



AUGUST 2018 | POLICY BRIEF

On the Path to Becoming a Teacher: The Landscape of Student Teaching in Chicago Public Schools

UCHICAGO Consortium
on School Research

IN PARTNERSHIP WITH

National Louis University

University of Michigan School of Education

Stanford Graduate School of Education

Molly F. Gordon and Jennie Y. Jiang

with Kavita Kapadia Matsko, Matthew Ronfeldt, Hillary L. Greene Nolan, and Michelle Reininger

Table of Contents

1	Introduction
2	Data Used in this Brief
4	The Characteristics of Student Teacher Placement Schools
8	The Characteristics of Mentor Teachers
12	Pathways into Teaching
14	Key Differences in Student Teacher Pathways
17	Early Indicators of Teacher Effectiveness
18	Implications
20	References
22	Appendix
24	Acknowledgements
25	About the Research

Cite as:

Gordon, M.F., Jiang, J.Y., Kapadia Matsko, K., Ronfeldt, M., Greene Nolan, H.G., & Reininger, M. (2018). *On the path to becoming a teacher: The landscape of student teaching in Chicago Public Schools*. Chicago, IL: University of Chicago Consortium on School Research.

Views expressed in this document are those of the authors and do not necessarily reflect those of the UChicago Consortium, the University of Chicago, National Louis University, University of Michigan, or Stanford University. The research reported here was supported by the Joyce Foundation and the Spencer Foundation. Additional support was provided by the Consortium Investor Council and Consortium general operating grants.

Student teaching¹ has long been a foundational component of teacher preparation. The student teaching experience is often the penultimate activity for teacher candidates prior to leading their own classrooms. While the precise activities can vary considerably, typically the experience involves observing experienced mentor teachers, receiving mentoring and coaching from them, and providing instruction in classrooms. The goal of these student teaching experiences is to familiarize future teachers with work in classrooms and to avoid the reality shock at the beginning of their teaching career.²

School districts across the country regularly open their doors for student teachers to learn alongside practicing teachers and invest considerable time and resources to provide mentoring, coaching, and oversight. The student teaching experience can serve as an opportunity to recruit and vet high-quality potential employees as well as prepare candidates for school-specific contexts of teaching. A strong student teaching experience is viewed as central to teacher preparation.³ Student teaching also has potential to not only help aspiring educators but also improve outcomes for their future students. The National Research Council identified the student teaching experience as one of three “aspects of preparation that have the highest potential for effects on outcomes for students.”⁴

While there is agreement on the centrality of student teaching, little is known about the student teaching experience—about the schools in which student

teachers are placed, for example, or the teachers who serve as mentors and role models. There are many unanswered questions about what features of the student teaching experience help student teachers feel more prepared and are associated with greater success in student teachers’ first year as a teacher-of-record.

In this brief, we synthesize our research findings from multiple studies on the student teaching experience in Chicago Public Schools (CPS) and address the following research questions:

RQ1: What types of schools are most likely and least likely to have student teachers?

RQ2: What are the characteristics of mentor teachers? Which characteristics of mentor teachers are associated with better outcomes for student teachers feeling better prepared and showing higher effectiveness as teachers-of-record?

¹ We use the term “student teaching” to represent the extended clinical portion of the teacher preparation process during which candidates get the opportunity to learn how to teach with some type of mentoring and oversight prior to becoming a teacher-of-record.

² Musset (2010).

³ Darling-Hammond & Cobb (1995); Musset (2010); Wang, Coleman, Coley, & Phelps (2003).

⁴ National Research Council (2010).

RQ3: How does the student teaching experience differ between traditional, alternative, and residency teacher preparation pathways?

RQ4: Are there early indicators of first-year teacher effectiveness that can be identified during the student teaching experience?

Chicago is an apt setting to understand the landscape of the student teaching experience. In any given year, approximately 1,000 student teachers from nearly 40 teacher preparation programs student teach in schools across the city through a variety of preparation pathways—traditional, alternative, and residency. The studies synthesized here used surveys of student and mentor teachers, as well as CPS administrative data, to gain perspective and insight on the student teaching experience.

Data Used in this Brief

For analyses on the schools in which teachers train (RQ1), mentor teachers (RQ2), and early indicators of student teacher effectiveness (RQ4), we utilized survey data from the 2014-15 cohort of student teachers and their mentors in CPS. Administrative data from CPS's Talent Office, and in some cases individual rosters from teacher preparation

programs, were utilized to ascertain student teacher placements. Student teachers were sent two surveys—one at the beginning and one at the end of their student teaching experience. We primarily utilized the post-student teacher surveys for our analysis. Mentor teachers were sent one survey—at the end of their student teachers' teaching experience. We were able to link student teachers from the 2014-15 cohort to CPS employment data to follow student teachers subsequently employed by the district. This allowed us to analyze relationships between surveys taken during student teaching to evaluation ratings from teachers' first year as teachers-of-record, including the observation ratings and value-added scores these teachers received as part of Chicago's REACH evaluation system.

To conduct analyses on the differences between alternative, traditional, and residency preparation pathways (RQ3), we utilized surveys of the 2015-16 cohort of student teachers and their mentors in CPS (the 2014-15 surveys did not include questions about pathway). **Table 1** details survey response rates.

TABLE 1
Student Teacher and Mentor Teacher Survey Response Rates*

	2014-2015		2015-2016	
	Cohort Student Teachers	Cohort Mentor Teachers	Cohort Student Teachers	Cohort Mentor Teachers
Number Who Were Sent Surveys	1122	1063	1157	905
Number of Respondents	656	843	765	522
Survey Response Rate	58.47%	79.30%	66.12%	57.68%
Employed by CPS	331	-	-	-
Employed by CPS & Responded to Survey	226	-	-	-
Survey Respondents with REACH Teacher Evaluation Ratings Data Available	211	-	-	-

Note

Respondents included anyone who answered at least one survey question. Employment and evaluation data for the 2014-15 cohort are from the 2015-16 school year. Survey response rates in the table come from the post-surveys for the 2014-15 cohort, as most of the analysis used in this brief came from the post-survey. In addition, the 2014-15 cohort of student teachers completed a pre-survey with a 76 percent response rate. In 2015-16, there were 13 respondents who were missing pathway information and not included above. “Employed by CPS” is defined as those who were identified as full-time teachers in the following school year—there were 24 student teachers employed by CPS but in non-instructional positions or as substitutes and one student teacher employed as a part-time teacher; these student teachers were excluded from our employment analysis. In addition, evaluation data (REACH ratings) were missing for 15 survey respondents.

*Post-student teaching surveys only.

The Characteristics of Student Teacher Placement Schools

One potentially influential aspect of student teachers' learning is the field placement site—the school in which student teaching occurs. Previous research suggests that student teachers may emulate the teaching they encounter in their field placements.⁵ However, there is some debate about the specific qualities of placement schools that can promote instructional effectiveness for student teachers. Some research suggests that student teachers should learn to teach in better functioning, more supportive schools,⁶ while other research suggests that these field experiences may leave new teachers unprepared

Schools on the North, Northwest, or Far North Sides of Chicago were three times more likely to serve as a field placement school compared to schools on the South or West Sides of Chicago

for the challenging realities in the schools in which they may land their first teaching jobs.⁷

In addition, there may be consequences for schools that take on student teachers, both for hiring and for workload. On the one hand, student teachers

may provide an opportunity for vetting and recruitment—field placement schools may identify and hire the most effective of their student teachers. On the other hand, student teachers require supervision and training—possibly placing additional burdens on schools' and mentor teachers' time and resources.

