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Novice Middle School Teachers' Preparedness for Teaching, and the Helpfulness of Supports: A Survey of One State¹

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Abstract: Novice teachers' readiness for teaching may affect the quality of the classroom environment and teachers' likelihood of remaining in teaching. Using a survey of novice teachers in one state, we examine teachers' preparedness for teaching, the supports offered, and the perceived helpfulness of those supports. Even novice teachers often had some type of prior experience: particularly substitute teaching (64%) and as a teacher aide or assistant (44%). Still, they often did not feel well prepared. Sixty percent of teachers felt well prepared in their subject area, but only 34% in using appropriate pedagogical strategies, 28% in managing their classrooms, and 17% in reaching

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all students. Teachers typically received multiple types of supports and received them multiple times over the first year, with a mean of 163 instances of supports. Teachers most often viewed supports as helpful if the supports were in the areas that teachers felt least prepared and provided at least monthly. The supports most related to teachers' perceptions of helpfulness were mentoring, planning lessons, using student assessment data to make decisions about instruction, using appropriate pedagogical strategies, professional development for new teachers, teacher networks, and regular collaboration with other teachers.

Keywords: Beginning teacher induction; teacher preparation

Preparación para la enseñanza de maestros novatos de escuela intermedia y la ayuda de los apoyos: Una encuesta de un estado

Resumen: La preparación de los maestros novatos para la enseñanza puede afectar la calidad del ambiente del aula y la probabilidad de que los maestros permanezcan en la enseñanza. Utilizando una encuesta de maestros novatos en un estado, examinamos la preparación de los maestros para la enseñanza, los apoyos ofrecidos y la utilidad percibida de esos apovos. Incluso los maestros novatos a menudo tenían algún tipo de experiencia previa: particularmente enseñanza sustitutiva (64%) y como ayudante de maestro o asistente (44%). Aún así, a menudo no se sentían bien preparados. El sesenta por ciento de los docentes se sintió bien preparado en su materia, pero solo el 34 por ciento usó estrategias pedagógicas apropiadas, el 28 por ciento en la gestión de sus aulas y el 17 por ciento en llegar a todos los estudiantes. Los maestros generalmente recibieron múltiples tipos de apoyos y los recibieron varias veces durante el primer año, con una media de 163 instancias de apoyos. Los maestros a menudo veían los apoyos como útiles si los apoyos se encontraban en las áreas en las que los maestros se sentían menos preparados y proporcionados al menos mensualmente. Los apoyos más relacionados con las percepciones de ayuda de los maestros fueron la tutoría, la planificación de lecciones, el uso de datos de evaluación de estudiantes para tomar decisiones sobre la instrucción, el uso de estrategias pedagógicas apropiadas, el desarrollo profesional para nuevos maestros, las redes de maestros y la colaboración regular con otros maestros.

Palabras-clave: inducción docente inicial; preparación docente

Preparação dos professores iniciantes para o ensino médio e a utilidade dos apoios: Uma pesquisa em um estado

Resumo: A disponibilidade dos professores iniciantes para o ensino pode afetar a qualidade do ambiente da sala de aula e a probabilidade de os professores permanecerem no ensino. Usando uma pesquisa com professores novatos em um estado, examinamos a preparação dos professores para o ensino, os apoios oferecidos e a percepção da utilidade desses apoios. Mesmo os professores novatos costumavam ter algum tipo de experiência anterior: particularmente o ensino substituto (64%) e como auxiliar ou assistente de professor (44%). Ainda assim, eles muitas vezes não se sentiam bem preparados. Sessenta por cento dos professores se sentiram bem preparados em sua área de estudo, mas apenas 34% no uso de estratégias pedagógicas apropriadas, 28% no gerenciamento de suas salas de aula e 17% em alcançar todos os alunos. Os professores geralmente recebiam vários tipos de suporte e os recebiam várias vezes durante o primeiro ano, com uma média de 163 instâncias de suporte. Os professores costumavam ver os apoios como úteis se estivessem nas áreas em que os professores se sentiam menos preparados e forneciam pelo menos mensalmente. Os apoios mais relacionados às percepções de utilidade dos professores foram orientação, planejamento de aulas, uso de dados de avaliação dos alunos

para tomar decisões sobre instrução, estratégias pedagógicas apropriadas, desenvolvimento profissional para novos professores, redes de professores e colaboração regular com outros professores.

Palavras-chave: iniciação de professor; preparação do professor

Introduction

The first three years of teaching encompass one of the most difficult transitions that teachers must make, moving from receiving instruction about teaching to taking full responsibility for a classroom. Teachers' success in making that transition can affect both the quality of their teaching and their likelihood of remaining in the profession. To address the need for a successful start, policymakers have sponsored a number of initiatives, including changes in teacher education programs and supports for novice teachers.

This paper, based on a survey of novice teachers in one state, documents the extent of the need for induction support and the degree to which schools and school districts meet that need. Specifically, we address three research questions: How well prepared do teachers feel when they first enter teaching? What types of supports do new teachers receive, and with what frequency? To what extent do they perceive the supports as useful? We find that teachers often feel a need for induction supports, particularly with regard to managing the classroom, communicating with parents, and reaching all students. They typically received induction supports, and often with great frequency, but the areas in which they received support were often not where they had the greatest perceived needs. Teachers' perceptions of the usefulness of the supports were closely related to the frequency of supports. State and district policymakers can use these results to guide the design of support systems that teachers will find more helpful.

We do not attempt here to examine how the supports should be constructed or implemented, though we do provide evidence that some types of supports are more strongly tied to teachers' feelings of being well prepared than other supports, and that the frequency of providing the supports is important. Later replications of this survey could be used to determine the magnitude of change in supports over time, and the extent to which new teacher supports vary from one state to another.

Background

Challenges Faced by Novice Teachers

The first few years of teaching present multiple challenges to a teacher. The teacher has little or no backlog of lesson plans to rely on, and must start everything new. Postsecondary teacher education programs typically have provided limited hands-on experience before graduation (Darling-Hammond & Ball, 2004), though there is an ongoing effort to increase such experience (National Council for Accreditation of Teacher Education, 2010). Still, novice teachers must learn important skills "on the job," and often feel unprepared in key areas. The National Center for Education Statistics' 2007–08 Schools and Staffing Survey found that "only 20% of teachers in their first year of teaching felt very prepared to select and adapt curriculum materials, handle a wide range of classroom management and discipline situations, and assess students" (Coggshall, Bivona, & Reschly, 2012, p. 3). Survey results of teachers with five or less years of experience found that, in eight areas listed, a majority felt either very well prepared or well prepared, still leaving 19 to 47% feeling either not at all prepared or somewhat prepared in each area (U.S. Department of Education, n.d.-b). The areas with the lowest levels of preparedness were: using data from student assessments

to inform instruction (47% said they were somewhat prepared or not at all prepared), handling a range of classroom management or discipline situations (44%), and differentiating instruction in the classroom (42%).

Since teacher contracts often assign considerable value to seniority, new teachers are likely to get the least desirable schools and teaching assignments; this may both compound the difficulties that novice teachers face, while also having implications for whether school systems distribute teacher quality equitably for all students. Teachers at schools with high poverty levels (i.e., schools in which 75% of more of the students were approved for free or reduced-price lunches) are slightly more likely than those at low poverty schools (schools in which 35% or less are eligible) to be under 30 years old (16% versus 14%), and to have less than four years of experience (18% versus 13%), and slightly less likely to have had college instruction in the following areas: classroom management techniques (71% versus 76%), lesson planning (76% versus 82%), learning assessment (74% versus 78%), and serving students with special needs (68% versus 71%) (Taie & Goldring, 2017). Still, these differences are small.

