enrollment	Percent ranking this topic the top priority	Standard Error ¹	95% Confidence Interval	
1) <20.0%	14.5%	0.0070	0.131	0.159
2) 20.0-37.96%	13.6%	0.0063	0.123	0.148
3) 37.96-58.02%	12.9%	0.0063	0.117	0.142
4) >58.02%	11.0%	0.0062	0.098	0.122

¹ Standard errors have not been converted to percentages

TABLE 94. DIFFERENCES IN TOP PRIORITIES FOR PROFESSIONAL DEVELOPMENT – USES OF TECHNOLOGY IN INSTRUCTION BY SCHOOL POVERTY (PERCENT OF STUDENTS ENROLLED IN THE FREE AND REDUCED LUNCH PROGRAM – FRL)

	Percent FRL Enrollment (A)	Percent FRL Enrollment (B)	Mean Diff (A-B)	Std Error	t	P> t
Uses of technology in instruction as a top priority for further professional development	1) <20.0%	2) 20.0-37.96%	0.0095	0.0089	1.06	0.290
	1) <20.0%	3) 37.96-58.02%	0.0158	0.0087	1.82	0.072
	1) <20.0%	4) >58.02%	0.0352***	0.0086	4.08	0.000
	2) 20.0-37.96%	3) 37.96-58.02%	0.0063	0.0084	0.75	0.453
	2) 20.0-37.96%	4) >58.02%	0.0257**	0.0089	2.89	0.005
	3) 37.96-58.02%	4) >58.02%	0.0194*	0.0083	2.33	0.022

* Difference is significant (p<.05) **Difference is significant (p<.01) ***Difference is significant (p<.001)

TABLE 95. TOP PRIORITIES FOR PROFESSIONAL DEVELOPMENT – CONTENT OF THE SUBJECT(S) TAUGHT BY SCHOOL POVERTY (PERCENT OF STUDENTS ENROLLED IN THE FREE AND REDUCED LUNCH PROGRAM – FRL)

Percent FRL Enrollment	Percent ranking this topic the top priority	Standard Error ¹	95% Confidence Interval	
1) <20.0%	26.5%	0.0095	0.246	0.284
2) 20.0-37.96%	23.3%	0.0096	0.214	0.252
3) 37.96-58.02%	21.2%	0.0073	0.197	0.226
4) >58.02%	16.3%	0.0085	0.146	0.180

¹ Standard errors have not been converted to percentages

TABLE 96. DIFFERENCES IN TOP PRIORITIES FOR PROFESSIONAL DEVELOPMENT – CONTENT OF THE SUBJECT(S) TAUGHT BY SCHOOL POVERTY (PERCENT OF STUDENTS ENROLLED IN THE FREE AND REDUCED LUNCH PROGRAM – FRL)

	Percent FRL Enrollment (A)	Percent FRL Enrollment (B)	Mean Diff (A-B)	Std Error	t	P> t
Content of the subject(s) taught as a top priority for further professional development	1) <20.0%	2) 20.0-37.96%	0.0318*	0.0130	2.44	0.017
	1) <20.0%	3) 37.96-58.02%	0.0531***	0.0121	4.38	0.000
	1) <20.0%	4) >58.02%	0.1022***	0.0137	7.44	0.000
	2) 20.0-37.96%	3) 37.96-58.02%	0.0213	0.0119	1.80	0.076
	2) 20.0-37.96%	4) >58.02%	0.0704***	0.0126	5.57	0.000
	3) 37.96-58.02%	4) >58.02%	0.0491***	0.0114	4.32	0.000

* Difference is significant (p<.05) **Difference is significant (p<.01) ***Difference is significant (p<.001)

TABLE 97. TOP PRIORITIES FOR FURTHER PROFESSIONAL DEVELOPMENT – STUDENT DISCIPLINE AND CLASSROOM MANAGEMENT BY SCHOOL LEP (LIMITED ENGLISH PROFICIENT) ENROLLMENT

Percent LEP Enrollment	Percent ranking this topic the top priority	Standard Error ¹	95% Confidence Interval	
1) 0%	21.0%	0.0062	0.197	0.222
2) 0.0-2.5%	21.8%	0.0112	0.196	0.241
3) 2.5-5%	20.6%	0.0165	0.173	0.239
4) 5-10%	19.9%	0.0152	0.169	0.230
5) >10%	17.1%	0.0078	0.156	0.187