In this section, we used administrative data, student teacher survey data (2014-15 cohort), and *My Voice My School*⁸ teacher and student survey data to better understand the types of CPS schools in which student teachers train. Where are student teachers in Chicago placed? What are the characteristics of student teacher placement schools? Are there differences between student teacher placement schools and schools where students are not placed, particularly in terms of student achievement levels, school quality ratings, demographic characteristics of the student body, or important school organizational features?

North Side schools are more likely than South Side schools to host teachers.

We found that student teachers were placed in schools throughout the city, but they were far more likely to be placed in schools on the North Side of Chicago, as shown in **Figure 1**. These patterns may be related to the location of the universities that supply student teachers to the district. Three of the four universities that supply the most student teachers are located on the North Side (Northeastern Illinois University, DePaul University, and Loyola University of Chicago), and the fourth is located in the center of the city (University of Illinois at Chicago).

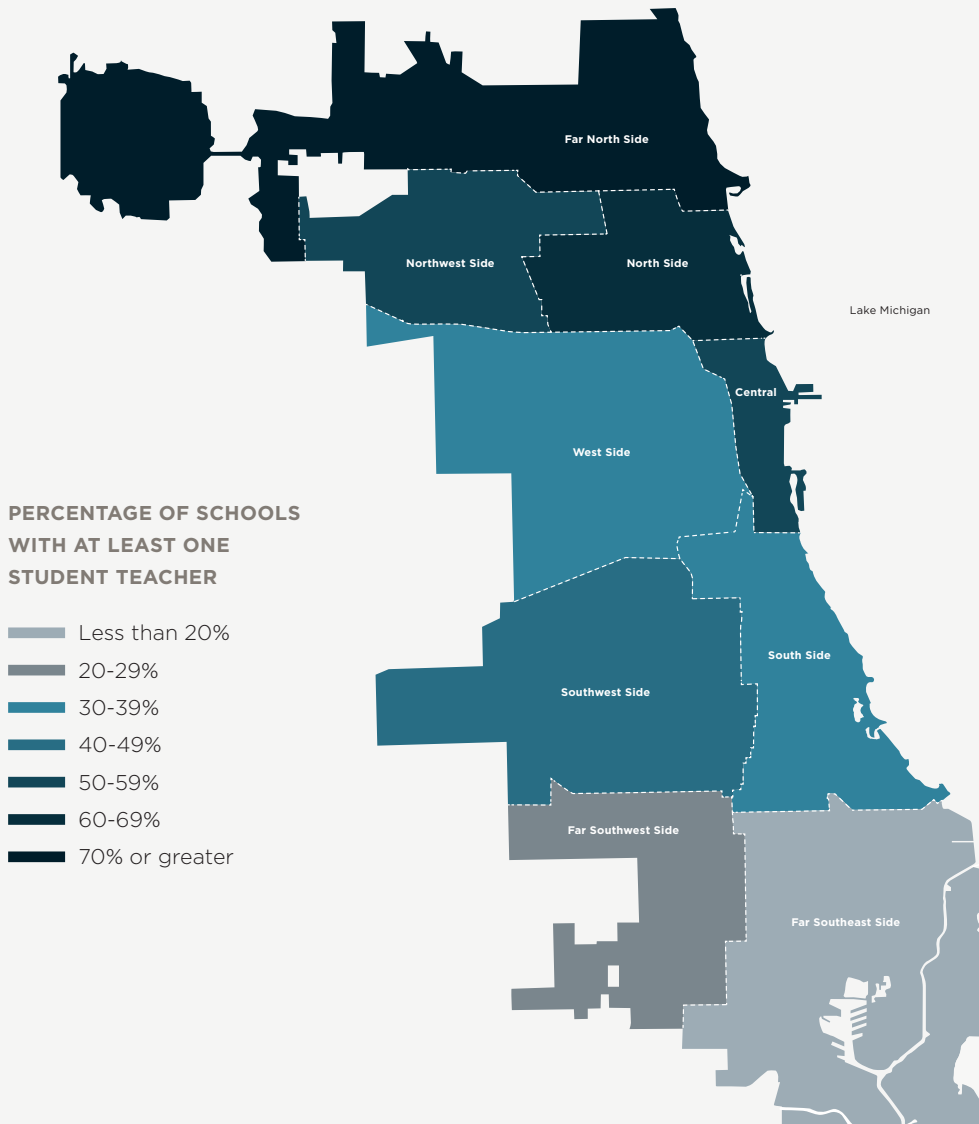
⁵ Zeichner & Gore (1990); Feiman-Nemser & Buchmann (1985); Hoy & Rees (1977).

⁶ Ronfeldt (2012).

⁷ Haberman (1995); Hargreaves & Jacka (1995).

⁸ The *My Voice, My School* surveys are given to students and teachers in CPS annually. For more information, visit: <https://consortium.uchicago.edu/surveys>

FIGURE 1
Placement Schools Were Disproportionately Located on Chicago's North Side (2014-15)



Note
 Placement school is defined as a CPS school with at least one student teacher placement in the 2014-15 school year. The map contains placement schools for the students who did their fieldwork during the 2014-15 school year in CPS. Student teachers who did their fieldwork during the summer months (primarily those in alternative programs) are not included in the map.

In 2014-15, schools on the North, Northwest, or Far North Sides of Chicago were three times more likely to serve as a field placement school compared to schools on the South or West Sides of Chicago. For example, 70 percent of schools on the Far North Side of Chicago (see map) had at least one student teacher. In comparison—only 25 percent of schools on the Far Southwest Side and less than 20 percent of schools on the Far Southeast Side had any student teacher placements.

Student teachers are more common in more socioeconomically advantaged schools.

Schools on the North and Far North Side of Chicago have a higher proportion of students from higher socioeconomic (SES) backgrounds than schools on the South and West Sides. These schools have a higher proportion of White, Asian, and Latino students. We found that student teachers were significantly less likely to be placed in low-SES schools—schools with primarily Black students—and schools located in historically disinvested neighborhoods (see **Table 2**).

In addition, we found that the characteristics of student teaching placement schools varied in many other important ways from non-placement schools. We found that schools in which student teachers trained had significantly higher ratings on the districts' school accountability ratings (School Quality Rating Policy or SQRP)⁹ than non-

placement schools—though there was a small proportion of placement schools on probation (about 19 percent). We also found that student teaching placement schools, on average, had more positive teacher survey results on the *My Voice My School* annual surveys¹⁰ in a number of school organizational areas, including effective leadership, teacher collaboration, and the level of involvement of families in schools. Placement schools also had higher teacher satisfaction ratings than non-placement schools. At the same time, we found no differences between the schools where student teachers trained and other district schools in the level of ambitious instruction, or the degree to which the schools had supportive environments, or in the ways in which new teachers were socialized into their buildings.

While we found organizational and geographic differences between placement and non-placement schools, we also examined whether these differences influenced student teachers' instructional effectiveness once they became teachers-of-record. Our analysis showed no differences in teachers' first year REACH ratings, whether they student taught in higher- or lower-achieving schools.¹¹ Evidence from previous studies on placement schools is mixed and most field placement school characteristics, including student demographics and school level, were unrelated to first-year teacher performance.

⁹ The CPS School Quality Rating Policy (SQRP) is the district's policy for measuring annual school performance. The SQRP is a five-tiered performance system based on a broad range of indicators of success, including, but not limited to, student test score performance, student academic growth, closing of achievement gaps, school culture and climate, attendance, graduation, and preparation for post-graduation success.

¹⁰ *My Voice, My School* student and teacher surveys annually measure school organizational features including what we call the five essential supports: effective leaders, collaborative teachers, supportive environment, ambitious instruction, and involved families. For more information about the five essentials, visit: <https://consortium.uchicago.edu/surveys>

¹¹ This finding holds when comparing teachers in similar schools during their first year of teaching.