Consequences for Schools and School Districts

Not only are the early years challenging for a teacher, but they also have important consequences for schools and school districts. As noted above, there may be important inequities in terms of whether all students get equally qualified teachers. There also are other important implications.

There is concern that new teachers demonstrate a high rate of attrition, leading to a continuing cycle of new and poorly prepared teachers. Some studies have found unusually high rates of turnover among new teachers as compared with other professions, with between 40% and 50% of teachers leaving within five years of beginning teaching (Ingersoll & Strong, 2011). Not all studies have found such high attrition rates, with one recent study finding an attrition rate of 17% going into the fifth year (Gray & Taie, 2015), but even this rate can be considered high. Also, teachers at high poverty schools were less likely than other teachers to teach in all five years after entering teaching (75% versus 80%), and less likely to return after leaving teaching (51% versus 64%; Raue & Gray, 2015).

There is some evidence that induction programs may affect whether beginning teachers stay in teaching. Based on data from the 2007-08 Beginning Teacher Longitudinal Study, 92% of teachers who were assigned a mentor in their first year remained in teaching in the following year, compared with 84% of those who were not assigned a mentor (Gray & Taie, 2015). By the fifth year, 86% of those who were assigned a mentor remained in teaching, compared with 71% of those who were not assigned a mentor. However, Glazerman et al. (2010), found a comprehensive induction program had no impact on teacher retention, though the comparison they made was between a comprehensive induction program and other induction supports. Teachers in both the treatment group and control group all received substantial levels of support in every year, and they received equivalent levels of support in the third, fourth, and fifth years. The only differences were in the first and second years, and with regard to the one-year program, the control group received more supports in the second year than teachers in the treatment group. Thus, the study was not designed to measure the effects of induction supports in general, or even whether intensive levels of support were no better than lower levels of support (since all received high levels of support). At most, it demonstrated that a certain package of induction supports did not result in higher retention rates than different packages of induction supports. Efforts to help teachers in their first years thus have the potential for long-lasting effects, not only helping those students who are taught by new teachers but creating a more stable and effective supply of teachers.

Induction Programs for New Teachers

Recognizing these challenges, districts and schools often provide induction programs for new teachers. As of the 2015–16 school year, 29 states required that new teachers be provided some type of support, though only 15 states required that the support be provided over multiple years (Goldrick, 2016). However, Goldrick also reported that the state requirements were sometimes implemented poorly or sporadically, and that beginning teachers often reported they were not assigned a formal mentor even in states with a mentoring requirement. Goldrick provided detailed information on the nature of state policies, but not on the frequency of induction supports (which was outside the scope of the paper), and the policies themselves tended to be fairly general.

The extent to which teachers receive induction support has been measured through surveys conducted by National Center for Education Statistics within the U.S. Department of Education. Based on a national survey of teachers who began teaching in 2007-08, 76% participated in a teacher induction program and 80% were assigned a mentor in their first year of teaching (Raue & Gray 2015). However, teacher supports declined greatly in later years, with 33% being assigned a mentor in their second year of teaching, and 18% in their third year (U.S. Department of Education, n.d.-a). Both of the above reports contained dichotomous (yes/no) measures of the induction supports, without measuring the frequency or nature of the supports.

Induction can be seen as part of a continuum of development (Darling-Hammond, 2012; Odden, 2011), and as a supplemental, highly variable training activity (Smith & Ingersoll, 2004). Some literature strongly indicates that the nature of the induction program offered by a school to new teachers, as well as the quality of the mentoring they receive, have an impact on teachers' performance (Ingersoll & Strong, 2011). However, not all research agrees. A randomized control trial testing the impact of a comprehensive induction program found no impacts on classroom practices in the first year, and no impacts on student achievement in the first and second years, but found a significant impact on student achievement in the third year (Glazerman et al., 2010). Again, however, this study was not a true test of induction supports since teachers in the control group also received high levels of induction supports. Note that there may also be an indirect way in which induction supports improve teacher performance that would not be captured above: to the extent that experienced teachers are more effective than beginning teachers, then improvements in teacher retention due to induction supports may result in larger proportions of teachers being experienced, thus producing, on average, higher levels of teacher performance.

Middle School as a Key Transitional Time for Students

In this paper, we focus on the middle-school years. These years are often neglected in research, and are both distinctive and of great importance. In comparison to elementary school teachers, middle school teachers are more likely to be trained for teaching specific subject areas, and to have majors or minors in those subject areas. Thus, with regard to teacher effectiveness, this may change the relative importance of the subject area content knowledge in comparison to pedagogical training and knowledge. It may also change teachers' needs with regard to professional development.

The middle school years are also a time when some students begin to disengage from education, and students' behaviors at this time period (attendance, misbehavior, and course failures) are powerful predictors of which students are at risk of not graduating (Balfanz, Herzog, & Mac Iver, 2007). Thus, they have considerable importance for students' future educational careers, and are a key time for identifying at-risk students and implementing interventions.

The middle school years may also be a key transitional time in mathematics in which students decide whether to pursue the more advanced academic track. After examining course taking patterns and achievement starting with the eighth grade, Wang & Goldschmidt wrote:

The role of middle school mathematics course taking and mathematics preparedness for high school mathematics achievement is pronounced, and high schools appear to be unable to facilitate students' ability to close achievement gaps that exist prior to entering high school. (2003, p. 15)

Finally, inequality in educational achievement increases as students advance in grade, with larger gaps between advantaged and disadvantaged students in their later years than when they first start school. For example, the difference in reading test scores between low-poverty and high-poverty students on the National Assessment for Educational Progress (NAEP) decreased for fourth graders from 1992 to 2015, but increased for 12th graders (Snyder, de Brey, & Dillow, 2016). To the extent that new teachers are among the most likely to be teaching disadvantaged students, their lack of experience both works against efforts to compensate for inequality, and may actually increase the inequality. New teacher retention also decreased as the grade levels advanced, with five-year retention rates of 86% in elementary schools and 78% in secondary schools (Gray and Taie, 2015). Thus, improving teacher retention through teacher induction supports might be one way to address inequality in educational achievement, but the value of such efforts may not be properly measured unless one conducts separate analyses for each school level.

Gaps in the Research

One of the difficulties in monitoring and assessing induction programs is that the types of supports offered, quality of supports, and amounts of supports received all can vary. Even in those states that require induction supports, the nature of that support is not fully specified, and varies even to the point of no induction supports being provided. Research measures, by contrast, often have treated the provision of supports as dichotomous: either teachers received induction supports or they did not, without regard to the amount or quality of the support. Some studies have attempted to measure different levels of induction support (Ingersoll & Strong, 2011), but the measures tended to be very general (such as classifying induction supports as weak, average, or strong), though one study used multiple measures of mentoring, including the time spent with the mentor. The Glazerman et al. study (2010) adopted an unusual number of measures of induction supports, including multiple measures concerning mentors (the number of mentors, positions held by the mentors, frequency of meetings, and the average and total length of time by types of activities) along with apparently dichotomous measures of nine types of professional development activities and the number of times of observations and feedback on teaching over three months. From these, four summary measures were developed of teacher induction program depth, intensity, and instructional focus, along the number of years a mentor was assigned. Their findings are notable in two regards: measuring the level of support can be important (at least with regard to teacher satisfaction), and the measures were closely correlated to each other, making it difficult to distinguish separate impacts for each.