¹ Standard errors have not been converted to percentages

TABLE 98. DIFFERENCES IN TOP PRIORITIES FOR FURTHER PROFESSIONAL DEVELOPMENT – STUDENT DISCIPLINE AND CLASSROOM MANAGEMENT BY SCHOOL LEP (LIMITED ENGLISH PROFICIENT) ENROLLMENT

	Percent LEP Enrollment (A)	Percent LEP Enrollment (B)	Mean Diff (A-B)	Std Error	t	P> t
Student discipline and classroom management as a top priority for further professional development	1) 0%	2) 0.0-2.5%	-0.0086	0.0130	-0.66	0.510
	1) 0%	3) 2.5-5%	0.0035	0.0180	0.19	0.846
	1) 0%	4) 5-10%	0.0103	0.0152	0.68	0.500
	1) 0%	5) >10%	0.0384***	0.0092	4.16	0.000
	2) 0.0-2.5%	3) 2.5-5%	0.0121	0.0190	0.64	0.525
	2) 0.0-2.5%	4) 5-10%	0.0190	0.0167	1.14	0.258
	2) 0.0-2.5%	5) >10%	0.0470**	0.0135	3.49	0.001
	3) 2.5-5%	4) 5-10%	0.0068	0.0232	0.29	0.769
	3) 2.5-5%	5) >10%	0.0349	0.0176	1.98	0.050
	4) 5-10%	5) >10%	0.0281	0.0162	1.73	0.087

* Difference is significant (p<.05) **Difference is significant (p<.01) ***Difference is significant (p<.001)

TABLE 99. TOP PRIORITIES FOR FURTHER PROFESSIONAL DEVELOPMENT – TEACHING STUDENTS WITH SPECIAL NEEDS BY SCHOOL LEP (LIMITED ENGLISH PROFICIENT) ENROLLMENT

Percent LEP Enrollment	Percent ranking this topic the top priority	Standard Error ¹	95% Confidence Interval	
1) 0%	12.9%	0.0055	0.118	0.140
2) 0.0-2.5%	7.6%	0.0084	0.060	0.093
3) 2.5-5%	9.6%	0.0106	0.075	0.117
4) 5-10%	12.3%	0.0131	0.097	0.149
5) >10%	21.9%	0.0087	0.202	0.236

¹ Standard errors have not been converted to percentages

TABLE 100. DIFFERENCES IN TOP PRIORITIES FOR FURTHER PROFESSIONAL DEVELOPMENT – TEACHING STUDENTS WITH SPECIAL NEEDS BY SCHOOL LEP (LIMITED ENGLISH PROFICIENT) ENROLLMENT

	Percent LEP Enrollment (A)	Percent LEP Enrollment (B)	Mean Diff (A-B)	Std Error	t	P> t
Teaching students with special needs as a top priority for further professional development	1) 0%	2) 0.0-2.5%	0.0528***	0.0110	4.80	0.000
	1) 0%	3) 2.5-5%	0.0335**	0.0125	2.68	0.009
	1) 0%	4) 5-10%	0.0066	0.0139	0.47	0.639
	1) 0%	5) >10%	-0.0897***	0.0101	-8.84	0.000
	2) 0.0-2.5%	3) 2.5-5%	-0.0193	0.0134	-1.45	0.152
	2) 0.0-2.5%	4) 5-10%	-0.0463**	0.0151	-3.06	0.003
	2) 0.0-2.5%	5) >10%	-0.1426***	0.0133	-10.72	0.000
	3) 2.5-5%	4) 5-10%	-0.0270	0.0173	-1.56	0.123
	3) 2.5-5%	5) >10%	-0.1233***	0.0139	-8.86	0.000
	4) 5-10%	5) >10%	-0.0963***	0.0158	-6.09	0.000

* Difference is significant (p<.05) **Difference is significant (p<.01) ***Difference is significant (p<.001)

TABLE 101. TOP PRIORITIES FOR FURTHER PROFESSIONAL DEVELOPMENT – TEACHING LEP STUDENTS BY SCHOOL LEP (LIMITED ENGLISH PROFICIENT) ENROLLMENT

Percent LEP Enrollment	Percent ranking this topic the top priority	Standard Error ¹	95% Confidence Interval	
1) 0%	1.4%	0.0019	0.010	0.018
2) 0.0-2.5%	2.2%	0.0041	0.014	0.030
3) 2.5-5%	2.7%	0.0058	0.015	0.038
4) 5-10%	4.7%	0.0107	0.026	0.069
5) >10%	12.9%	0.0078	0.114	0.145