TABLE 2
Student Teacher Placement Schools' Characteristics

Field placement schools are higher in:

- SQRP (accountability) ratings
- Student test scores
- The proportion of White, Asian, and Latino students
- Effective Leaders*
- Collaborative Teachers*
- Involved Families*
- Teacher Satisfaction*

Field placement schools are lower in:

- The proportion of students living in poverty
- The proportion of Black students

No differences:

- Ambitious Instruction*
- Supportive Environment
- Socialization of new teachers
- The proportion of students with special education status

Note

*These results are from the *My Voice, My School* surveys given annually to students and teachers in CPS, comparing 2014-15 student teachers' placement schools with non-placement school.

On average, student teachers who were hired in their field-placement school had higher first-year evaluation ratings than student teachers hired in other CPS schools.

One explanation for this might be that placement school leaders had the opportunity to vet their student teachers, and hire the ones they believed to

be the most instructionally effective. Another explanation might be that these student teachers may have been able to be more successful because they were hired into familiar schools settings and had the time to learn the schools' culture, expectations, community, and learning environment, whereas student teachers who were hired into new and unfamiliar schools did not have that advantage.

The Characteristics of Mentor Teachers

Mentor teachers¹² play a critical role in shaping student teachers' field experiences and learning.¹³ The role of the mentor teacher can be a demanding one. They balance opening up their classrooms and devoting time to help student teachers develop key instructional strategies with continuing to be responsible for their own classrooms and the students they serve. Mentor teachers also have to fulfill many different roles, from showing empathy, building confidence, and giving advice,¹⁴ to providing constructive feedback and both emotional and academic support.¹⁵ In our research, we used student and mentor teacher survey responses from the 2014-15 cohort, as well as district teacher evaluation ratings, to focus on two research questions:

1. What are the characteristics of mentor teachers?

2. Which characteristics of mentor teachers are associated with better outcomes for student teachers—feeling better prepared and showing higher effectiveness as teachers-of-record?

When thinking about the types of support that mentors may provide student teachers, and in looking at the broader literature on mentoring, we identified

two main roles of mentor teachers. First, mentors may provide support to student teachers by *modeling* effective teaching practices and strategies so that student teachers are exposed to exemplary teaching. Second, mentors may also provide more explicit support by *coaching* teachers, including providing opportunities for them to practice teaching, followed by constructive feedback and reflective conversations. We were interested in understanding whether different aspects of modeling¹⁶ and coaching¹⁷ were related to student teachers' feelings of preparedness and effectiveness during their first year as teachers-of-record. (In a later section, we also examine whether or not student teachers' feelings of preparedness were related to their effectiveness during their first year of teaching. See section entitled, "**Early Indicators of Teacher Effectiveness**" on p.17 for findings.)

In CPS in 2014-15, 1,063 CPS teachers served as mentor teachers.¹⁸ To understand the characteristics of mentor teachers, we looked at several district proxies of teacher quality, including education level (having a master's degree), National Board Certification, and measures of their performance on the teacher evaluation system—REACH observation scores and value-added

¹² Mentor teachers are also often referred to as "cooperating teachers." We use "mentor teachers" throughout this brief for consistency.

¹³ Clift & Brady (2005); Feiman-Nemser & Parker (1993); Grossman (2010); Guyton & McIntyre (1990); National Research Council (2010); Zeichner (1980).

¹⁴ Pascarelli (1998).

¹⁵ Izadinia (2015); Beck & Kosnik (2002); Zanting, Verloop, & Vermunt (2001).

¹⁶ In our analyses, we used measures of instructional effectiveness (e.g., REACH observation ratings) and qualifications (e.g., years of experience, tenure) as proxies for mentor teachers as models of effective instruction.

¹⁷ We used student teacher and mentor teacher surveys to measure mentor teacher coaching. See **Table A.2 on p.23** for a list of survey measures and corresponding items

¹⁸ To conduct these analyses we utilized a sample of 500 mentor teachers with education, evaluation and National Board Certification data and linked them to 583 corresponding student teachers who responded to our surveys.

TABLE 3

How Were Mentor Teachers' Characteristics Related to Outcomes for Student Teachers?

Student Teachers' Feelings of Preparedness at the End of Student Teaching

Student teachers more likely to feel prepared²⁰ when mentor teachers provided:

- Abundant examples of effective teaching practices through modeling
- Coaching in targeted domain-specific²¹ instructional support
- Frequent, specific, constructive feedback
- A safe space to take risks, while balancing autonomy, support, and encouragement
- Collaborative coaching, including opportunities for co-planning and co-teaching
- Assistance in finding a full-time job

No difference in feelings of preparation:

- Mentors with more years of experience
- Mentors with National Board Certification
- Mentor tenure
- Mentors with higher VAM scores

First Year Teachers' REACH Observation Scores (Year Following Student Teaching)

Associated with higher scores:

- Mentor teachers with higher REACH observational ratings
- Mentor teachers with higher VAM scores
- Mentor teachers who provided coaching in targeted domain-specific instructional support

Not associated with REACH observation scores:

- Mentors with more years of experience
- Mentors with National Board Certification
- Mentor tenure

measures (VAM).¹⁹ Both the REACH observation protocol domains and our surveys align with Charlotte Danielson's Framework for Teaching. The domains are broken down into four distinct areas of teaching: planning and preparation, instruction, classroom environment, and professional

responsibilities. A summary of our findings can be found in **Table 3**. For a closer look at the survey measures that correspond to the individual components of these domains, see **Table A.1 on p.22**.

¹⁹ CPS has a teacher evaluation system (REACH) in place that includes teacher observation ratings, VAM scores when available, and scores from teacher-created performance tasks for students. CPS provided our research team the means of ratings in four domains of practice from at least two observations, which were typically conducted by either the principal or an assistant principal. We used VAMs for teachers in grades 3-8, based on reading and math NWEA MAP test available for a subset of teachers. For more information, see CPS evaluator handbook (<http://www.ctunet.com/rights-at-work/teacher-evaluation/text/CPS-REACH-Educator-Evaluation-Handbook-FINAL.pdf>)

²⁰ Feelings of preparation were sometimes contained to specific domains, such as classroom environment.

²¹ Domains include planning and preparation, classroom environment, instruction, and professional responsibilities.

Mentor teachers have higher qualifications than other teachers.

CPS teachers who served as mentors were significantly more qualified on most of the district's teacher quality metrics, compared to other teachers in the district. Mentor teachers were more likely to have master's degrees, be tenured, and be National Board Certified Teachers (NBCT). They also scored higher on measures of instructional effectiveness in the teacher evaluation system, with higher REACH observation ratings, than non-mentor teachers. However, we did not find that mentor teachers had significantly different VAM scores compared to other teachers in the district.

Mentors' qualifications were generally not associated with student teachers' feelings of preparedness.

Although we found differences in mentor teacher characteristics compared to other teachers across the district, mentor characteristics, such as years of experience or NBCT status, were not associated with student teachers feeling more prepared to teach. In other words, although it appears that teachers who were more instructionally effective and qualified were the ones mentoring student teachers, most proxies of mentor teacher quality were not related to student teachers' feelings of preparedness.

There was one area in which mentor teachers' qualifications were related to student teachers' feelings of preparedness; student teachers were significantly more likely to feel prepared in the domain of classroom environment when their mentor teachers received stronger REACH observation ratings overall.

Mentors' own evaluation ratings were positively related to their student teachers' effectiveness as first-year teachers, but other mentor qualifications were not.

For those student teachers who were hired by CPS, we can compare the ratings they received on the REACH teacher evaluation system to the characteristics of their mentor teachers. Mentor teachers' own ratings of teaching effectiveness were positively related to their student teachers' evaluation ratings the next year, when the student teachers became teachers-of-record. Both the REACH observation score and the VAM rating of the mentor teachers were related to student teachers' first year REACH ratings. Other mentor teacher qualifications—including their years of teaching experience, tenure, or NBCT status—were unrelated to student teachers' performance in their first year of teaching.