In short, there is suggestive evidence that the amounts of induction supports are important, though limited data are available on what types and amounts of services are received. Teasing out differences in impact among different types of support is likely to be difficult, partly because possibly equivalent support might be offered though different modalities and because the various supports may be offered as a package with teachers receiving multiple supports. This research seeks to differentiate among the supports more deeply, looking at variations in what supports are received and in how frequently those supports are received. Twenty-two separate (but related) measures are examined. This research also looks at the degree to which the various supports are interrelated. Since these survey data are limited to one state, this is not intended to be a definitive study, but it may help to set the groundwork for additional and more in-depth analyses of teacher induction supports.

Data and Methods

This paper provides results from a survey of novice teachers in public schools in one state, restricted to teachers in their first, second, or third year of full-time teaching in grades 6 to 8 in either English/language arts or mathematics. The teacher survey was one component of a larger study on the impact of teacher preparation programs.

Our analysis is based on teachers' self-reports of their experiences and their evaluations of their experiences. The use of self-reports has both advantages and disadvantages. One important advantage is that the self-reports are individualized, allowing for variations in what each teacher has received and for the possibility that the same support may have had different impacts on different teachers (e.g., based on differences in teachers' prior backgrounds, skills, or teaching approaches, or classroom compositions). A second advantage is that knowledge of teachers' perceptions is itself important: though perceptions may seem more subjective than, say, tests of teachers' skills, teachers' perceptions of preparedness and of the supports they receive are likely to affect the way they approach their teaching, the degree to which they participate in and respond to supports, and the attitudes they convey to students. Third, survey data can provide a comprehensive picture of all of the supports a teacher receives, while program participation data may not collect data on the full set of supports, thus not providing the full context in which teachers operate. A disadvantage of using self-reports is that teachers' memories may by faulty or incomplete, so that, for example, we cannot obtain completely reliable accounts of the number of times that a teacher received a particular support. A second disadvantage is that a teacher's subjective evaluation may be affected by many factors in addition to content or actual usefulness of the support, such as a teacher's response to the provider's personality or "sense of fit" with the culture of the school. Still, teachers' perceptions are likely to affect the impact of any program involving teachers, and they also reflect the informed judgments of those who have had experience with the program. Further, to the extent that teachers feel poorly prepared and not adequately supported, they are at risk of leaving teaching.

Study Design

This study was conducted through a survey of teachers who first started teaching in the 2010–11, 2011–12, or 2012–13 school years—the three most recent years for which teacher data were available prior to our survey starting in October 2014. The survey questionnaire (see Appendix) covered teachers' experience, feelings of preparedness, the supports they received as new teachers, and their perceptions of the usefulness of the supports. We tested the survey through a focus group with two teachers who were both in their second year of teaching and revised the questionnaire based on their comments. They found no major problems with the survey and made the following types of suggestions: provide a more extensive list of possible support providers, specifically mentioning principals and vice-principals rather than the more generic "administrators;" clarify the time frames involved (e.g., per year or per semester); add three types of support to question 8; and clarify the source of support in question 11 (we added "from your district and school"). Because no major problems were identified and the comments could be addressed in a straightforward manner, no retesting of the revised instrument was performed. An IRB associated with Westat approved the questionnaire and data collection approach.

Since the teachers could have started teaching in any of three years, the teachers had between one and three years of teaching experience when they responded to the survey. The survey questionnaire asked about all three years of teaching (as applicable), but focused most on the first year; the first year is the year that the transition to teaching might be expected to be the most difficult, and it is also the year in which, according to our survey data, novice teachers received the

greatest amounts of support. Of the 170 eligible teachers who responded to the survey, 29% started teaching in 2010–11, 37% started in 2011–12, 32% started in 2012–13, and 1% reported starting in 2013–14.

Data Collection

Using data provided by a cooperating state department of education, we identified 1,809 teachers who, based on the state-provided data, had started teaching mathematics or English/language arts in the applicable school years. We surveyed all of these teachers through an online survey over the period October 2014 through May 2015, sending an initial invitation to complete the survey by email, and conducting email and telephone follow-up of nonrespondents. Of the 1,809 teachers originally identified as belonging to the target population, the data collection process revealed that only 889 appeared to be correctly identified as novice teachers and were still actively teaching. We received 321 responses (including partial responses; sometimes the only missing data was from a failure to indicate whether we had permission to collect their college transcripts, which supported a different part of the study), with 170 being from eligible teachers and 151 being from ineligible teachers (based on their responses indicating that they were not novice teachers). Response rates can be calculated in many different ways; to support consistency in reporting, we use formulas developed and promoted by the American Association of Public Opinion Research (AAPOR). AAPOR provides four separate formulas, but for our study the distinction between partial responses and complete responses was not important, leaving two formulas that are relevant. If we ignore the issue of whether some nonrespondents might have been ineligible (AAPOR response rate 2), the response rate was 23% [170/(170+568)]. Alternatively, if one assumes that the nonrespondents were ineligible as the same rate as among the respondents (AAPOR response rate 4), then the response rate was 69%; i.e., $170/\{170+568*[170/(170+920+151)]\}$. The ineligibility rate may have been higher among

i.e., 170/{170+568*[170/(170+920+151)]}. The ineligibility rate may have been higher among nonrespondents than respondents since experienced teachers may have decided the survey did not apply to them; thus, 69% is likely to be a conservative estimate if one wishes to adjust for ineligibility among nonrespondents. Comparing the two estimated responses rates, 23% seems overly conservative (almost certainly, some of the nonrespondents were ineligible, especially given the high level of ineligibility that we found among respondents), and 69% may also be conservative. Thus, 69% seems closer to the true response rate, though it is based on an approximation.

We excluded part-time teachers, ESL teachers, Special Education teachers, and those who were no longer actively teaching. The requirement for teachers to still be actively teaching was made partly for convenience (helping us to locate the teachers based on the school information we had) and partly because another component of the study required multiple years of teacher/student data. To the extent that poorly prepared teachers, or teachers with few supports, drop out of teaching quickly, the study findings may have been biased by underrepresenting such teachers. The degree to which there was bias depends on the reasons why the novice teachers left teaching, and whether those reasons might be associated with teachers' readiness for teaching and the supports they received. Teachers may have left for personal reasons that had nothing to do with either factor, but to the extent that some teachers left because they felt poorly prepared for teaching and did not receive adequate induction supports, the survey would tend to overestimate the degree to which teachers received induction supports. Possibly too, since the receipt of some types of supports (such as mentoring) was almost universal, the addition of more teachers with few or no induction supports might have increased our ability to discriminate among the various types of supports and better measure the association between the supports and feelings of preparedness. We will later show evidence that some types of induction supports were correlated with each other, and adding teachers with lower levels of supports might have helped to reduce such correlations. However, we still were often able to find variation among teachers in terms of the amount of supports they received. Alternatively, if the excluded teachers left teaching after receiving the same levels of support (i.e., we self-selected teachers who stayed, but all teachers received similar induction supports), that would not explain the associations we find here between induction supports and feelings of preparedness; thus it seems unlikely that adding more teachers would undercut the findings presented here.

Logistic Regression Models

We designed logistic regressions models to predict teachers' overall perceptions of the helpfulness of the package of new teacher supports they received based on the frequency with which teachers received each support.

We recoded the dependent variable (overall perceived helpfulness of new teacher supports; question 13) to be dichotomous: extremely helpful or any other response (i.e., combining not helpful at all, somewhat helpful, and helpful). We also explored using the combination of "extremely helpful" and "helpful," but the models based on predicting "extremely helpful" performed better in terms of producing more concordance between predicted and observed responses.