¹ Standard errors have not been converted to percentages

TABLE 102. DIFFERENCES IN TOP PRIORITIES FOR FURTHER PROFESSIONAL DEVELOPMENT – TEACHING LEP STUDENTS BY SCHOOL LEP (LIMITED ENGLISH PROFICIENT) ENROLLMENT

	Percent LEP Enrollment (A)	Percent LEP Enrollment (B)	Mean Diff (A-B)	Std Error	t	P> t
Teaching LEP students as a top priority for further professional development	1) 0%	2) 0.0-2.5%	-0.0080	0.0046	-1.76	0.082
	1) 0%	3) 2.5-5%	-0.0123	0.0060	-2.05	0.044
	1) 0%	4) 5-10%	-0.0331**	0.0109	-3.04	0.003
	1) 0%	5) >10%	-0.1151***	0.0079	-14.57	0.000
	2) 0.0-2.5%	3) 2.5-5%	-0.0043	0.0068	-0.63	0.528
	2) 0.0-2.5%	4) 5-10%	-0.0251*	0.0118	-2.12	0.037
	2) 0.0-2.5%	5) >10%	-0.1070***	0.0091	-11.81	0.000
	3) 2.5-5%	4) 5-10%	-0.0208	0.0120	-1.74	0.086
	3) 2.5-5%	5) >10%	-0.1028***	0.0090	-11.47	0.000
	4) 5-10%	5) >10%	-0.0819***	0.0117	-7.01	0.000

* Difference is significant (p<.05) **Difference is significant (p<.01) ***Difference is significant (p<.001)

TABLE 103. TOP PRIORITIES FOR FURTHER PROFESSIONAL DEVELOPMENT – USE OF TECHNOLOGY IN INSTRUCTION BY SCHOOL LEP (LIMITED ENGLISH PROFICIENT) ENROLLMENT

Percent LEP Enrollment	Percent ranking this topic the top priority	Standard Error ¹	95% Confidence Interval	
1) 0%	14.3%	0.0043	0.134	0.152
2) 0.0-2.5%	16.2%	0.0114	0.139	0.185
3) 2.5-5%	14.0%	0.0133	0.114	0.166
4) 5-10%	14.7%	0.0142	0.119	0.175
5) >10%	9.8%	0.0056	0.086	0.109

¹Standard errors have not been converted to percentages

TABLE 104. DIFFERENCES IN TOP PRIORITIES FOR FURTHER PROFESSIONAL DEVELOPMENT – USE OF TECHNOLOGY IN INSTRUCTION BY SCHOOL LEP (LIMITED ENGLISH PROFICIENT) ENROLLMENT

	Percent LEP Enrollment (A)	Percent LEP Enrollment (B)	Mean Diff (A-B)	Std Error	t	P> t
Use of technology in instruction as a top priority for further professional development	1) 0%	2) 0.0-2.5%	-0.019	0.012	-1.60	0.114
	1) 0%	3) 2.5-5%	0.003	0.014	0.21	0.831
	1) 0%	4) 5-10%	-0.004	0.014	-0.30	0.763
	1) 0%	5) >10%	0.045***	0.006	7.05	0.000
	2) 0.0-2.5%	3) 2.5-5%	0.022	0.017	1.30	0.197
	2) 0.0-2.5%	4) 5-10%	0.015	0.018	0.83	0.410
	2) 0.0-2.5%	5) >10%	0.064***	0.013	4.91	0.000
	3) 2.5-5%	4) 5-10%	-0.007	0.018	-0.40	0.687
	3) 2.5-5%	5) >10%	0.042**	0.014	2.96	0.004
	4) 5-10%	5) >10%	0.050***	0.014	3.44	0.001

* Difference is significant (p<.05) **Difference is significant (p<.01) ***Difference is significant (p<.001)

TABLE 105. TOP PRIORITIES FOR FURTHER PROFESSIONAL DEVELOPMENT – CONTENT OF THE SUBJECT(S) TAUGHT BY SCHOOL LEP (LIMITED ENGLISH PROFICIENT) ENROLLMENT

Percent LEP Enrollment	Percent ranking this topic the top priority	Standard Error ¹	95% Confidence Interval	
1) 0%	24.0%	0.0056	0.229	0.251
2) 0.0-2.5%	26.2%	0.0117	0.238	0.285
3) 2.5-5%	24.4%	0.0166	0.211	0.277
4) 5-10%	20.6%	0.0125	0.181	0.231
5) >10%	17.0%	0.0082	0.154	0.187