When student teachers perceived that their mentors modeled effective instruction and coached them, they felt better prepared to take on the responsibilities of teaching themselves.

Most student teachers reported that their mentor teachers provided extensive and helpful coaching and mentoring, but not all student teachers felt prepared to teach after working with their mentor teachers during their field experiences. However, when student teachers perceived their mentor teachers modeled effective teaching practices, student teachers felt better prepared. Also, student teachers were much more likely to feel prepared when they reported their mentor teachers coached them by providing constructive feedback and domain-specific targeted support—such as learning about the domains in conversations with their mentors—and provided a safe space for them to teach and take risks. Lastly, student teachers were more likely to feel prepared when they said their mentor teachers provided them with job search assistance, such as offering advice on the kinds of jobs to apply for, discussing specific job openings in the placement schools and elsewhere, helping prepare for interviews, and offering feedback on resumes.

Strong coaching in specific instructional domains was also related to higher first-year REACH ratings.

Specifically, when mentors said they coached their student teachers in domain specific areas of instruction, student teachers were more effective in their first year. These domains included working closely with student teachers in helping them plan lessons, deliver instruction, create and maintain a positive environment, model professionalism, and teach in culturally-responsive ways.

Pathways into Teaching

For decades, the only pathway to becoming a teacher was through a four-year university program. In recent years, varying pathways into teaching have emerged alongside traditional university routes of preparation. These include shorter “alternative” programs that are typically faster tracks to certification, and residency models which often partner closely with a school district and include full-year classroom apprenticeships. The vast majority of student teachers, across the country and in CPS, still come from traditional programs. This is mirrored in our sample, as shown in **Figure 2**.

Traditional programs are the most common form of teacher preparation. They are housed in colleges or universities, enroll undergraduate or graduate students, and result in a BA (four-year undergraduate) or MAT/MEd (two-year graduate) degree. Traditional programs generally frontload foundations and methods coursework and culminate with a clinical experience called student teaching, which typically runs a semester (generally 16 weeks) or less. Student teachers in CPS come from many traditional programs, but the four programs in our sample with the highest proportion of student teachers were Northeastern Illinois University, University of Illinois at Chicago, DePaul University, and Loyola University of Chicago.²²

Alternative certification programs provide a fast-track to licensure, and typically partner with school districts and universities, but are not

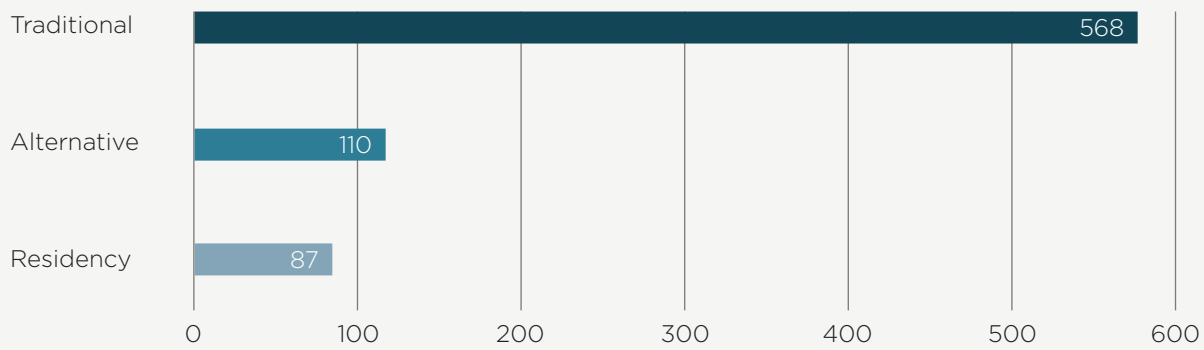
necessarily housed within a university. Their enrollees are often recent college graduates, but also include career-changers who have a college degree. These programs have an abbreviated, intensive pre-service preparation, followed by entry into the field as teacher-of-record. Alternative certification programs are often accompanied by course credits toward a master’s degree. Student teachers from alternative programs in our sample mostly came from Teach for America. A small number of student teachers in our sample were enrolled in Grand Canyon University and Western Governors University.

Residencies provide candidates with a year-long, in-school “residency” in which they learn to teach alongside a teacher-mentor. Residencies typically involve partnerships with districts and emphasize time in schools as a significant part of the preparation process. Residencies are typically structured in the form of master’s level programs and are often accompanied by a post-residency work requirement within the district, along with induction programming. Student teachers completing residencies in Chicago in our sample included those enrolled in the Academy for Urban School Leadership (partnered with National Louis and DePaul Universities), Urban Teacher Education Program (at the University of Chicago),²³ RELAY Graduate School, and Illinois State University Teacher Pipeline programs.

²² For this study, Loyola’s program was categorized as “traditional;” however, in fall 2013, Loyola’s program shifted to a field-based model with placements starting students’ freshman year and culminating in a one-year internship similar to a residency model.

²³ The UChicago Consortium and the Urban Teacher Education Program (UTEP) are separate units within the University of Chicago Urban Education Institute (UEI). Kavita Kapadia Matsko was the founding director of UTEP in 2001, and served as director through 2014, when this research was launched; she was a senior advisor at UTEP through 2016, and an affiliate researcher with the UChicago Consortium from 2014-2018. For more information on UEI, including the UChicago Consortium and UTEP, please visit <https://uei.uchicago.edu/>

FIGURE 2
CPS 2015-16 Student Teachers by Pathways



Note

The figure shows the number of student teachers by pathway, as identified on self-reported student teacher surveys. Numbers only reflect student teachers who responded to our surveys.

Key Differences in Student Teacher Pathways

Chicago serves as an optimal site for researching the similarities and differences between particular features of teacher preparation pathways because approximately 1,000 student teachers from nearly 40 teacher education colleges and universities through a variety of preparation pathways—traditional, alternative, and residency—student teach in schools across the city. Little research has been done on these pathways as a collective, giving us a rare opportunity to gain insight into significant questions about what differences exist across pathways. The vast majority of student teachers in CPS come from traditional programs. In 2015-16, 74 percent of our sample of student teachers came from traditional programs, 14 percent from alternative programs, and 11 from residencies (see **Figure 2**).

In this section, we present findings on differences that exist between the three teaching pathways on two key questions:

1. What differences exist across pathways in coursework or program length?

2. Are student teachers' aspirations to teach or stay in education different by pathway?

As described on page 12, alternative providers made substantial structural changes: reducing program length and coursework, while fast-tracking candidates into clinical work and ultimately the role as teacher-of-record, when they can complete remaining requirements. The most visible differences across pathways are in the structural features of preparation. Our findings suggest that the intended differences in methods coursework and program length bear out.