We explored three alternative methods for defining the independent variables (the frequency that teachers received each support, based on questions 7, 8, and 9). One method was to convert the measures to continuous measures (the number of each support per year), based on applying the mean value for the chosen range (e.g., converting "once or twice a month" to 1.5 times nine months, or 13.5). The response options for question 7 were not the same as for questions 8 and 9; to make the odds ratios more comparable across variables, we recoded question 7 so the highest response was "weekly." We also rescaled the measures by dividing the values above by 36 (the maximum value, based on weekly receipt of a support) so that all of the independent variables would have a range from zero to one. The second method was to convert the responses to dichotomous measures, using the breakdown "at least monthly" vs. "less often." The third method also involved converting the measures to dichotomous measures, but instead dividing the responses between "at least weekly" vs. "less often." We believe the first approach is best because it made the most use of the variation in the data, and it also performed the best in terms of producing more concordance between predicted and observed responses, and has a greater area under the receiver operating characteristics (ROC) curve (AUC). (The ROC curves are provided in Supplemental Figure 1.) The estimated AUC of 0.88 can be considered excellent. All three methods produced similar results, and our findings would not change in important ways by using either of the other two methods. Results from all three approaches are presented in the text, and the similarities and differences are discussed.

Only limited demographic data on the teachers were collected. Question 15 on the teacher questionnaire asked for permission to collect certain data from the colleges they attended; 64% of teachers gave permission, but the colleges were unwilling to provide the data without actual teacher signatures (rather than electronic permission). We explored the use of four questions collecting data about the teachers in the teacher questionnaire (questions 1, 2, 3, and 14); of these, only question 2 (the number of years of teaching in the state) was statistically significant in the statistical models, and it was retained when significant.

We used stepwise logistic regressions to estimate which teacher supports were most strongly associated with teachers' perceptions that the teacher supports overall were extremely helpful. Our reason was that we felt a need to restrict the model in some way, since we started with a large number of variables (22), and a model with irrelevant variables would have larger standard errors, possibly keeping some variables from achieving statistical significance. Given the lack of a clear theoretical model that specifies which supports would be most valuable (which, we suspect, depends

on the teacher and on how the supports are designed and packaged), stepwise regression provided a way to create a plausible parsimonious model. However, given that the variables are inter-related, one should be wary of over-interpreting the findings. A support may have dropped out in part because it is highly correlated with a support that was retained, but that does not mean that the dropped support was unimportant; rather, it means only that measures of that support failed to add much new information to the model.

Limitations

As noted above, the survey had an estimated response rate of 69%, and the nature of the bias associated with nonresponse is not clear. For example, some teachers probably did not respond because the survey was inapplicable (i.e., they were not novice teachers), others because they were too busy, others because they did not trust the promise of confidentiality, and others because of a lack of interest in the topic (which may be an indicator that they did not receive new teacher supports or did not have strong feelings about the new teacher supports they received). The last reason listed (a lack of interest) may be the most serious in the sense that this survey may overstate the degree to which teachers received new teacher supports, or the degree to which the teachers thought the new supports were helpful. Potential bias may also arise because this study excluded those who had left teaching, which also may lead to overstating the number of teachers who received new teacher supports and who were helped by the supports. There also were substantial problems in the frame, with many experienced teachers improperly identified as novice teachers; we excluded those teachers who could be identified as ineligible, but, given the problems in the data, may have failed to survey teachers who should have been sampled.

In several ways, this study had a highly specialized focus, which affects the degree to which one can generalize the results. First, these results may apply less well to elementary schools, where the relative importance of content knowledge expertise versus general teaching skills may differ, affecting what types of supports are most needed. Second, we defined novice teachers as teachers who were new to teaching in the public schools in the cooperating state. Some teachers (10%) were not truly novice teachers in the sense that they had taught previously in a private school or in a public school in another state. One might anticipate that teachers with less experience would in general feel less prepared. Third, other states/districts may have different teacher selection processes and different supports for novice teachers. Possibly, too, state curricula may differ in the degree to which they can be readily mastered by novice teachers, affecting both teachers' feelings of preparedness and the value of teacher induction programs. Schools, districts, and states also vary in the distribution of student characteristics, such as poverty levels and parental educational backgrounds, and such differences may affect what teachers perceive as their greatest needs. Fourth, while we focus here on state statistics (and had too little data for district-level analyses), the state may not be the most important actor in education. The hiring and support of teachers is largely performed at the district level, subject to certification standards set by the state, and differences in hiring approaches, teacher supports, teacher education programs, the quality and background of available teaches, and curricula could easily lead to widely varying results across districts (and states). To some degree, the variations across districts were useful for the purposes of this study because they allowed us to compare teachers across diverse teacher induction programs; still, other districts (or groups of districts, including the nation overall) may show different patterns relating to both induction programs and to the characteristics of novice teachers.

Given the above limitations, statistics in this report should be considered solely as preliminary indicators. Statistics on the frequency of different supports seem the most likely to be subject to change in a different state or in a nationally representative sample. On the other hand, the

results on which services appear most helpful to teachers are more likely to reflect general teachers' needs and experiences, and are more likely to be generalizable. Still, the quality of the supports may vary greatly among districts, leading to differences in the perceptions of helpfulness. Also, teachers' needs for different types of supports may vary depending on the characteristics of their students.

Results

Research Question 1: How Well Prepared Do Teachers Feel When They First Enter Teaching?

Teachers often reported having some practical experience with teaching prior to their first year of being responsible for their own classroom: 64% had experience as a substitute teacher, 44% had been a teacher aide or assistant, 29% had performed other paid teaching work outside of K-12, and 10% had been a teacher of record at a private school or a school outside of the state. Collectively, 84% had experience with at least one of these four approaches, and 45% had experience with more than one of these four approaches. By this measure and for this state, relatively few teachers were truly "novice" teachers when they first took responsibility for a classroom in a public school. Of course, teachers also may gain practical experience while attending teacher preparation programs, but it is customary to consider such teachers as novice teachers despite such experience. Also, these four types of experience vary in terms of the level of responsibility a teacher has for organizing a classroom, and the two most common experiences (as a substitute teacher, aide, or assistant) can involve low levels of such responsibility.

Most teachers (60%) said they felt well prepared in their first year of teaching with regard to mastering the subject areas being taught, and half (48%) for preparing lessons. However, only 34% felt well prepared in using appropriate pedagogical strategies, 28% in managing their classroom, 25% in communicating with parents, and 17% in reaching all students. In two areas (communicating with parents and reaching all students), teachers were more likely to say they were poorly or not at all prepared than to say they were well prepared.

One might ask whether some types of prior experience were more valuable than other types. Table 1 provides information on this issue: teachers who previously had been the teacher of record in a private school or outside the state were among the most likely to feel well prepared for managing the classroom (41% versus 28 to 38% among other teachers) and using appropriate pedagogical strategies for the subject area(s) (47% versus 32 to 38%), but among the least likely to feel well prepared for preparing lessons (35% versus 50 to 53%) and mastery of the subject area (44% versus 58 to 63%). There was little difference among teachers in feelings of preparation based on prior experience for the other two aspects of teaching (reaching all students and communicating with parents). Among teachers with the other three types of prior experience, the differences in feelings of preparedness tended to be small, though those who had been teacher aides or assistants were somewhat more likely to feel well prepared for managing the classroom (38% versus 28 to 31%) and using appropriate pedagogical strategies (38% versus 32 to 33%).