¹Standard errors have not been converted to percentages

**TABLE 106. DIFFERENCES IN TOP PRIORITIES FOR FURTHER PROFESSIONAL DEVELOPMENT—
CONTENT OF THE SUBJECT(S) TAUGHT BY SCHOOL LEP
(LIMITED ENGLISH PROFICIENT) ENROLLMENT**

	Percent LEP Enrollment (A)	Percent LEP Enrollment (B)	Mean Diff (A-B)	Std Error	t	P> t
Content of the subject(s) taught as a top priority for further professional development	1) 0%	2) 0.0-2.5%	-0.0218	0.0132	-1.64	0.104
	1) 0%	3) 2.5-5%	-0.0045	0.0174	-0.26	0.798
	1) 0%	4) 5-10%	0.0340	0.0134	2.54	0.013
	1) 0%	5) >10%	0.0695***	0.0095	7.29	0.000
	2) 0.0-2.5%	3) 2.5-5%	0.0173	0.0194	0.89	0.376
	2) 0.0-2.5%	4) 5-10%	0.0558**	0.0158	3.53	0.001
	2) 0.0-2.5%	5) >10%	0.0913***	0.0158	5.79	0.000
	3) 2.5-5%	4) 5-10%	0.0385	0.0194	1.98	0.051
	3) 2.5-5%	5) >10%	0.0740***	0.0171	4.32	0.000
	4) 5-10%	5) >10%	0.0355*	0.0148	2.40	0.019

* Difference is significant (p<.05) **Difference is significant (p<.01) ***Difference is significant (p<.001)

**TABLE 107. TOP PRIORITIES FOR FURTHER PROFESSIONAL DEVELOPMENT –
METHODS OF TEACHING BY SCHOOL LEP (LIMITED ENGLISH PROFICIENT) ENROLLMENT**

Percent LEP Enrollment	Percent ranking this topic the top priority	Standard Error ¹	95% Confidence Interval	
1) 0%	11.0%	0.0044	0.101	0.119
2) 0.0-2.5%	12.3%	0.0094	0.104	0.141
3) 2.5-5%	11.8%	0.0113	0.095	0.140
4) 5-10%	12.2%	0.0116	0.099	0.145
5) >10%	8.1%	0.0051	0.071	0.091

¹ Standard errors have not been converted to percentages

**TABLE 108. DIFFERENCES IN TOP PRIORITIES FOR FURTHER PROFESSIONAL DEVELOPMENT –
METHODS OF TEACHING TAUGHT BY SCHOOL LEP
(LIMITED ENGLISH PROFICIENT) ENROLLMENT**

	Percent LEP Enrollment (A)	Percent LEP Enrollment (B)	Mean Diff (A-B)	Std Error	t	P> t
Methods of teaching as a top priority for further professional development	1) 0%	2) 0.0-2.5%	-0.0122	0.0103	-1.19	0.239
	1) 0%	3) 2.5-5%	-0.0075	0.0125	-0.60	0.549
	1) 0%	4) 5-10%	-0.0115	0.0124	-0.92	0.358
	1) 0%	5) >10%	0.0291***	0.0059	4.94	0.000
	2) 0.0-2.5%	3) 2.5-5%	0.0047	0.0160	0.29	0.769
	2) 0.0-2.5%	4) 5-10%	0.0008	0.0146	0.05	0.958
	2) 0.0-2.5%	5) >10%	0.0413***	0.0104	3.96	0.000
	3) 2.5-5%	4) 5-10%	-0.0039	0.0161	-0.24	0.808
	3) 2.5-5%	5) >10%	0.0366**	0.0130	2.82	0.006
	4) 5-10%	5) >10%	0.0405**	0.0129	3.13	0.002

* Difference is significant (p<.05) **Difference is significant (p<.01) ***Difference is significant (p<.001)

TABLE 109. TOP PRIORITIES FOR FURTHER PROFESSIONAL DEVELOPMENT – STUDENT DISCIPLINE AND CLASSROOM MANAGEMENT BY YEARS OF TEACHING EXPERIENCE

Years of Teaching Experience	Percent ranking this topic the top priority	Standard Error ¹	95% Confidence Interval	
1) 2 years or less	33.3%	0.0110	0.311	0.355
2) 3-5 years	23.2%	0.0117	0.209	0.256
3) 6-10 years	17.2%	0.0086	0.155	0.189
4) 11-20 years	15.0%	0.0070	0.137	0.164
5) 21 years+	16.4%	0.0084	0.147	0.180