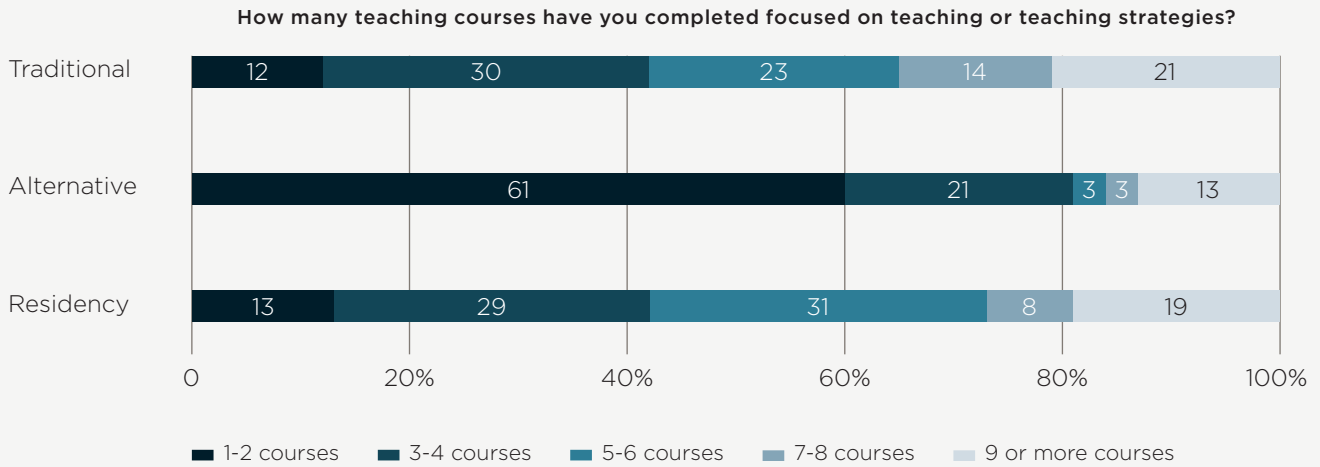
Student teachers from residency and traditional pathways completed far more methods courses in comparison to student teachers from alternative programs.

Traditional programs were designed so that candidates complete most coursework and other requirements before student teaching, while alternative reformers created a different approach through fast-tracking candidates into clinical work and full-time teaching. Consistent with these varied approaches, we found significant differences between pathways in terms of the proportion of methods coursework completed prior to student teaching. Overall, as shown in **Figure 3**, student teachers in traditional pathway programs completed the most courses prior to student teaching, followed by student teachers in residency, and then alternative pathway programs.

Student teachers from traditional and residency programs had lengthier student teacher placements.

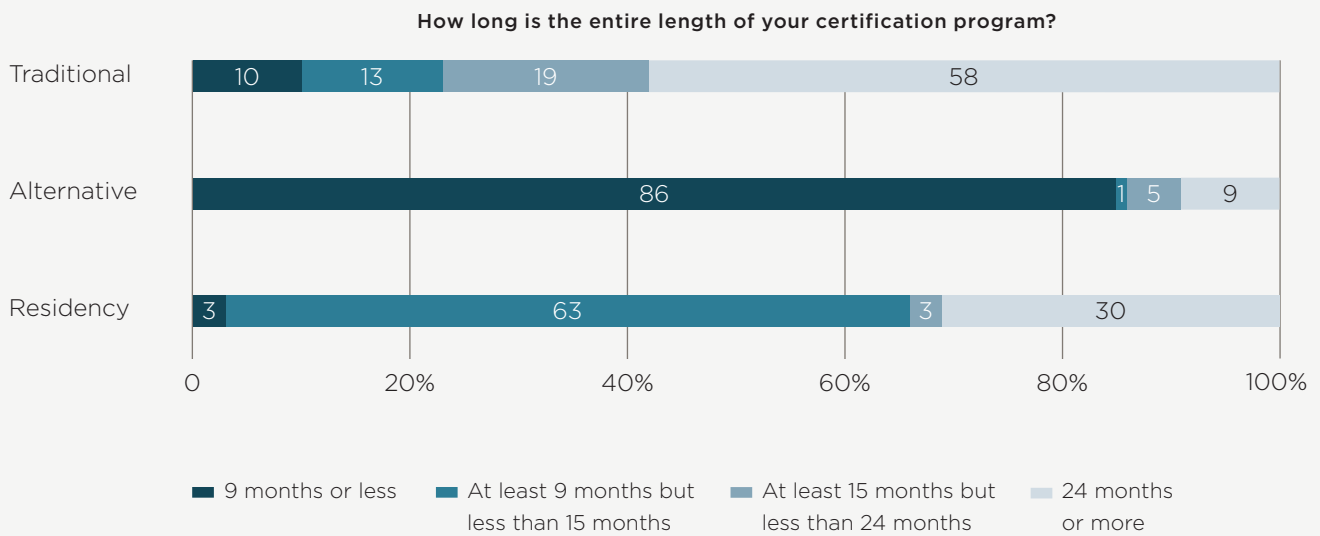
A key difference between traditional university-based pathways and alternative or residency pathways was the length of time it took to receive certification. On average, traditional pathways programs were the longest, while alternative pathways were the quickest routes to certification (see **Figure 4**).

FIGURE 3
Teaching Strategies Courses Completed, by Pathway



Note
 Percentages may not add up to 100 due to rounding.

FIGURE 4
Length of Certification Program, by Pathway



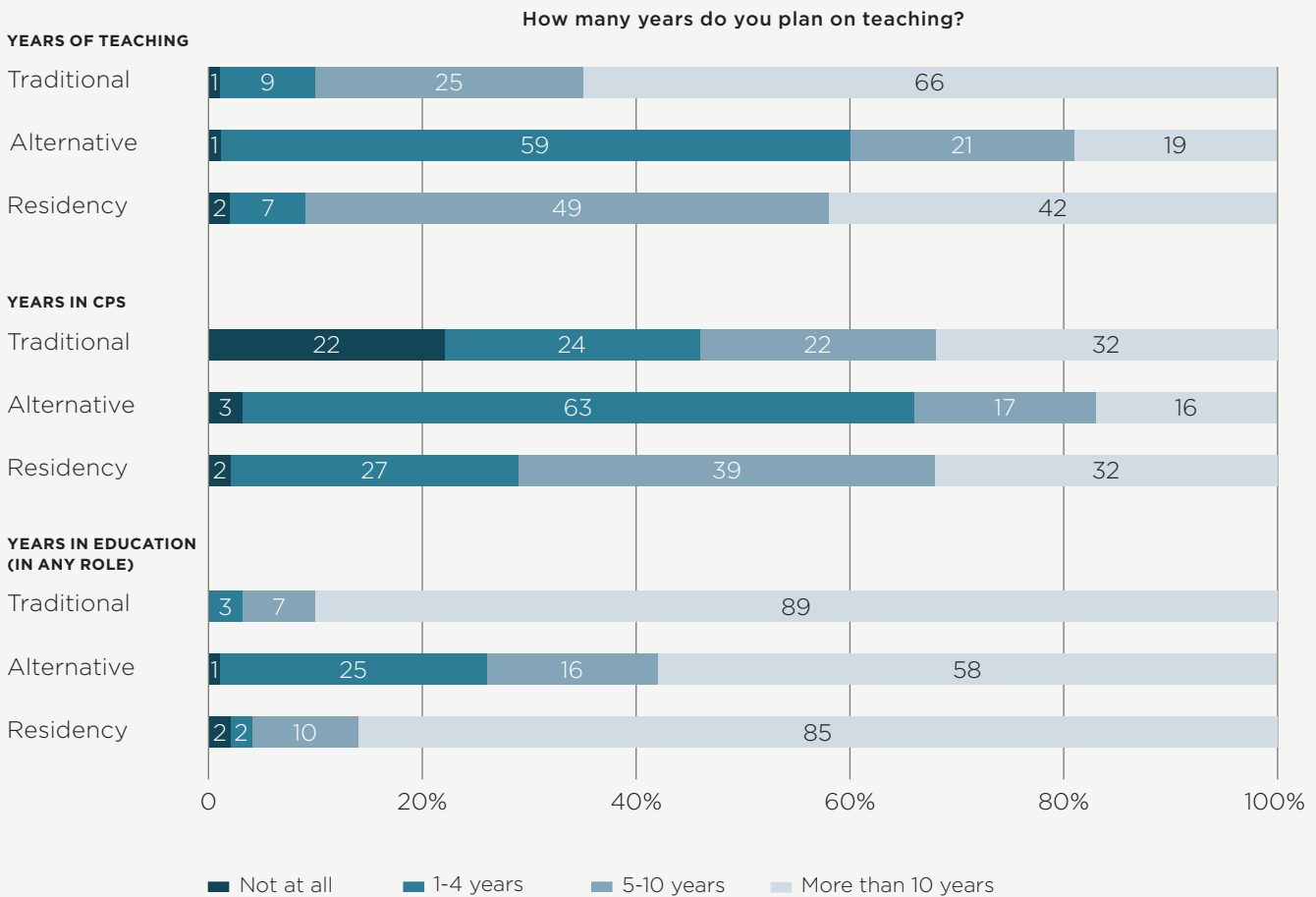
Note
 Percentages may not add up to 100 due to rounding.