Table 1
Percentage of novice teachers who felt well prepared for various aspects of teaching, by types of prior teaching experience

Aspect of teaching		Prior ex	perience	
	Teacher in	Teacher aide	Substitute	Paid teaching
	private school	or assistant	teacher	work outside
	or outside the			K-12
	state			
Preparing lessons	35	53	50	50
Managing the classroom	41	38	28	31
Reaching all students	18	20	18	21
Mastery of subject area(s)	44	61	58	63
Using pedagogical strategies	47	38	32	33
Communicating with parents	24	24	27	25

Research question 2: What Types of Supports Do New Teachers Receive, and With What Frequency?

One of the most common methods of assisting new teachers was through mentoring. Essentially all teachers received support through a mentor (96%), most often through a mentor at their local school (90%), but 38% also reported have a mentor provided outside the school by the school district or another organization (Figure 1). In addition, 31% reported being mentored in both locations. However, mentors were primarily a resource for first-year teachers: 92% had a mentor in the first year, 35% in the second year, and 14% in the third year. Mentors almost always had similar students as those taught by the novice teachers (93%), and large majorities also had similar subjects, grade levels, and courses. More than half of the teachers interacted with their mentor at least weekly, with 26% meeting daily and 32% meeting weekly. The remainder generally met every two weeks (12%) or monthly (25%).

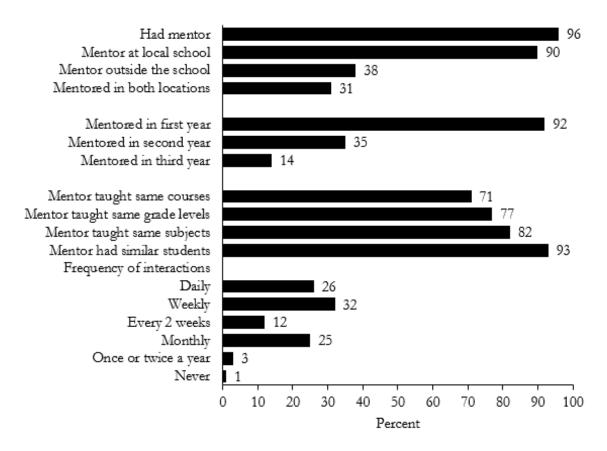


Figure 1. Teachers' reported frequency of having a mentor, and the characteristics of their interactions

Three of 17 listed types of assistance were received by a majority of new teachers at least once or twice a month: 81% reported having a common planning time, 61% reported regularly scheduled collaboration, and 59% received assistance in locating curriculum or resources (Figure 2). However, most teachers received assistance less than once or twice a month in two of the areas that they were weakest: 42% received help at least once or twice a month in classroom management, and 41% in using appropriate pedagogical strategies. Looking at the data in a different way, the approximate total number of times teachers received any of the 17 listed helps in the first year ranged from 16 to 510, with a mean of about 163 times per teacher and a median of 143; however, these statistics may include some double counting (e.g., a teacher might get help with classroom management during regularly scheduled collaboration).

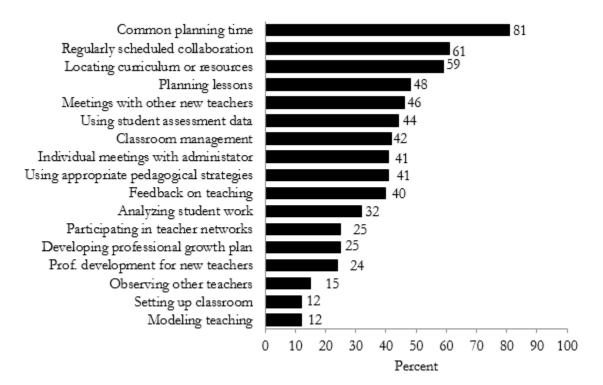


Figure 2. Percentage of new teachers receiving different types of assistance at least once or twice a month

Among the 17 items were seven ways in which the teachers might have met with or collaborated with others in their first year. For each of the seven means of working with others, 55% or more reported participating at least once a year, and for all but one support (teacher networks), 75% or more reported participating at least once a year (Table 2). The activities reported as being the most frequent (at least once a month) were a common planning time with teachers in their grade or subject (81%), regularly scheduled collaboration with other teachers (61%), and meetings with other new teachers (46%). As in the previous paragraph, one might estimate the number of collaborative activities by converting the categorical responses to numeric responses; by this measure, the number of such activities ranged from seven (three teachers) to 238 (one teacher), with a mean (and median) of 75 collaborative activities per teacher.

Table 2
Percentages of teachers reporting collaborating with others in various ways in their first year of teaching, and frequency of collaboration

Type of collaboration	Never	Once a	Once or	Once or	Weekly
		year	twice a	twice a	
			semester	month	
Individual meetings with your principal, another administrator, or department chair	2	9	48	30	11
Meetings with other new teachers in your school or district to discuss new teacher issues	17	12	25	40	5
Professional development sessions designed especially for new teachers	23	25	28	23	2
Visiting and observing in other teachers' classrooms	25	28	32	6	8
Teacher networks (e.g., study groups, lesson study, professional learning community)	45	14	17	11	14
Common planning time with teachers in your grade or subject	8	2	8	20	61
Regularly scheduled collaboration with other teachers on issues of instruction	14	6	19	19	42

Other kinds of support that teachers received in their first three years include teacher aides or assistants (42%), regular team teaching with an experienced teacher (21%), smaller class sizes (9%), and reduced teaching schedule or number of preparations (2%). However, more experienced teachers might also have been provided with one or more of these supports, perhaps particularly including a teacher aide or assistant.

Research Question 3: To What Extent Do Teachers Perceive the Value of the Supports They Receive as Useful?

Overall, a slight majority of the teachers described the new teacher supports as being either helpful (33%) or extremely helpful (19%) in developing their effectiveness as a teacher, while 40% said the supports were somewhat helpful, and 8% said the supports were not helpful at all (Figure 3). Somewhat larger majorities of teachers felt that supports in particular areas were more helpful: 64% found supports in using pedagogical strategies to be either helpful or extremely helpful, 63% said the same for reaching all students, and 60% for managing the classroom. These latter three areas are ones in which teachers were least likely to feel well prepared and, thus, in areas where teachers felt some of the greatest needs.

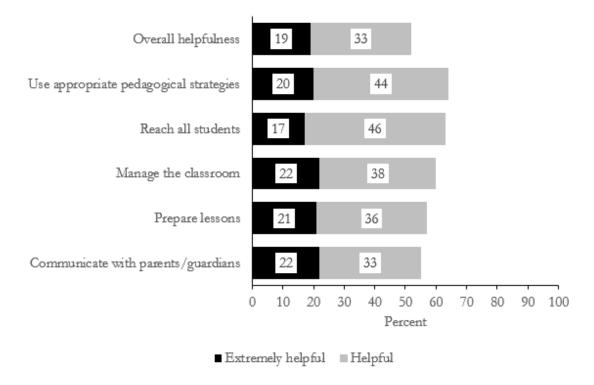


Figure 3. Teachers' perception of the helpfulness of supports in specific areas

The remainder of this section focuses just on teachers' overall perception of the helpfulness of the new teacher supports, based on question 13 in the questionnaire, seeking to look at which aspects of the supports were most associated with overall perceptions of helpfulness. Teachers' perceptions of the overall usefulness of their teacher supports were closely related to the frequency that they received the supports. The following paragraphs examine the relationship between the supports discussed above and teachers' perceptions of usefulness.