¹ Standard errors have not been converted to percentages

TABLE 110. DIFFERENCES IN TOP PRIORITIES FOR FURTHER PROFESSIONAL DEVELOPMENT – STUDENT DISCIPLINE AND CLASSROOM MANAGEMENT BY YEARS OF TEACHING EXPERIENCE

	Years Teaching Experience (A)	Years Teaching Experience (B)	Mean Diff (A-B)	Std Error	t	P> t
Student discipline and classroom management as a top priority for further professional development	1) 2 years or less	2) 3-5 years	0.1005***	0.0156	6.43	0.000
	1) 2 years or less	3) 6-10 years	0.1610***	0.0136	11.85	0.000
	1) 2 years or less	4) 11-20 years	0.1825***	0.0137	13.28	0.000
	1) 2 years or less	21 years+	0.1693***	0.0124	13.63	0.000
	2) 3-5 years	3) 6-10 years	0.0605***	0.0134	4.53	0.000
	2) 3-5 years	4) 11-20 years	0.0820***	0.0121	6.78	0.000
	2) 3-5 years	5) 21 years+	0.0688***	0.0133	5.17	0.000
	3) 6-10 years	4) 11-20 years	0.0215*	0.0103	2.08	0.040
	3) 6-10 years	5) 21 years+	0.0084	0.0117	0.71	0.477
	4) 11-20 years	5) 21 years+	-0.0131	0.0104	-1.26	0.211

* Difference is significant (p<.05) **Difference is significant (p<.01) ***Difference is significant (p<.001)

TABLE 111. TOP PRIORITIES FOR FURTHER PROFESSIONAL DEVELOPMENT – STUDENT DISCIPLINE AND CLASSROOM MANAGEMENT BY YEARS OF TEACHING EXPERIENCE

Years of Teaching Experience	Percent ranking this topic the top priority	Standard Error ¹	95% Confidence Interval	
1) 2 years or less	6.2%	0.0085	0.045	0.079
2) 3-5 years	9.2%	0.0058	0.080	0.103
3) 6-10 years	12.3%	0.0083	0.107	0.140
4) 11-20 years	15.7%	0.0073	0.143	0.172
5) 21 years+	17.3%	0.0094	0.155	0.192

¹ Standard errors have not been converted to percentages

TABLE 112. DIFFERENCES IN TOP PRIORITIES FOR FURTHER PROFESSIONAL DEVELOPMENT – STUDENT DISCIPLINE AND CLASSROOM MANAGEMENT BY YEARS OF TEACHING EXPERIENCE

	Years Teaching Experience (A)	Years Teaching Experience (B)	Mean Diff (A-B)	Std Error	t	P> t
Student discipline and classroom management as a top priority for further professional development	1) 2 years or less	2) 3-5 years	-0.0294**	0.0108	-2.71	0.008
	1) 2 years or less	3) 6-10 years	-0.0611***	0.0117	-5.21	0.000
	1) 2 years or less	4) 11-20 years	-0.0948***	0.0108	-8.81	0.000
	1) 2 years or less	21 years+	-0.1109***	0.0128	-8.66	0.000
	2) 3-5 years	3) 6-10 years	-0.0317**	0.0099	-3.20	0.002
	2) 3-5 years	4) 11-20 years	-0.0655***	0.0094	-6.96	0.000
	2) 3-5 years	5) 21 years+	-0.0815***	0.0111	-7.34	0.000
	3) 6-10 years	4) 11-20 years	-0.0338**	0.0109	-3.11	0.003
	3) 6-10 years	5) 21 years+	-0.0498***	0.0124	-4.03	0.000
	4) 11-20 years	5) 21 years+	-0.0161	0.0123	-1.31	0.193

* Difference is significant (p<.05) **Difference is significant (p<.01) ***Difference is significant (p<.001)

TABLE 113. TOP PRIORITIES FOR FURTHER PROFESSIONAL DEVELOPMENT – CONTENT OF THE SUBJECT(S) TAUGHT BY YEARS OF TEACHING EXPERIENCE

Years of Teaching Experience	Percent ranking this topic the top priority	Standard Error ¹	95% Confidence Interval	
1) 2 years or less	15.3%	0.010	0.134	0.173
2) 3-5 years	17.1%	0.009	0.152	0.190
3) 6-10 years	22.9%	0.010	0.209	0.249
4) 11-20 years	23.8%	0.009	0.221	0.256
5) 21 years+	25.0%	0.009	0.232	0.269