Traditional and residency student teachers planned significantly more years in teaching, teaching in CPS, and in education, than student teachers in alternative programs.

As shown in **Figure 5**, about two-thirds (66 percent) of traditional student teachers said they planned to teach for at least 10 years, compared with 42 percent of residency student teachers and 19 percent of alternative student teachers. Consistent with the focus among residency providers to prepare teachers in and for particular contexts, about one-third

(32 percent) of residency student teachers planned more than 10 years in CPS. Only 16 percent of alternative pathway student teachers, on the other hand, planned over a decade in CPS. In fact, alternative pathway student teachers were significantly less likely than non-alternative (traditional and residency) student teachers to plan over a decade in either teaching or in CPS. Furthermore, 85 percent or more of student teachers in residency and traditional programs planned to be in the field of education for at least 10 years, compared to 58 percent of students in alternative programs.

FIGURE 5
Years Planned in Teaching, by Pathway



Note
Percentages may not add up to 100 due to rounding.

Early Indicators of Teacher Effectiveness

Student teaching provides an opportunity for schools and the district to ascertain future teachers' potential. But what are the indications that they are likely to be successful as teachers-of-record? School leaders who hire recent graduates must make an assessment regarding which prospective teachers they believe will be effective classroom teachers. During this hiring process, it is important for districts and school leaders to have as much information as possible about student teachers' potential. The kinds of information school leaders use to make these projections of success is critical. In addition, teacher preparation programs often use their students' perceptions of preparations as measures of program success, but little is known about whether student teachers' self-assessments of preparedness are good indicators of how well they do as a first-year teacher. Therefore, in this section, we asked: Are there early indicators of first-year teacher effectiveness that can be identified during the student teaching experience?

Student teachers' perceptions of their level of preparedness were not related to their first-year performance when they became teachers-of-record.

While it is important for teacher education programs to focus on helping student teachers feel prepared to begin their teaching careers, we found that student teachers' self-assessments of their preparedness to teach were not good indicators of how well they did in their first year of teaching (as measured by first year REACH observation scores). The correlation between student perceptions of their own preparedness and their observation ratings in their first year of teaching was 0.03.

Previous research on survey-based measures of self-perceived preparedness found they were positively related to teachers' career plans, self-efficacy, and early-career retention, but these studies did not link self-perceived preparedness to measures of teaching on REACH, either observational scores or VAM ratings.²⁴ This finding is consistent with research evidence on the metacognitive difficulty of estimating one's own ability on situations not yet experienced.²⁵

Mentor teachers' observational ratings of student teachers' instructional abilities were positively related to student teachers' first-year observation ratings.

We found mentor teachers' ratings of their student teachers predicted performance levels in the first year of teaching. The correlation between mentor teachers' ratings of their student teachers and observation ratings of student teachers in their first-year of teaching was 0.24.

There were no differences on mentor ratings or feelings of preparation between student teachers employed by the district and those not employed.

In 2014-15, almost 30 percent of student teachers in the district became employed as teachers-of-record in CPS. We find no differences on mentor ratings of student teachers; student teachers employed as teachers by the district were not necessarily higher rated by their mentors on planning, professionalism, instruction, or classroom evaluation.

Of 1122 student teachers in Chicago in 2014-15

331

(30%) became teachers-of-record in CPS in 2015-16

24

were employed at CPS in a different capacity (as substitutes, classroom assistants, or other)

²⁴ Ronfeldt, Schwartz, & Jacob (2014); Ronfeldt & Reinger (2012).

²⁵ Kruger & Dunning (1999).

Implications

Student teachers in CPS are less likely to get experience teaching in low-performing schools than higher-performing ones.

There is an uneven distribution of student teachers placed in schools across geographic areas of Chicago.²⁶ This means that student teachers are more likely to get experience teaching in schools that are higher-income and have different racial compositions than the schools in which they end up taking jobs as teachers-of-record. There may be a mismatch in terms of training for predominantly Black, low-income schools on the South and West Sides. This has implications for how teacher preparation programs match student teachers to school placement sites. Because we found no differences in first-year teacher instructional effectiveness whether they trained in a higher- or lower-achieving school, an argument can be made to broaden the field of placement school options throughout the city. Teacher candidates may need experience and opportunities to learn how to be successful teachers in other types of schools.

Because student teachers are more likely to be placed in schools on the North Side, these schools, which serve more advantaged students, have a greater opportunity to vet and potentially hire student teachers than schools on the South Side.

This matters because student teaching can be a recruitment and training tool. Student teachers who are hired by the school in which they student taught

have higher first-year evaluations than other teachers, suggesting that school leaders may be using the student teaching experience to determine whether the student teachers are a good fit for their school, and to recruit, hire, and train student teachers for future employment. This also means that schools on the South Side, serving predominantly lower income students, do not have as much opportunity as schools on the North Side to vet potential candidates by seeing how they learn and grow in their time student teaching.

CPS could consider using mentor teachers' ratings of student teachers to predict how they may perform as first-year teachers.

Teacher preparation programs often use their students' feelings of preparedness to gauge program effectiveness, but we found this was not related to their performance in the field—at least among those who were hired by CPS. Teacher preparation programs may therefore want to look beyond student teacher perceptions of preparedness to other indicators of their programs' success. Mentor teacher ratings were not related to being hired. We found that the student teachers who get hired by the district were not necessarily higher rated by their mentors on planning, professionalism, instruction, or classroom evaluation than teachers who were not hired by the district. But mentor teacher ratings of student teachers *were* predictive of student teachers' later performance. This suggests that districts and school leaders could consider reaching out to mentor teachers to get their assessments of their student teachers' skills prior to hiring.

²⁶ Since data for this study was collected, CPS has developed programs and policies aimed at increasing student teacher placements in higher-need schools, improving the student teaching experience through partnerships with teacher preparation programs, and supporting mentor teachers in coaching.

CPS might consider encouraging teachers with high evaluation ratings to be mentors to student teachers.

Mentor teachers' effectiveness seems to matter the most for student teacher success, at least during student teachers' first year as teachers-of-record. Mentors' own REACH evaluation ratings mattered for their student teachers' later effectiveness. Student teachers were more effective in their first year if their mentor teachers had received high performance ratings—either receiving high observation scores or high VAM ratings. In addition, mentor teachers' emphasis on the REACH domains of teaching was also related to student teachers having higher ratings on these domains when they became teachers. Other characteristics that districts and programs might believe to be important, but which showed no relationship to student teachers' subsequent performance included: National Board Certification status, tenure, and prior mentor experience. Districts could consider encouraging teachers with strong performance ratings to become mentor teachers by helping to establish networks or partnerships of highly-rated teachers with teacher preparation programs.

Teacher preparation programs could consider working more closely with the district to identify field placement school sites and strong mentor teachers.

There is large variation among teacher preparation programs in how field placement sites and mentor teachers are identified. In some cases, little coordination happens between field placement

coordinators and district staff. Teacher preparation programs might consider working more closely with district partners to find new field placement sites throughout the city and to work together to help diversify the pool of mentor teachers—both so that student teachers have more varied experiences and so a larger pool of schools have the opportunity to vet potential teacher candidates.

