

THE MCKNIGHT FOUNDATION

FOOD FOR THOUGHT



The Human Capital Landscape for Twin Cities Teachers

A report from Urban Teacher Residency United

Commissioned by The McKnight Foundation

AUGUST 2014

Foreword

The Human Capital Landscape for Twin Cities Teachers by Urban Teacher Residency United was co-commissioned by The McKnight Foundation and Urban Education Institute in 2013. We are releasing it publicly now as part of McKnight’s “Food for Thought” series — a collection of independent essays to help inform our understanding of the fields in which we operate and our related program strategies.

McKnight’s program focus on early literacy supports efforts to dramatically increase the percentage of 3rd-grade readers in the Twin Cities, especially among populations underserved in our schools. We support and promote the development of effective teachers and leaders, successful schools, and aligned pathways bridging PreK and K-12. In partnership with the University of Chicago’s Urban Education Institute, we engage deeply in seven Twin Cities schools, deploying evidence-based supports that put each of our program strategies into practice. Our own work in the schools affirms a growing body of research, such as Wallace Foundation’s *How leadership influences student learning*, finding that the teachers and leaders who work with our children are the most important in-school influences in ongoing student achievement.

So it stands to reason that recruiting, preparing, supporting, and retaining these individuals to ensure students receive the best possible instruction should be a primary focus of any effective educational ecosystem — but Minnesota’s human capital landscape for teachers remains complex and fragmented. As this report reveals, there remain significant discrepancies between the expectations for early childhood educators versus those for elementary and secondary teachers. We have few (if any) strong metrics to gauge the quality of teacher preparation programs. And the number of teachers of color in Minnesota remains staggeringly low — in fact, Minnesota’s pool of teaching candidates has grown less diverse over time.

Nonetheless, Minnesota has made tremendous progress in the year or so since we first commissioned this report. In 2014, the Minnesota Board of Teaching approved our state’s first ever alternative certification program, a partnership between Teach For America and the University of Minnesota Twin Cities, and the Department of Education has improved the process for granting reciprocity to out-of-state teaching candidates. We’re pleased that some of this report’s closing suggestions are already being actively addressed. At the same time, we believe the data and recommendations provided here — some of which will sound familiar to education advocates, and some of which would break new ground in the Twin Cities — merit continued sharing and discussion.

Every day we support and learn from hardworking teachers across the Twin Cities. We recognize their impact on students, and we therefore hold them to very high standards. At the same time, we see the need to provide these teachers with high supports, delivered early and often, to ensure that Minnesota’s students receive the best instruction possible. We hope this Food for Thought edition gives readers a clearer sense of who Minnesota’s teacher candidates are, and what we can do to better prepare them for the demands of their future classrooms.

**Neal Cuthbert, Vice President of Program
The McKnight Foundation**

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EXECUTIVE SUMMARY

In Minnesota, as elsewhere, the human capital landscape is complex, highly politicized, and frequently the focus of intense debate. This report investigates the teacher human capital landscape in Minnesota, and the Twin Cities in particular. The report synthesizes education stakeholder interview data and analyzes primary and secondary data sources. Specifically, it documents trends in student achievement, teacher supply and demand, stakeholder perspectives on strengths and areas of need, and concludes with a set of ambitious recommendations designed to improve the human capital pipeline. It is written for policy makers, school district leaders, philanthropists, advocates, and the public. In essence, it is an effort to take stock. The McKnight Foundation and program partner the University of Chicago Urban Education Institute (UEI) co-commissioned this report in an effort to support Minnesota's efforts to become a national leader in improving educational outcomes for all children.