¹ Standard errors have not been converted to percentages

TABLE 114. DIFFERENCES IN TOP PRIORITIES FOR FURTHER PROFESSIONAL DEVELOPMENT – CONTENT OF THE SUBJECT(S) TAUGHT BY YEARS BY YEARS OF TEACHING EXPERIENCE

	Years Teaching Experience (A)	Years Teaching Experience (B)	Mean Diff (A-B)	Std Error	t	P> t
Content of the subject(s) taught as a top priority for further professional development	1) 2 years or less	2) 3-5 years	-0.0176	0.0132	-1.33	0.187
	1) 2 years or less	3) 6-10 years	-0.0754***	0.0133	-5.69	0.000
	1) 2 years or less	4) 11-20 years	-0.0849***	0.0144	-5.89	0.000
	1) 2 years or less	21 years+	-0.0969***	0.0139	-7.00	0.000
	2) 3-5 years	3) 6-10 years	-0.0578***	0.0125	-4.61	0.000
	2) 3-5 years	4) 11-20 years	-0.0673***	0.0122	-5.54	0.000
	2) 3-5 years	5) 21 years+	-0.0793***	0.0128	-6.21	0.000
	3) 6-10 years	4) 11-20 years	-0.0095	0.0133	-0.72	0.476
	3) 6-10 years	5) 21 years+	-0.0215	0.0147	-1.46	0.148
	4) 11-20 years	5) 21 years+	-0.0120	0.0133	-0.91	0.368

* Difference is significant (p<.05) **Difference is significant (p<.01) ***Difference is significant (p<.001)

TABLE 115. TOP PRIORITIES FOR FURTHER PROFESSIONAL DEVELOPMENT – CONTENT STANDARDS IN THE SUBJECT(S) TAUGHT BY YEARS OF TEACHING EXPERIENCE

Years of Teaching Experience	Percent ranking this topic the top priority	Standard Error ¹	95% Confidence Interval	
1) 2 years or less	4.7%	0.0047	0.037	0.056
2) 3-5 years	6.4%	0.0058	0.052	0.075
3) 6-10 years	9.2%	0.0068	0.078	0.106
4) 11-20 years	9.7%	0.0057	0.086	0.109
5) 21 years+	9.7%	0.0051	0.087	0.107

¹ Standard errors have not been converted to percentages

TABLE 116. DIFFERENCES IN TOP PRIORITIES FOR FURTHER PROFESSIONAL DEVELOPMENT – CONTENT STANDARDS IN THE SUBJECT(S) TAUGHT BY YEARS OF TEACHING EXPERIENCE

	Years Teaching Experience (A)	Years Teaching Experience (B)	Mean Diff (A-B)	Std Error	t	P> t
Content standards in the subject(s) taught as a top priority for further professional development	1) 2 years or less	2) 3-5 years	-0.0170*	0.0067	-2.55	0.013
	1) 2 years or less	3) 6-10 years	-0.0454***	0.0081	-5.59	0.000
	1) 2 years or less	4) 11-20 years	-0.0506***	0.0069	-7.38	0.000
	1) 2 years or less	5) 21 years+	-0.0504***	0.0070	-7.15	0.000
	2) 3-5 years	3) 6-10 years	-0.0284**	0.0084	-3.39	0.001
	2) 3-5 years	4) 11-20 years	-0.0337***	0.0081	-4.16	0.000
	2) 3-5 years	5) 21 years+	-0.0334***	0.0083	-4.04	0.000
	3) 6-10 years	4) 11-20 years	-0.0053	0.0091	-0.58	0.566
	3) 6-10 years	5) 21 years+	-0.0050	0.0083	-0.60	0.548
	4) 11-20 years	5) 21 years+	0.0003	0.0073	0.04	0.970

* Difference is significant (p<.05) **Difference is significant (p<.01) ***Difference is significant (p<.001)

TABLE 117. TOP PRIORITIES FOR FURTHER PROFESSIONAL DEVELOPMENT – CONTENT STANDARDS IN THE SUBJECT(S) TAUGHT BY YEARS OF TEACHING EXPERIENCE

Years of Teaching Experience	Percent ranking this topic the top priority	Standard Error ¹	95% Confidence Interval	
1) 2 years or less	12.1%	0.0082	0.105	0.137
2) 3-5 years	12.6%	0.0074	0.112	0.141
3) 6-10 years	11.2%	0.0071	0.098	0.126
4) 11-20 years	9.6%	0.0064	0.083	0.109
5) 21 years+	7.3%	0.0063	0.061	0.086