Mentors. As noted, 92% of new teachers had a mentor in the first year. Those who interacted with their mentors on a daily basis tended to view the supports as either extremely helpful (38%) or helpful (31%; Figure 4). By contrast, those who interacted with the mentor only once or twice a year never said the supports were extremely helpful, though 40% said the supports were helpful. Forty percent of those interacting with the mentor once or twice a year said the supports were not helpful at all.

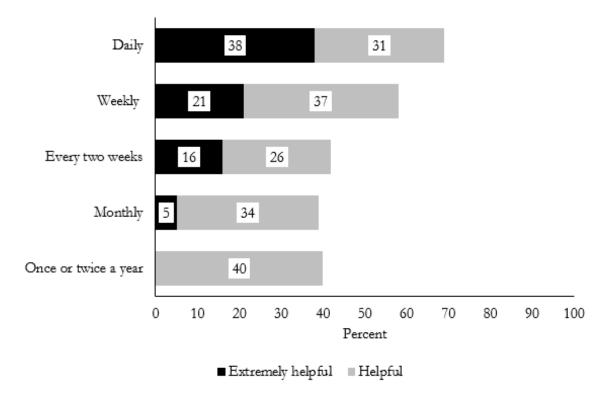


Figure 4. Percentage of teachers who reported the supports they received were helpful or extremely helpful, by the frequency of their interactions with their mentor

Specific types of support. For all 10 types of supports that were examined, teachers were between 14 and 33 percentage points more likely to describe their overall teacher supports as extremely helpful if they had received their services monthly or more frequently, as compared with less than monthly (Figure 5). Some of the specific supports that were most strongly related to perceptions of overall supports being extremely helpful were: modeling teaching or demonstrating lessons in the teacher's classroom (48% versus 15% among those receiving such support less than monthly), setting up the classroom (45% versus 15%; however, only 20 teachers received such support at least monthly, making the statistic of 45% less reliable), using student assessment data to make decisions about instruction (38% versus 5%), collaborating on developing a professional growth plan (37% versus 13%), and analyzing samples of student work (35% versus 11%).

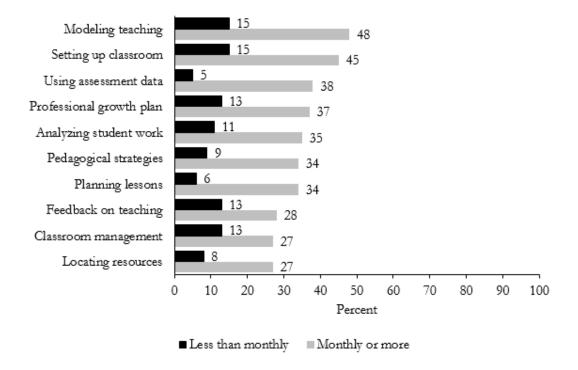


Figure 5. Percentage of teachers that overall perceived new teacher supports as extremely helpful, by the frequency with which they received specific supports

Collaboration with others. For all seven measures of collaboration with others in the first year, there again was a strong relationship between the frequency of the service and the frequency of perceiving the supports as being extremely helpful (Figure 6). Comparing those teachers who received the services at least once a month (combining the responses for "once or twice a month" with the responses for "weekly") with teachers who received the services less often, there was at least a 20 percentage point difference in perceptions for five of the seven supports, and at least a 9 point percentage point difference for the remaining two supports. For example, 44% of those who received professional development for new teachers at least monthly viewed new teacher supports overall as extremely helpful, compared with 11% of other new teachers. Similarly, 40% of those visiting and observing other teachers' classrooms at least monthly said overall the supports were extremely helpful, compared with 15% of other teachers, and 39% of those participating in teacher networks at least monthly said overall the supports were extremely helpful, compared with 13%.

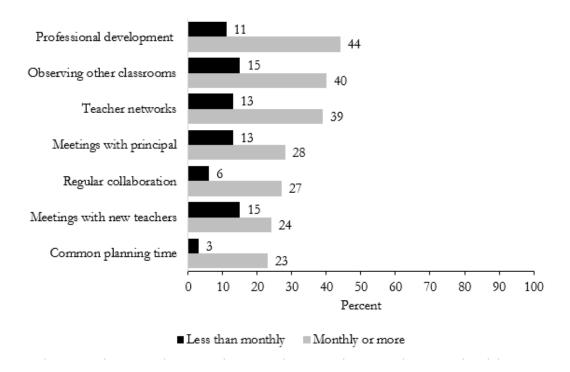


Figure 6. Percentage of teachers that overall perceived new teacher supports as extremely helpful, by the frequency with which they collaborated in various ways

Other supports. As discussed in the previous section, the survey also asked about four other supports that new teachers might receive: teacher aides or assistants, regular team teaching with an experienced teacher, smaller class sizes, and reduced teaching schedule or number of preparations. All of these items asked for yes/no responses rather than the frequency of the supports. These items, unlike the other supports discussed above, showed relatively little relation to perceptions that first-year supports were extremely helpful; the differences between those who received the supports and those who did not ranged from zero to eight percentage points, depending on the item. Largely, there were similar responses for all four types of supports, with between 17 and 22% saying that first year supports in general were extremely helpful, and between 55 and 64% saying the supports were either helpful or extremely helpful.

Patterns among the supports. One striking pattern in the above statistics is that the first three groups of supports all showed substantial differences based on the frequency of support. There were also some strong differences among the supports. Four services, when frequently received, were associated with 40% or more of teachers saying the overall supports were extremely helpful. These four services were modeling teaching (48% said the supports were extremely helpful), setting up the classroom (45%), professional development for new teachers (44%), and observing other classrooms (40%). Still, every support was viewed as extremely helpful by at least 23% of teachers who received the support at least monthly (and another 24 to 44% viewed each support as helpful when received at least monthly). In addition, every support showed a strong difference between those who received the supports at least monthly and those who received them less often. For example, one might hypothesize that teachers only need help at the start of the year in setting up their classroom, but this support showed some of the greatest differences between those who received assistance at least monthly and those who received assistance less often (45% versus 15%).

Looking at a multivariable model and employing stepwise regression using the continuous measures of the number of sessions, the four supports that showed the greatest predictive power with regard to perceiving that first year supports were extremely helpful were using student assessment data to make decisions about instruction, using appropriate pedagogical strategies, professional development for new teachers, and regular collaboration with other teachers (Table 3).

Table 3

Odds ratios from logistic regressions to predict overall helpfulness of supports based on the frequency of different types

Type of support and teacher experience (with question number)		rts extremely		Sur	nely ful	
,	Frec	quency of sup	port	Frec	Frequency of support	
	At least weekly	At least monthly	#of sessions	At least weekly	At least monthly	#of sessions
Planning lessons (Q8c)		3.53*		5.02**	4.45**	8.56**
Analyzing samples of student work (Q8d)	0.05**					
Using student assessment data (Q8e)	5.66*	5.88**	9.46**			
Using appropriate pedagogical strategies (Q8j)	22.19**		7.42**			
Prof. development for new teachers (Q9c)		4.87**	29.53**			
Teacher networks (Q9e)		2.83*		5.82**	5.61**	14.87**
Regular collaboration with other teachers (Q9g)	3.71*		4.10*		2.15*	
Number of years of teaching in state (Q2)	0.40**		0.40**			
Steps required	5	4	7	4	3	2
Percentage concordant	82	86	88	49	73	79
Percentage discordant	13	10	12	9	14	17
Area under the curve	84.7	88.0	88.4	70.0	79.6	81.4

^{**} Significant at 0.01; * significant at 0.05

When alternative formulations of the models were explored, the results were consistent but with minor variations. Three additional types of support were significant: planning lessons (four of six models), using student assessment data (one model), and teacher networks (four models). Also, there were minor variations in terms of which supports were significant across all six models. Still, six of the seven types of supports were significant in at least two models, and two types of supports (planning lessons and participation in teacher networks) were significant in four models. Based on the odds ratios and using what appears to be the best model, the greatest contribution was professional development for new teachers, with an odds ratio of 29.5. However, the size and relative ordering of the ratios varied depending on the model that is used, and (as will be discussed later) the different measures of teacher supports are interrelated. For these reasons, we view the statistics as providing general support for the value of induction supports and for providing the supports with relatively high frequency, while quantifying the association of a specific support with teachers' perceptions of the value of supports overall is likely to extrapolate more from the data than is justified.