Student achievement trends

Minneapolis and St. Paul Public School Districts are large diverse urban districts with challenges typical of urban schools, including a large percentage of students who qualify for free and reduced lunch as well as significant numbers of dual language learners. While white students in Minneapolis and Saint Paul public schools tend to perform at or above the state average, students of color perform below the state average, in some cases, significantly below. As has been documented widely, **the Twin Cities have one of the largest achievement gaps in the nation.**

Teacher supply and demand trends

This report highlights the complexity of the issues of human capital on the teacher front. There are clear areas of teacher surplus, including K–6 elementary, physical education, social studies (grades 5-12), and communication arts and literature. There are also clear areas of teacher shortage, evident in the number of special permissions issued by the State Board of Teaching for areas of chronic teacher shortage, including special education, language and language learning, and STEM-related fields. The areas of shortage are reinforced by interviews with district hiring officers. However, complicating the picture, there are some instances in which it appears there are sufficient numbers of teachers licensed in a given area each year (e.g., mathematics) and yet school districts have difficulty staffing positions in those areas. Overall there were fewer teachers completing teacher licensure programs in 2011 when compared to the previous five years, and those teachers who are pursuing certification are less diverse than previous years. Further, relatively few newly licensed teachers are hired into K-12 teaching positions as district hiring trends reveal a preference for teachers with multiple years of teaching experience.

Stakeholder perspectives on strengths and areas of need

Education stakeholders highlighted the culture of innovation in Minnesota while acknowledging several areas in need of attention. Areas of innovation focused on openness to data sharing between Minneapolis Public Schools and the higher education community, improved teacher accountability through the edTPA and teacher evaluation legislation and Minnesota's growing commitment to early childhood education. There were several clear trends around areas of need including building teacher data literacy (the ability to use data strategically in planning and implementing instruction), teacher diversity, training of early childhood educators and the cultural competence of the teacher workforce. Minnesota's persistent achievement gap, one of the widest in the nation, is on the mind of many education stakeholders.

Recommendations

The report ends with seven recommendations to create a high quality, diverse teaching work force, particularly for the Twin Cities. While some of our recommendations build on work already underway, others would break new ground, positioning Minnesota as a true pathfinder for improving the quality of schooling and transforming children's lives.

INTRODUCTION

Over the last decade policy makers, practitioners and the public have become increasingly focused on the quality of the teaching work force in U.S. elementary and high schools. This is due in part to unambiguous empirical evidence regarding the direct impact teachers have on student achievement. Dozens of high-profile reports and studies have brought teaching and teacher education into the public spotlight, each reinforcing the fact that the quality of teaching is the single most important school-based factor for improving student learning. The nation's focus on teacher quality has also been propelled by federal, state and local policy; rapid growth of a not for profit sector focused on improving human capital in the education sector, and; myriad philanthropic and advocacy efforts intended to improve the quality of teacher training, teacher evaluation and teacher support.

Given the essential role of teaching there are key questions any state or jurisdiction must ask. Specifically, is Minnesota adequately preparing and supporting teachers to meet the challenges they face? If not, why not? Is Minnesota producing enough teachers? What are the surplus and shortage areas? And what are policy and programmatic barriers to excellence?

The report is organized into the following four main sections. It begins with an overview, is followed by a description of key context, provides a summary of findings and concludes with recommendations for action.

OVERVIEW

This report is intended to provide a descriptive analysis of the human capital landscape in the Twin Cities. The primary goals are to:

- *Document and analyze trends in human capital needs as evidenced by state supply and demand reports and Twin Cities public education stakeholders; and*
- *Document and analyze innovations in teacher human capital preparation, recruitment, and retention as stated by Twin Cities public education stakeholders.*
- *Make ambitious recommendations for improving the quality of teaching and student learning in the Twin Cities.*

Description of interview protocol, interview analysis, and other data sources: Beginning in the spring of 2013, various education stakeholders were invited to participate in interviews to answer the following questions (the full interview protocol is reflected in appendix A):

- What are the human capital needs within MPS and SPPS?
- What are the strengths and needs of the candidates hired by the districts?
- What systems and strategies are in place to ensure candidates are prepared to serve the students in MPS and SPPS?
- How are effective teachers recruited, selected and retained?