¹ Standard errors have not been converted to percentages

TABLE 118. DIFFERENCES IN TOP PRIORITIES FOR FURTHER PROFESSIONAL DEVELOPMENT – CONTENT STANDARDS IN THE SUBJECT(S) TAUGHT BY YEARS BY YEARS OF TEACHING EXPERIENCE

	Years Teaching Experience (A)	Years Teaching Experience (B)	Mean Diff (A-B)	Std Error	t	P> t
Content standards in the subject(s) taught as a top priority for further professional development	1) 2 years or less	2) 3-5 years	-0.0052	0.0108	-0.48	0.629
	1) 2 years or less	3) 6-10 years	0.0094	0.0108	0.87	0.387
	1) 2 years or less	4) 11-20 years	0.0251*	0.0114	2.20	0.031
	1) 2 years or less	21 years+	0.0476***	0.0097	4.91	0.000
	2) 3-5 years	3) 6-10 years	0.0146	0.0104	1.41	0.162
	2) 3-5 years	4) 11-20 years	0.0304**	0.0098	3.11	0.003
	2) 3-5 years	5) 21 years+	0.0529***	0.0102	5.18	0.000
	3) 6-10 years	4) 11-20 years	0.0157	0.0088	1.79	0.077
	3) 6-10 years	5) 21 years+	0.0382***	0.0093	4.13	0.000
	4) 11-20 years	5) 21 years+	0.0225*	0.0097	2.32	0.023

* Difference is significant (p<.05) **Difference is significant (p<.01) ***Difference is significant (p<.001)

TABLE 119. PARTICIPATION IN INDUCTION PROGRAMS BY CERTIFICATION CONTENT AREA
(Percent beginning teachers with five or fewer years of teaching experience reporting participation in an induction program during the first year of teaching)

Certification Area	Percentage of Teachers	Standard Error ¹	95% Confidence Interval	
Early Childhood or General Elem	75.3%	0.0169	0.720	0.787
Special Education	69.3%	0.0329	0.628	0.758
Arts and Music	75.9%	0.0329	0.694	0.825
English and Language Arts	73.4%	0.0246	0.685	0.783
ESL or Bilingual Education	62.4%	0.0810	0.463	0.786
Foreign Languages	68.7%	0.0477	0.592	0.782
Health or Physical Education	75.5%	0.0447	0.667	0.844
Mathematics	75.1%	0.0271	0.697	0.805
Natural Sciences	72.8%	0.0356	0.658	0.799
Social Sciences	73.6%	0.0360	0.664	0.807
Vocational, Career, or Technical	75.0%	0.0330	0.690	0.810
All Others	74.1%	0.0446	0.650	0.832

¹ Standard errors have not been converted to percentages

TABLE 120. INDUCTION SUPPORT – MASTER OR MENTOR TEACHER BY CERTIFICATION CONTENT AREA

(Percent beginning teachers with five or fewer years of teaching experience reporting ongoing guidance and feedback from a master or mentor teacher during the first year of teaching)

Certification Area	Percentage of Teachers	Standard Error ¹	95% Confidence Interval	
Early Childhood or General Elem	78.5%	0.0206	0.744	0.826
Special Education	75.0%	0.0283	0.694	0.806
Arts and Music	80.1%	0.0227	0.756	0.846
English and Language Arts	79.1%	0.0238	0.744	0.839
ESL or Bilingual Education	80.4%	0.0508	0.703	0.905
Foreign Languages	82.4%	0.0348	0.755	0.894
Health or Physical Education	80.1%	0.0360	0.730	0.873
Mathematics	76.7%	0.0267	0.714	0.820
Natural Sciences	74.8%	0.0390	0.670	0.826
Social Sciences	80.4%	0.0222	0.760	0.848
Vocational, Career, or Technical	79.8%	0.0334	0.732	0.864
All Others	85.5%	0.0355	0.785	0.926

¹ Standard errors have not been converted to percentages

TABLE 121. INDUCTION SUPPORT - REGULAR SUPPORTIVE COMMUNICATION WITH PRINCIPAL BY CERTIFICATION CONTENT AREA

(Percent beginning teachers with five or fewer years of teaching experience reporting regular supportive communication with a principal, other administrators, or department chair during the first year of teaching)