To explore why some supports stood out while others did not, we examined the correlations between the different measures of induction supports, somewhat arbitrarily choosing a correlation of 0.30 or higher as indicating a relatively high level of correlation. Four of the seven supports that stood out in the logistic regressions—planning lessons, analyzing samples of student work, using student assessment data, and receiving support in using appropriate pedagogical strategies—were each correlated at 0.30 or higher with nine or more other supports, and the remaining three final supports were each correlated at 0.30 or higher with one other support. Collectively, there were a total of nine supports that were not in the final models but that were relatively highly correlated with one or more of the seven supports in the final models; possibly these measures of support may have simply failed to provide much new information, rather than indicating that these types of support were not helpful.

A different way of examining the impact of the correlations among the supports is by running 22 bivariate logistic regressions: one for each type of support (i.e., based on questions 7, 8a through 8j, 9a through 9g, and 10a through 10d). Taking this approach, six additional supports were statistically significant at the 0.05 level when they were the only predictor, though they were not significant when using stepwise logistic regressions. Also, as another test of the correlation between the variables, the models were re-run as regressions in order to produce the variance inflation factor. The variance inflation factor ranged from 1.0 to 1.83, indicating that the standard errors were up to 1.35 times larger (i.e., the square root of 1.83) than if the variable had no correlation with the other predictor variables.

Discussion

The survey found that teachers often perceive a need for induction supports beyond what is provided in teacher education programs. Novice teachers generally felt well prepared in their content areas, but often not with regard to other important aspects of teaching, such as managing the classroom, communicating with parents, and reaching all students. The percentage feeling well prepared in classroom management (28%) was lower than that found by the Schools and Staffing Survey (56%) (U.S. Department of Education, n.d.-b), possibly reflecting that they were newer teachers (with no more than three years of teaching, versus up to five years). These concerns about preparedness occurred even though the teachers in this study were often not truly "novice" teachers: 84% had some kind of prior experience (primarily as a substitute teacher or teacher aide), not counting whatever experience teachers might have received in teacher preparatory programs. This is

an important finding for administrators who trust either in postsecondary teacher education programs or in other types of experience. Possibly the most surprising result was that teachers who had previously taught in public schools in other states, or in private schools, were more likely than other new teachers to feel well prepared in managing the classroom and using appropriate pedagogical strategies but not in preparing the lessons and mastering the subject area; possibly the switch to a different curriculum left them feeling relatively unprepared.

It is not the purpose of this article to examine whether teacher induction programs are the best method for having teachers who are well prepared. One could argue that teachers' expressed feelings of not feeling well prepared in key areas indicate that teacher education programs may often not give adequate attention to these areas. The National Council for Accreditation of Teacher Education (which later merged with the Teacher Education Accreditation Council to form the Council for the Accreditation of Educator Preparation) issued a call in 2010 for increased attention to providing hands on experience — both an indication of past weaknesses and a possible indicator that teacher education programs may have changed as a result. The teachers in this study started teaching after the call was issued, and may have experienced at least some increased attention to hands on experience while in college, but we do not have data on the nature of the teacher education programs that the surveyed teachers attended. At least at the time of the survey, these survey data indicate that teacher education programs were not (yet) getting teachers well prepared in key areas, and that there was a need for teacher induction supports.

Teachers reported they received a large number of supports, with 96% receiving support from a mentor, and three other supports (common planning time, regularly scheduled collaboration, and locating curriculum or resources) being received at least once a month by a majority of teachers. The mean total number of incidents of support was 163; even if there was some double counting and the same incident provided multiple types of support, these numbers are large enough to suggest that induction supports were both frequent and wide-ranging in their coverage. Still, some of the areas where teachers expressed being least prepared (classroom management and using appropriate pedagogical strategies) were areas where most teachers received assistance less than once a month. Thus, the new teacher supports, at least in terms of frequency, may not be targeted to teachers' greatest perceived needs.

Teachers often perceived the induction supports as extremely helpful. They were most likely to do so if they received supports at least once a month, and if the supports were among seven types or areas of support: mentoring, planning lessons, using student assessment data to make decisions about instruction, using appropriate pedagogical strategies, professional development for new teachers, teacher networks, and regular collaboration with other teachers. However, the variables that stood out as statistically significant may have been measuring teacher supports somewhat more broadly rather than just the impact of the supports that were retained in the stepwise regressions, and providing a package of supports may be more useful than focusing on one or two specific supports. That is, the supports were not fully distinct from each other, both in the sense that multiple types of support could be received at one time (e.g., a mentor might provide help in multiple ways) and that the measures of the various supports were correlated with each other; when each support's association with teacher preparedness was tested individually (rather than together in a multivariable model), six additional supports showed significant relationships. In fact, for every support, at least 23% of the teachers who received the support at least monthly viewed the support as extremely helpful. As another example of how the measures are interrelated, Figure 4 shows a strong difference in teachers' perceptions of supports depending on the frequency of help they received in setting up the classroom. (However, this measure of support dropped out in the final logistic regression models.) One might think that this is an area of support in which high frequency

is not needed; indeed, only 27% reported receiving such support more than once a year. It may be that, when teachers received multiple occasions of support, this time was used for discussions about teaching issues as well as simply physically setting up the classroom. Similarly, the measure may be an indicator of the closeness of a relationship that the teacher had some type of mentor or coach, with the closeness of the relationship being the true source of the teacher's perceptions of support.

These results are highly consistent with previous research: beginning teachers feel the need for additional supports (Coggshall, Bivona, & Reschly, 2012; U.S. Department of Education, n.d.-b), teachers often received supports (Raue & Gray, 2015) and often in large amounts of supports (Glazerman et al., 2010), the amounts of supports appear to be important (Ingersoll & Strong, 2011; Glazerman et al., 2010), and it can be difficult to distinguish the impact of individual supports because their receipt is so highly correlated (Glazerman et al., 2010).

There are several implications for policymakers, districts, schools and research. First, given the connection between teachers' perceptions of the helpfulness of the new teacher supports and frequency of supports, greater attention should be given to the frequency of supports. For example, a state policy that requires provision of a mentor may have little value if the teacher seldom sees the mentor. From a research perspective, we need to be collecting more detailed information about the types and amounts of supports that teachers receive, rather than dichotomous measures of whether or not the teacher received a support. Techniques such as randomized control trials, though powerful for some applications, are not well suited for examining the impacts of services that are highly variable.