Stakeholders included representatives from the St. Paul and Minneapolis Public Schools, leaders from not for profit organizations and foundations and representatives from the Minnesota Board of Teaching, the Minnesota Department of Education, and from institutions of higher education (IHEs).

Data sources: This report also draws on a number of primary and secondary sources related to the teacher human capital landscape in Minnesota. For example:

- Teacher supply and demand report, 2013, Minnesota Department of Education
- Teacher supply and demand report, 2011, Minnesota Department of Education
- Minnesota Teacher Supply and Demand Study, 2010, MacCallum Ross, Inc.,
- Twin Cities and Minnesota census data, 2010
- 2006 Child Care Workforce in Minnesota survey
- 2011 National Assessment of Educational Progress Results
- Minnesota Comprehensive Assessment Results, 2012
- Minnesota Teacher Licensure Examinations Technical Report, 2010-2011

KEY CONTEXT

What follows are background factors relevant to the current teacher education landscape, a brief description of the overall ‘system’ in place to develop human capital, a summary of performance and demographic indicators of public schools in the Twin Cities and some of the key regulatory and legislative levers that influence the development of the teacher work force.

Institutes of Higher Education (IHEs) Preparing Teachers: In Minnesota there are 32 public, private, and non-profit institutions that have been approved to prepare teacher within the state of Minnesota. Within these 32 institutions there are over 600 distinct licensure programs.

Minnesota has two different public university systems: the University of Minnesota (five primary campuses) and Minnesota State Colleges and Universities (MnSCU). MnSCU is comprised of 31 colleges and universities, including 24 two-year colleges and seven state universities. There are also 22 private institutions that train aspiring teachers statewide.

In addition to traditional teacher training programs, in March 2011 the Governor signed into law a statute allowing for Alternative Pathways for Teacher Licensing. Following the passage of the law the Minnesota Board of Teaching developed the requirements for entities interested in creating an alternative pathway to teacher license. **As of July, 2013 no programs had applied for approval under the Alternative Pathways status.**

District Enrollment: The table below offers a brief overview of district enrollment and demographic data for the Minneapolis and St. Paul Public School districts. These data highlight the fact that the Twin Cities public schools educate a significantly more diverse population of students and a much higher percentage of students who qualify for free and reduced lunch programs compared to the state as a whole.

Table 1: Summary of Twin Cities public school enrollment and demographic data 2013

	Minneapolis Public Schools	St Paul Public Schools	Statewide
Total enrollment	35,262	37,913	845,177
Total # of schools/ programs	71	85	n/a
% white students/ students of color	37%/63%	24%/76%	73%/27%
% English language learners	25%	30%	8%
% special education	18.4%	17%	15%
% free/reduced lunch	66%	73%	38%

Data source: MDE Analytics Data for Parents and Educators (<http://education.state.mn.us/mde/Data>)

Student Achievement: Minnesota is generally considered a high achieving state. Eighth grade students in Minnesota score near the top of all states in math and reading performance on the National Assessment of Educational Progress (NAEP, 2012). For example, in mathematics, the percentage of students in Minnesota who performed at or above the NAEP Proficient level was 39 percent in 2011, while 81 percent of students scored above basic. Only five other states scored similarly or higher.

The Achievement Gap: While 2011 Minnesota NAEP data suggests impressive state-wide achievement trends, underneath these trends lie a very different story. *In 2009 students from low-income communities in the state of Minnesota ranked 49th in math and 46th in reading out of 50 states compared to students from middle- and high-income backgrounds.* In St. Paul on the 2012 Minnesota Comprehensive Assessments (MCA), 35% of Hispanic students and 26% of Black students were proficient in mathematics, compared with 71% of White students. In reading, 54% of Hispanic students and 46% of Black students were proficient, compared with 85% of White students. In Minneapolis Public Schools the results were even worse. On the 2012 MCA, 28% of Hispanic students and 20% of Black students in MPS schools scored proficient in mathematics, compared with 72% of White students. In reading, 40% of Hispanic students and 41% of Black students scored proficient, compared with 87% of White students. While the performance of dual language learners in the Twin Cities is closer to state averages, only 20% of dual language learners in Minneapolis are at or above proficiency levels in mathematics. In Saint Paul, 33% of dual language learners are at or above proficiency in mathematics. In essence, the achievement of students of color and dual language learners in the Twin Cities public schools suggest significant and persistent achievement gaps. These data are summarized in the table below.