Certification Area	Percentage of Teachers	Standard Error ¹	95% Confidence Interval	
Early Childhood or General Elem	79.9%	0.0174	0.764	0.833
Special Education	77.7%	0.0301	0.717	0.836
Arts and Music	77.4%	0.0272	0.720	0.828
English and Language Arts	80.5%	0.0214	0.762	0.847
ESL or Bilingual Education	80.2%	0.0568	0.689	0.915
Foreign Languages	79.8%	0.0412	0.716	0.880
Health or Physical Education	85.3%	0.0310	0.792	0.915
Mathematics	79.7%	0.0267	0.744	0.850
Natural Sciences	76.9%	0.0268	0.716	0.822
Social Sciences	80.3%	0.0249	0.754	0.853
Vocational, Career, or Technical	81.7%	0.0271	0.763	0.870
All Others	86.6%	0.0401	0.786	0.945

¹ Standard errors have not been converted to percentages

TABLE 122. INDUCTION SUPPORT – SEMINARS OR CLASSES BY CERTIFICATION CONTENT AREA

(Percent beginning teachers with five or fewer years of teaching experience reporting participation in seminars or classes during the first year of teaching)

Certification Area	Percentage of Teachers	Standard Error ¹	95% Confidence Interval	
Early Childhood or General Elem	77.5%	0.0164	0.742	0.807
Special Education	73.1%	0.0258	0.680	0.782
Arts and Music	68.4%	0.0335	0.618	0.751
English and Language Arts	71.7%	0.0247	0.668	0.766
ESL or Bilingual Education	70.9%	0.0656	0.579	0.839
Foreign Languages	67.3%	0.0437	0.586	0.760
Health or Physical Education	72.1%	0.0370	0.648	0.795
Mathematics	71.4%	0.0268	0.660	0.767
Natural Sciences	72.3%	0.0304	0.662	0.783
Social Sciences	69.6%	0.0332	0.630	0.762
Vocational, Career, or Technical	75.3%	0.0321	0.689	0.817
All Others	80.3%	0.0405	0.723	0.884

¹ Standard errors have not been converted to percentages

TABLE 123. INDUCTION SUPPORT – COMMON PLANNING TIME BY CERTIFICATION CONTENT AREA

(Percent beginning teachers with five or fewer years of teaching experience reporting participation in common planning time with teachers in their subject during the first year of teaching)

Certification Area	Percentage of Teachers	Standard Error ¹	95% Confidence Interval	
Early Childhood or General Elem	74.4%	0.0180	0.708	0.780
Special Education	42.4%	0.0363	0.352	0.496
Arts and Music	30.8%	0.0445	0.220	0.396
English and Language Arts	54.4%	0.0255	0.493	0.595
ESL or Bilingual Education	52.1%	0.1009	0.320	0.722
Foreign Languages	42.4%	0.0500	0.324	0.523
Health or Physical Education	55.7%	0.0456	0.466	0.648
Mathematics	50.2%	0.0314	0.439	0.564
Natural Sciences	43.8%	0.0337	0.371	0.505
Social Sciences	48.3%	0.0334	0.417	0.549
Vocational, Career, or Technical	37.5%	0.0379	0.300	0.451
All Others	51.4%	0.0523	0.410	0.618

¹ Standard errors have not been converted to percentages

TABLE 124. INDUCTION SUPPORT – REDUCED TEACHING LOAD OR PREPARATIONS BY CERTIFICATION CONTENT AREA

(Percent beginning teachers with five or fewer years of teaching experience reporting a reduced teaching load or reduced number of preparations during the first year of teaching)

Certification Area	Percentage of Teachers	Standard Error	95% Confidence Interval	
Early Childhood or General Elem	7.2%	0.0115	0.049	0.095
Special Education	12.9%	0.0259	0.077	0.180
Arts and Music	11.4%	0.0282	0.058	0.170
English and Language Arts	13.2%	0.0173	0.097	0.166
ESL or Bilingual Education	11.4%	0.0606	-0.007	0.234
Foreign Languages	14.0%	0.0318	0.076	0.203
Health or Physical Education	15.4%	0.0464	0.062	0.246
Mathematics	14.0%	0.0239	0.093	0.188
Natural Sciences	11.9%	0.0202	0.078	0.159
Social Sciences	11.7%	0.0214	0.074	0.159
Vocational, Career, or Technical	16.7%	0.0240	0.119	0.214
All Others	21.9%	0.0412	0.137	0.301



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