Second, these findings suggest that teachers with prior experience at private schools or at public schools in other states are different from other novice teachers, and may need different kinds of support, particularly with regard to the curriculum (preparing lessons and mastery of the subject area) as compared with managing the classroom and using appropriate pedagogical strategies. A possible reason is that changing from one curriculum to another presents special challenges, or at least leaves the teachers feeling disadvantaged compared with those teachers having more exposure to the state curriculum. Such a finding also could have implications for states that change their curricula, such as those adopting the Common Core, turning experienced teachers into teachers who feel unprepared. What is not clear is whether teachers who changed to a different curriculum actually were at a relative disadvantage compared to other teachers, or they simply perceived themselves as being at a disadvantage.

Third, given that teachers perceive different levels of need in different areas (e.g., showing greater perceived need with regard to classroom management than to the subject area being taught), and that teachers are more likely view the supports as helpful when the support address those felt needs), while the various modes of support may be somewhat interchangeable, a focus on the mode of supports offered may not be as important as the areas covered by the supports.

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Appendix: Survey Questionnaire

Teacher Questionnaire Survey on Support Received in First Three Years of Teaching

This brief survey asks about the support you received from your district and/or school during your first three years as a teacher of record, responsible for your own classroom. By support, we mean resources like a mentor, a support team, professional development, release time, or other strategies to help new teachers develop their skills and acclimate to their schools.

The survey is part of a study of educator preparation programs being conducted by Boston College and Westat, a research company in Rockville, Maryland. The study is being conducted in cooperation with [your state's department of education].² The survey asks about your experiences in your first years of teaching because we want to take into account the support new teachers received after they graduated. It should take you about 10 minutes to complete the survey.

The survey is voluntary. There is no penalty for not participating or skipping questions you don't feel comfortable answering, but we hope you will participate and answer as many questions as possible. Your responses to this survey will be treated as confidential. Only the study team will see your responses; we will not share your responses or information that identifies you or your school with anyone else, not even staff at your school, in your district, or with [your state's department of education].

² Here and elsewhere in this questionnaire, the name of the cooperating state has been redacted.

1.	ch of the school years below was your first year as a teacher responsible for your own room?
	2013–14 (last school year)
	2012–13
	2011–12
	2010–11
	2009–10 or before
2.	ch of the school years below was your first year as a teacher responsible for your own room in [your state's] public or charter school?
	2013–14 (last school year)
	2012–13
	2011–12
	2010–11

3. When you first started teaching in public schools, how well prepared do you think you were in the following areas?

	Not at all prepared	Poorly prepared	Somewhat prepared	Well prepared
a. Preparing lessons	0	1	2	3
b. Managing your classroom	0	1	2	3
c. Reaching all students	0	1	2	3
d. Mastery of the subject area(s) taught	0	1	2	3
e. Using pedagogical strategies appropriate to the subjects you teach	0	1	2	3
f. Communicating with parents/guardians	0	1	2	3

4.	During any of your first three years of teaching in [your state's] public or charter school, were
	you provided with any of the following types of mentor?

	Yes	No
a. A mentor located at your school	1	2
b. A mentor provided by the school district or another organization outside your school	1	2

If you responded "no" to both a and b above, please skip to question 8 on the next page.

5. Did your mentor:

		Yes	No
a.	Teach or have experience teaching the same grade level as you?	1	2
b.	Teach or have experience teaching the same subjects as you?	1	2
c.	Teach or have experience teaching the same courses as you?	1	2
d.	Teach or have experience in teaching students similar to those you taught?	1	2

	First year
	Second year
	Third year
Но	w often did you interact with your mentor?
Ho	w often did you interact with your mentor? Never
Ho	
Ho	Never
Ho	Never Once or twice a year
Ho	Never Once or twice a year Monthly

8. A variety of different people can provide support to new teachers, including fellow teachers, mentors, coaches, lead teachers, principals, vice principals, or assistant principals.

In your first year as a teacher of record in [this state], about how often did any of these potential support providers work with you individually or in a small group on any of the activities listed below?

		Never	About once a year	Once or twice a semester	Once or twice a month	Weekly
a.	Observing your teaching and providing feedback	0	1	2	3	4
b.	Modeling teaching or demonstrating lessons for you in your classroom	0	1	2	3	4
c.	Planning lessons	0	1	2	3	4
d.	Analyzing samples of student work	0	1	2	3	4
e.	Discussing using student assessment data to make decisions about instruction	0	1	2	3	4
f.	Collaborating on developing a professional growth plan	0	1	2	3	4
g.	Locating curriculum materials or resources	0	1	2	3	4
h.	Implementing better classroom management	0	1	2	3	4
i.	Setting up your classroom	0	1	2	3	4
j.	Using pedagogical strategies appropriate to the subjects you teach	0	1	2	3	4

9. During your first year as a teacher of record in [this state], how often did you participate in any of the following activities?

		Never	About once a year	Once or twice a semester	Once or twice a month	Weekly
a.	Individual meetings with your principal, another administrator, or department chair	0	1	2	3	4
b.	Meetings with other new teachers in your school or district to discuss new teacher issues	0	1	2	3	4
c.	Professional development sessions designed especially for new teachers	0	1	2	3	4
d.	Visiting and observing in other teachers' classrooms	0	1	2	3	4
e.	Teacher networks (e.g., study groups, lesson study, professional learning community)	0	1	2	3	4
f.	Common planning time with teachers in your grade or subject	0	1	2	3	4
g.	Regularly scheduled collaboration with other teachers on issues of instruction	0	1	2	3	4

10. During any of your first three years of teaching, were you provided with any of the following?

	Yes	No	Don't recall
a. Smaller class sizes than experienced teachers	1	2	3
b. Reduced teaching schedule or number of preparations	1	2	3
c. Regular team teaching with an experienced teacher	1	2	3
d. A teacher aide or assistant	1	2	3

11. •	<present< th=""><th>one of two</th><th>versions</th><th>below</th><th>based</th><th>on resp</th><th>onse to</th><th>item</th><th>1></th></present<>	one of two	versions	below	based	on resp	onse to	item	1>
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For teachers starting before 2012–13

Overall, how did the supports that you received from your district and school in your second and third years of teaching compare with the supports you received in the first year? (Choose one response in each column.)

	Year 2	Year 3
a. I received no support in this year.		
b. The support I received was less than 25% of what I received in the first year.		
c. The support I received was between 25% and 49% of what I received in the first year.		
d. The support I received was between 50% and 74% of what I received in the first year.		
e. The support I received was 75% or more of what I received in the first year.		

For teachers starting in 2012-13

Overall, how did the supports that you received from your district and school in your second year of teaching compare with the supports you received in the first year?

I received no support in the second year.
The support I received was less than 25% of what I received in the first year.
The support I received was between 25% and 49% of what I received in the first year.
The support I received was between 50% and 74% of what I received in the first year.
The support I received was 75% or more of what I received in the first year.

12. How helpful has the support you have been provided in developing your ability to:

	Not helpful at all	Somewhat helpful	Helpful	Extremely helpful
a. Prepare lessons?	0	1	2	3
b. Manage your classroom?	0	1	2	3
c. Reach all students?	0	1	2	3
d. Use pedagogical strategies appropriate to the subjects you teach?	0	1	2	3
e. Communicate with parents/guardians?	0	1	2	3

Before your first year of teaching in a [your state's] public or charter scho	1 1:1	harro ca
of the following teaching-related experiences?		
a. Teacher of record in a private school or school outside [this state]	Yes 1	No 2
b. Experience as a teacher aide or assistant	1	2
c. Experience as a substitute teacher	1	2
d. Other paid teaching work outside of K–12	1	2
d. Other paid teaching work outside of R 12		

Thanks very much for completing this survey.

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