Table 2: Minnesota Comprehensive Assessments (MCA-III math and MCA-II reading) results by race/ethnicity, 2012

	Minneapolis Public Schools	St. Paul Public Schools	State Average
Reading			
All students	57%	57%	76%
White students	87%	85%	83%
Black (not of Hispanic origin) students	41%	46%	53%
Hispanic students	40%	54%	54%
Dual language learners	28%	39%	38%
Mathematics			
All students	41%	44%	65%
White students	72%	71%	73%
Black (not of Hispanic origin) students	20%	26%	36%
Hispanic students	28%	35%	41%
Dual language learners	20%	33%	33%

Data sources: MDE Analytics Data for Parents and Educators (<http://education.state.mn.us/mde/Data>)

Shifting Demographics: Over the past decade Minnesota has witnessed a significant shifting demographic. Census data from 2010 show a growing immigrant population, with settlement occurring in all regions of the state. Minnesota ranks 21st out of 50 states in the United States for the percent change in the foreign-born population from 2000 to 2011.

In 2011, the foreign born population represented 7.3 percent of Minnesota’s total population, an increase from 5.3 percent in 2000 and 2.6 percent in 1990. The top three countries of origin for recent immigrants are Mexico, India, and Vietnam. In the 1990s immigrants to Minnesota were typically from Laos, Canada, and Germany (US Census Bureau & Migration Policy Institute, 2013).

Minnesota Regulatory and Legislative Context: There are a number of regulatory and legislative factors that influence the teacher human capital landscape. These are outlined in brief below.

State board of teaching: The Minnesota Board of Teaching is responsible for establishing and maintaining licensure standards, approving institutions and licensure programs to prepare

teachers, and establishing and enforcing the Code of Ethics for Minnesota teachers. Minnesota is one of 13 states in the US that has an independent standards board, separate from the Department of Education. This makes the governance infrastructure different than in many states, for while the Minnesota Board of Teaching has purview over preparation and licensing policy, there is an educator licensing division at the Department of Education that actually awards licenses. Minnesota's current Board of Teaching consists of eleven members appointed by the Governor, including six classroom teachers, one faculty member from a teacher training institution, a school board member, two members of the public, and a licensed school administrator.

Early childhood: Minnesota's commitment to early childhood is illustrated by the establishment of an Office of Early Learning, the appointment of an Early Learning Council, and the creation of the Children's Cabinet. These entities were all established in 2011 by Governor Mark Dayton. The Office of Early Learning was established to coordinate early childhood programming statewide. Within this office, The Early Learning Council (ELC) was created to make recommendations to the Governor, the Children's Cabinet and state legislature, including proposing legislation to support high-quality early childhood programs to ensure all children arrive at kindergarten school-ready. The Children's Cabinet brings together stakeholders across state and community agencies to coordinate and align services, policies, and program implementation in the interest of improving outcomes for Minnesota children. The Children's Cabinet is comprised of the Commissioner of Education, the Commissioner of Health, and the Commissioner of Human Services.

Educator evaluation legislation: As a state, Minnesota is viewed as a leader on the educator evaluation front. In 2011 the Minnesota Legislature created statutory language requiring Minnesota schools to have annual evaluations for principals beginning in the 2013-14 school year and for teachers beginning in 2014-15. The law requires superintendents to use a performance-based assessment to annually evaluate principals and student academic growth must account for 35% of the principal evaluation. The teacher accountability law requires school boards and teacher unions to agree to an annual teacher evaluation and peer review process for all teachers. Teacher evaluation tools must include some value added measure, meaning that student achievement results must play some role in all teacher evaluations. Efforts are currently underway to design and pilot these evaluation tools statewide.