References

- Beck, C., & Kosnik, C. (2002). Professors and the practicum: Involvement of university faculty in preservice practicum supervision. *Journal of Teacher Education, 53*(1), 6-19.
- Clift, R.T., & Brady, P. (2005). Research on methods courses and field experiences. In M. Cochran-Smith & K. Zeichner (Eds.), *Studying teacher education: The report of the AERA panel on research and teacher education* (pp. 309-424). Mahwah, NJ: Lawrence Erlbaum Associates.
- Darling-Hammond, L., & Cobb, V.L. (1995). Teacher preparation and professional development in APEC members: A comparative study. Washington, DC: U.S. Department of Education.
- Feiman-Nemser, S., & Buchmann, M. (1985). On what is learned in student teaching: Appraising the experience. Paper presented at the annual meeting of the American Association of Colleges of Teacher Education, Chicago, IL.
- Feiman-Nemser, S., & Parker, M.B. (1993). Mentoring in context: A comparison of two U.S. programs for beginning teachers. *International Journal of Educational Research, 19*(8), 699-718.
- Grossman, P. (2010). *Learning to practice: The design of clinical experience in teacher preparation*. Washington, DC: National Education Association. Retrieved from https://www.nea.org/assets/docs/Clinical_Experience_-_Pam_Grossman.pdf.
- Guyton, E., & McIntyre, D.J. (1990). Student teaching and school experiences. In W.R. Houston (Ed.), *Handbook of research on teacher education* (pp. 514-534). New York, NY: Macmillan.
- Haberman, M. (1995). *Star teachers of children in poverty*. West Lafayette, IN: Kappa Delta Pi.
- Hargreaves, A., & Jacka, N. (1995). Induction or seduction?, *Peabody Journal of Education, 70*(3), 41-63.
- Hoy, W.K., & Rees, R. (1977). The bureaucratic socialization of student teachers. *Journal of Teacher Education, 28*(1), 23-26.
- Izadinia, M. (2015). A closer look at the role of mentor teachers in shaping preservice teachers' professional identity. *Teaching and Teacher Education, 52*, 1-10.
- Musset, P. (2010). Initial teacher education and continuing training policies in a comparative perspective: Current practices in OECD countries and a literature review on potential effects (OECD Education Working Paper No. 48). Paris, France: OECD Publishing.

- National Research Council. (2010). *Preparing teachers: Building evidence for sound policy*. Washington, DC: The National Academies Press.
- Pascarelli, J. (1998). A four-stage mentoring model that works. In S. Goodlad (Ed.), *Mentoring and tutoring by students*, (pp. 231-243). London, UK: Kogan Page.
- Ronfeldt, M. (2012). Where should student teachers learn to teach? Effects of field placement school characteristics on teacher retention and effectiveness. *Educational Evaluation and Policy Analysis*, 34(1), 3-26.
- Ronfeldt, M., & Reininger, M. (2012). More or better student teaching?. *Teaching and Teacher Education*, 28(8), 1091-1106.
- Ronfeldt, M., Schwartz, N., & Jacob, B. (2014). Does pre-service preparation matter? Examining an old question in new ways. *Teachers College Record*, 116(10), 1-46.
- Kruger, J., & Dunning, D. (1999). Unskilled and unaware of it: How difficulties in recognizing one's own incompetence lead to inflated self-assessments. *Journal of Personality and Social Psychology*, 77(6), 1121-1134.
- Wang, A., Coleman, A., Coley, E., & Phelps, R. (2003). *Preparing teachers around the world*. Princeton, NJ: Educational Testing Service.
- Zanting, A., Verloop, N., & Vermunt, J.D. (2001). Student teachers' beliefs about mentoring and learning to teach during teaching practice. *British Journal of Educational Psychology*, 71(1), 57-80.
- Zeichner, K.M. (1980). Myths and realities: Field-based experiences in preservice teacher education. *Journal of Teacher Education*, 31(6), 45-55.
- Zeichner, K., & Gore, J. (1990). Teacher socialization. In W.R. Houston (Ed.), *Handbook of research on teacher education*, (pp. 329-348). New York, NY: Macmillan.

Appendix

Rasch scales made from items on both the student teacher and mentor teacher surveys. The following measures were used in our analyses:

TABLE A.1.
Survey Measures of Teaching Domains

Planning and Preparation

Student teacher survey (reliability=0.90): How prepared do you feel to:

Mentor teacher survey (reliability =0.89): Now that your student teacher/resident has completed (or is near completing) her/his pre-service student teaching/residency experiences, how well prepared is s/he to do the following?

- Plan lessons
- Design student assessments
- Select instructional outcomes
- Use results from assessments to improve teaching
- Anticipate student misconceptions about content when planning for class

(Response options: not at all prepared, slightly prepared, moderately prepared, very prepared, exceptionally prepared)

Instruction

Student teacher survey (reliability=0.91): How prepared do you feel to:

Mentor teacher survey (reliability =0.92): Now that your student teacher/resident has completed (or is near completing) her/his pre-service student teaching/residency experiences, how well prepared is s/he to do the following?

- Use instructional language that is developmentally appropriate
- Pose a variety of questions to probe student understanding
- Facilitate discussions
- Maintain student interest
- Use a variety of instructional methods
- Adapt curricula to fit students' needs
- Teach your subject matter

(Response options: not at all prepared, slightly prepared, moderately prepared, very prepared, exceptionally prepared)

Classroom Environment

Student teacher survey (reliability=0.90): How prepared do you feel to:

Mentor teacher survey (reliability =0.89): Now that your student teacher/resident has completed (or is near completing) her/his pre-service student teaching/residency experiences, how well prepared is s/he to do the following?

- Develop relationships with students
- Manage students' behaviors
- Implement classroom routines & procedures
- Develop classroom communities for learning

(Response options: not at all prepared, slightly prepared, moderately prepared, very prepared, exceptionally prepared)

Professional Responsibilities

Student teacher survey (reliability=0.89): How prepared do you feel to:

Mentor teacher survey(reliability =0.85): Now that your student teacher/resident has completed (or is near completing) her/his pre-service student teaching/residency experiences, how well prepared is s/he to do the following?

- Maintain accurate grades and student data
- Perform administrative tasks
- Interact with school administrators
- Communicate with families
- Reflect on teaching (Mentor Teacher Survey only)

(Response options: not at all prepared, slightly prepared, moderately prepared, very prepared, exceptionally prepared)

TABLE A.2.
Survey Measures of Coaching Practices

Domain Specific Instructional Support

Student teacher survey (reliability=0.86): How much did you learn about the following skills from the conversations you had with your mentor teacher?

Mentor teacher survey (reliability =0.72): How effective do you feel you were in mentoring your student teacher in each of the following areas?

- Plan lessons
- Design student assessments
- Select instructional outcomes
- Use results from assessments to improve teaching
- Anticipate student misconceptions about content when planning for class

(Student teacher response options: nothing, a little, a fair amount, a great deal) (Mentor teacher response options: not at all effective, somewhat effective, effective, very effective)

Adequacy of Feedback & Observation

Mentor teacher survey (reliability =0.75) To what extent to you agree with the following statements?

- I observed my student teacher's instruction frequently enough
- I provided my student teacher with feedback frequently enough
- The feedback that I offered helped my student teacher learn to teach
- The feedback I offered was consistent with the feedback my student teacher received from his/her field instructor/supervisor

(Mentor teacher response options: never, once in a while, often, all the time)

Job Assistance

Student teacher survey (reliability=0.85): How often did your mentor teacher...

Mentor teacher survey (reliability=0.89) With your student teacher, how often did you...

- Offer advice on what kinds of jobs to apply for upon program completion?
- Discuss specific job openings in your school?
- Discuss specific job openings outside of your school?
- Offer feedback on your resume?
- Help you prepare for an interview?