Basic skills testing and edTPA for teachers: State law requires that new teachers in Minnesota pass the Minnesota Teacher Licensure Exam basic skills test. Aspiring teachers take a 48-question multiple-choice test, which they must complete in one hour, covering college level reading, writing, and mathematics. It is separate from any pedagogical or subject area test. The technical report on the basic skills test, which includes test taker performance, suggests that testing outcomes mirror the student achievement gap in the state. For example, 72 percent of Whites passed the math test, while only 23 percent of Blacks and 37 percent of Hispanics passed. In the reading portion, 73 percent of Whites passed, while only 31 percent of Blacks and 45 percent of Hispanics (Minnesota Teacher Licensure Examinations Technical Report 2010-2011, 2012).

Minnesota is also one of eight states leading the implementation of the EdTPA, a pre-service teacher performance assessment that uses authentic teaching materials, including unedited video of teaching practice, to certify a candidate's effectiveness. The edTPA is designed to facilitate common language across institutions and establish a set of common expectations across the state.

Higher Education Accountability: The Minnesota Board of Teaching has a new data system, debuted in 2013, designed to create more clarity regarding the quality of teacher preparation efforts statewide. The system has three tiers of information: program completion information, candidate performance data on the edTPA, and an alumni and employer survey. The board will use these data, and other information to approve teacher preparation programs at three levels: high performing, approved, or approved with a continuous improvement focus. Those IHEs with a continuous improvement focus must demonstrate progress in particular areas to ensure continued approval to train teachers. To date, the Minnesota Board of Teaching has not designated a program as low performing.

Revised licensure standards: The Minnesota Board of Teaching began reforming standards for teacher education programs in 2008 and is currently in a rule making process to finalize those standards. The new standards will require programs that are not nationally accredited to participate in a review process every five years, rather than every seven years. Further, the new standards are being designed to be more measurable and make it easier for institutions to provide concrete evidence they are meeting the standard.

Last in first out policy: Currently Minnesota is one of twelve states that execute a Last in First Out (LIFO) policy during district layoffs. This means that whether due to budget cuts, population decline, or district reorganization, the last hired teachers (least senior) are let go first while more senior staff are protected.

SUMMARY OF FINDINGS

This section of the report summarizes key facts drawn from teacher supply and demand reports and other policy documents as well as stakeholder perspectives regarding areas of strength, need in the Twin Cities.

The number of individuals completing teacher education programs in Minnesota has fluctuated between 2007-2011. The data are presented in the table below.

Table 3: Minnesota Teacher Education Program Completers

	2007	2008	2009	2010	2011
Teacher education program completers	4,203	4,028	4,513	4,334	3,790

Data source: 2013 Minnesota Department of Education Teacher Supply and Demand Report

In 2011-2012, there were 5,544 teacher hires in the state. According to the 2013 Minnesota Department of Education Teacher Supply and Demand Report, these hires were made from the following sources:

- Newly licensed teachers who completed a teacher education program Minnesota: 3.2 percent (N=1,699)
- Teachers who transferred from another Minnesota district: 3.2 percent (N= 1,693)
- Teachers returning to the profession after a break in service: 2.8 percent (N=1,515)
- Teachers who transfer from a school outside of Minnesota or a non public school: 0.9 percent (N=460)
- Newly licensed teachers who completed a teacher education program out of state: 0.3 percent (N=177)

The difference between teacher education program completers and newly licensed teachers who were hired for teaching positions in 2011 indicates a surplus of 2,091 program completers in 2011. There is no data available regarding what program completers do if they do not take a public school teaching job.

Importantly, the overall number of licenses issued in Minnesota has declined between 2007 and 2012 in every area except mathematics. These numbers are depicted in the table below. Teachers may hold more than one license.

Table 4: Teacher licenses issued in Minnesota

Subject area	# licenses issued in 2007-2008	# of licenses issued in 2011-2012
Mathematics	2,242	2,291
World language/culture	1,827	1,777
Prekindergarten/elementary	18,611	17,348
Natural sciences	3,020	2,789
Special education	9,562	8,669
Social sciences	3,185	2,855
English/Communication arts	4,685	4,059
Visual and performing arts	2,969	2,528
Health/safety/physical education	7,973	6,265
Industrial arts	519	379
Business and computer education	1,003	717
Agricultural education	296	209
Family/consumer sciences	907	634

Data source: 2013 Minnesota Department of Education Teacher Supply and Demand Report

Finally, teacher education program completers in Minnesota are primarily white, and the overall pool of teaching candidates has become less diverse over time. The table below compares program completers by race/ethnicity between 2006 and 2011. Clearly, this raises concerns about the teacher pipeline, especially as recent census data suggests that Minnesota is becoming an increasingly diverse state.

Table 5: Teacher Education Program Completers by Race/Ethnicity.

Race/Ethnicity	2006-2007	2010-2011
International students/noncitizens	0.5%	0.0%
African American	1.9%	1.5%
American Indian	0.7%	0.3%
Asian American	2.1%	1.8%
Hispanic	0.5%	0.0%
Caucasian	83.1%	91.8%
Unknown	10.9%	3.0%
Other	0.1%	0.4%

Data source: 2013 Minnesota Department of Education Teacher Supply and Demand Report

Areas of teacher surplus and shortage: The teacher employment numbers for 2011–12 have declined slightly since the 2007–08 school year. Employed teachers declined from 54,721 in 2007–08 to 53,297 in 2011–12, a 2.6 percent decrease across five school years. This occurred in all areas of the state.

While both the 2011 and 2013 Teacher Supply and Demand Reports identify four areas of perceived surplus, the reports also note areas of perceived shortage. According to district hiring officers and teacher preparation institutions, the teaching positions that are easiest to fill are:

- K–6 elementary
- Physical education
- Social studies high school and grades 5–8
- Communication arts and literature high school and grades 5–8

The state is not issuing an exceptionally large number of licenses in areas of perceived surplus, with the exception of elementary education, which represents more than one quarter of all licenses issued in 2011.

The number of special permissions issued by the State Board of Teaching suggest three areas of teacher shortage: special education, language and language learning, and three S.T.E.M.-related fields. These areas are depicted in the table below, along with information about the number of special permissions and licenses recently issued in these difficult to staff areas.

Table 6: Perceived shortage areas

Shortage area	Special permissions issued in 2011-2012 school year	Number of licenses issued in 2011 (% of total 2011 licenses)	Total number of licenses issued 2007-2011 (% of total licenses issued 2007-2011)
Special education			
Emotional behavior disorders (294 permissions) :	294	166 (4.4%)	1,048 (5%)
Learning disabilities	265	205 (5.4%)	1,205 (5.8%)
Developmental disabilities	145	95 (2.5%)	556 (2.7%)
Early childhood special education	91	82 (2.2%)	375 (1.8%)
Developmental/adapted physical education	45	0 (0%)	32 (0.15%)
Language and language learning			
Spanish	64	21 (0.6%)	26 (0.12%)
English as a second language	86	63 (1.7%)	683 (3.3%)
S.T.E.M. related fields			
Mathematics <i>Math 5-8 specialty or Math 5-12</i>	78	152 (4%)	733 (3.5%)
Physics	50	10 (0.3%)	76 (0.36%)
Chemistry	43	33 (0.9%)	163 (0.78%)
Total number of licenses issued (all subject areas)	n/a	3,790	20,868

Data source: 2013 Minnesota Department of Education Teacher Supply and Demand Report

These data present a puzzling picture. For example, while district hiring officers and teacher preparation programs report shortages of mathematics teachers, there are *more* newly licensed mathematics teachers than special permissions granted. This suggests the problem may not be with the supply of new teachers but rather with retention of licensed mathematics teachers.