(Student teacher response options: never, rarely sometimes, often)
(Mentor teacher response options: never, once in a while, often, all the time)

Frequency of Feedback

Student teacher survey(reliability=0.90): Think about the times your mentor provided feedback on your teaching. How often did your mentor teacher...

Mentor teacher survey (reliability =0.76): Think about the times you provided feedback to your student teacher about her/his instruction. How often did you...

- Offer concrete suggestions? (1)
- Ask reflective questions? (2)
- Offer general observations? (4)
- Refer to specific things the student teacher needs to improve?
- Refer to specific things the student teacher did well?
- Share specific ideas when providing feedback?

(Student teacher response options: never, once in a while, often, all the time) (Mentor teacher response options: never, once in a while, often, all the time)

Collaborative Coaching

Student teacher survey (reliability=0.86): On average, how often did your mentor teacher do the following?

- Ask you to observe an aspect of his/her teaching
- Co-design lessons or parts of lessons with you Co-teach lessons or parts of lessons with you
- Analyze student work with you
- Encourage you to practice specific aspects of your teaching
- Share data or evidence about lessons s/he observed you teach
- Offer you feedback on your teaching

(Student teacher response options: Never, Less than once a month, Once a month, 2-3 Times a month, Once a week, 2-4 Times a Week)

Autonomy & Engagement

Student teacher survey (reliability=0.65): To what extent do you agree with the following statements?

- When I struggled with my teaching, I could go to my mentor teacher for help
- My mentor teacher's expectations of me as a beginner were appropriate
- My mentor teacher allowed me to make my own instructional decisions
- I felt comfortable taking instructional risks in front of my mentor teacher

(Student teacher response options: strongly disagree, disagree, agree, strongly agree)

Acknowledgements

The authors wish to acknowledge all of the student and mentor teachers who graciously completed surveys, generously giving their time and sharing their perspectives. We would also like to acknowledge the Chicago Public Schools for providing us with the administrative data that allowed us to do this work. We thank Matt Lyons, Christine Judson, and Felipe Perez of the CPS Talent Office for their time and insight.

The authors also appreciate the many individuals who contributed to this report. We thank team members Jennifer Cowhy, Joshua Klugman, Julia Gwynne, and Stuart Luppescu for their expertise and contributions. We thank our research assistants on the project, Naureen Kheraj, Kiara Nerenberg, and Gina Kim for their invaluable support. We are also grateful to Todd Rosenkranz, Anthony Ciura, and Lynne Bryant for their technical, grant, and administrative support. We are indebted to our Consortium and UEI colleagues who read multiple drafts of the report and provided us with constructive feedback and suggestions, including Elaine Allensworth, Kylie Klein, Bronwyn McDaniel, Holly Hart, Jessica Tansey, and Bill Kennedy. We also thank our colleagues Marisa de la Torre, Jenny Nagaoka, Lauren Sartain, and Stacy Ehrlich, who gave us feedback and advice along the way. We also appreciate our colleagues Alida Mitau and Andrew Zou, who conducted a thorough technical read of the report, and the UChicago Consortium's communications team, including Bronwyn McDaniel, Jessica Tansey, and Jessica Puller, who were instrumental in the production of this report.

We are grateful to the Joyce Foundation and the Spencer Foundation for supporting this work and providing us with the necessary resources to conduct the analyses and write this brief. We also gratefully acknowledge the Spencer Foundation and the Lewis-Sebring Family Foundation, whose operating grants support the work of the UChicago Consortium. Finally, we greatly appreciate the support from the Consortium Investor Council that funds critical work beyond the initial research: putting the research to work, refreshing the data archive, seeding new studies, and replicating previous studies. Members include: Brinson Foundation, Chicago Community Trust, CME Group Foundation, Crown Family Philanthropies, Lloyd A. Fry Foundation, Joyce Foundation, Lewis-Sebring Family Foundation, McDougal Family Foundation, Osa Foundation, Polk Bros. Foundation, Robert McCormick Foundation, Spencer Foundation, Steans Family Foundation, and The Chicago Public Education Fund.

About the Research

Information and evidence in this brief are derived from research by:

Molly F. Gordon & Jennie Y. Jiang, University of Chicago Consortium on School Research

Kavita Kapadia Matsko, National Louis University

Matthew Ronfeldt & Hillary Greene Nolan, University of Michigan

Michelle Reininger, Stanford University

Publications include:

Ronfeldt, M., Matsko, K.K., Greene Nolan, H.L., & Reininger, M. (2018). [*Who knows if our teachers are prepared? Three different perspectives on graduates' instructional readiness and the features of preservice preparation that predict them.*](#) Stanford, CA: Center for Education Policy Analysis.

Matsko, K.K., Ronfeldt, M., Greene Nolan H.L., Klugman, J., Reininger, M., & Brockman S. (2018). [*Cooperating Teacher as Model and Coach: What Leads to Student Teachers' Perceptions of Preparedness?*](#) *Journal of Teacher Education*. DOI: 10.1177/0022487118791992

Matsko, K.K., Ronfeldt, M., Greene Nolan, H.L. (2018). [*How Different Are They? Comparing Preparation Offered by Traditional, Alternative, and Residency Pathways in Chicago Public Schools.*](#) Chicago, IL: National Louis University.

[National Louis University](#), a nonprofit, non-denominational University, offers bachelor's, master's, and doctoral degrees in the fields of education, management, human services, counseling, public policy, and others concerned with career and professional development. National Louis' roots date back to 1886 when it first began providing educational access to adult, immigrant and minority populations. Our mission is to provide innovative and superior and supportive educational experience for students of all ages and backgrounds, and we are committed to the preparation of professionals who serve their communities. Serving more than 7,000 students at locations in Illinois and Florida, we are proud of our alumni who are using their education to serve others.

[University of Michigan School of Education](#) is a top-ranked, public school of education located in Ann Arbor, Michigan. The school's two-fold mission is 1) to study and improve education practice, policy, and the contexts of teaching and learning in the service of constructing a just and equitable society and 2) to prepare a diverse group of education practitioners, policy-makers, and researchers who will contribute to building equitable and just educational opportunities. Since its founding in 1921, faculty members and students have been at the forefront of educational change through their research contributions, instructional activities, community engagement, and collaborative involvement with the education profession.

[Stanford Graduate School of Education](#) is a leader in pioneering new and better ways to achieve high-quality education for all. Faculty and students engage in groundbreaking and creative interdisciplinary scholarship that informs how people learn and shapes the practice and understanding of education. Through state-of-the-art research and innovative partnerships with educators worldwide, the school develops knowledge, wisdom and imagination in its diverse and talented students so they can lead efforts to improve education around the globe.

ABOUT THE UCHICAGO CONSORTIUM

The University of Chicago Consortium on School Research conducts research of high technical quality that can inform and assess policy and practice in the Chicago Public Schools. We seek to expand communication among researchers, policymakers, and practitioners as we support the search for solutions to the problems of school reform. The UChicago Consortium encourages the use of research in policy action and improvement of practice, but does not argue for particular policies or programs. Rather, we help to build capacity for school reform by identifying what matters for student success and school improvement, creating critical indicators to chart progress, and conducting theory-driven evaluation to identify how programs and policies are working. The UChicago Consortium is a unit of the Urban Education Institute.



THE UNIVERSITY OF
CHICAGO

UEI URBAN
EDUCATION
INSTITUTE

PARTNERS



NATIONAL
LOUIS
UNIVERSITY



SCHOOL OF EDUCATION
UNIVERSITY OF MICHIGAN

Stanford
GRADUATE SCHOOL OF
EDUCATION

1313 East 60th Street
Chicago, IL 60637
consortium.uchicago.edu

T (773) 702-3364
F (773) 702-2010
@UChiConsortium