These data also raise questions about actual shortage areas, especially in the areas of early childhood special education, developmental/adapted physical education, Spanish, and physics. There are relatively small numbers of licensed teachers available in these areas. As the state emphasizes early childhood initiatives, these shortages seem especially important to address. Addressing these areas requires examining both the quality of candidates in the training pipeline and their pass rates on the Minnesota Teacher Licensure Exam (MTLE). In the case of physics for example, only 35% of candidates passed the MTLE Physics (9-12) subtest, raising questions both about the depth and quality of the candidate pool.

Early Childhood Progress: While Minnesota was not historically viewed as a leader in early childhood education, recent legislative action and receipt of competitive federal funds has positioned the state to become a national leader. In December 2011, Minnesota was one of nine states awarded a Race to the Top-Early Learning Challenge Grant. The \$45 million award for 2012-2015 is designed to increase access to high quality child-care and early learning options. An important component of the Race to the Top award is focused on supporting the training of child-care professionals.

Additionally, in May, 2013 Governor Dayton allocated over \$200 million towards early learning with a focus on high quality child-care, preschool, and full day kindergarten. Approximately \$134 million of the allocation will provide all-day kindergarten for all children statewide. Currently, all-day kindergarten is available to slightly more than half of eligible kindergartners (Star Tribune Opinion, May 26, 2013).

While specific hiring and credential data for early childhood professionals are only available for individuals working in public school settings, it is clear that early childhood educators in Minnesota have a wide range of qualifications, credentials, and training experiences. There are several early childhood education practitioners who are, by state law, required to have teacher licensure. These include Early Childhood Special Educators and allied professionals working in Individuals with Disabilities Education Act (IDEA) funded programs, as well as teachers working in public school pre-kindergarten classrooms. Individuals completing teacher licensure in these areas follow the standards mandated by the Minnesota Board of Teaching Standards. However, the Minnesota Board of Teaching Standards and the Core Competencies for Early Childhood Practitioners are not aligned. **This means that early childhood licensure programs are currently ‘caught’ between meeting the Board of Teaching Standards for licensure requirements and addressing the core competencies considered essential to creating high quality early childhood education experiences.** Aligning these two sets of standards is especially important as Minnesota expands its full-day kindergarten and public school pre-kindergarten options, which will very likely increase the number of early childhood professionals enrolled in state-approved teacher licensure programs.

Sensibly, a portion of the recently awarded Race to the Top grant will bring together Minnesota’s postsecondary institutions, Minnesota’s Board of Teaching, individuals from the Minnesota State Colleges and Universities system, and the Minnesota Association of Early Childhood Teacher Educators to align the Core Competencies for Early Childhood Practitioners and the Minnesota Board of Teaching Standards.

Complicating the picture above considerably are the estimated 12,334 licensed family child-care providers and center-based programs (2006 Child Care Workforce in Minnesota survey). These programs include public school pre-kindergarten programs, Head Start, Early Childhood Special Education programs, and Early Childhood Family Education (a parent education program). There are approximately 36,500 individuals working in these early learning programs, including 14,700 providers and paid assistants working as licensed home-based providers and 21,800 staff working in centers (2,050 directors, 9,150 teachers, 5,000 assistant teachers and 5,600 aides). A picture of the widely varied training backgrounds of these practitioners is reflected below.

Table 7: Minnesota child care providers, summary of degree and training

Child care type	% with Bachelor's degrees	% reporting continuing education college classes in past 12 months
Public pre-school	100% (required by law)	not reported
Family child care	24% (10% in child related fields)	20% (median 8.5 hours)
Center based teachers	45% (34% in child related fields)	50% (median 30 hours)
Preschools	78% (68% in child related fields)	not reported
Center directors	67% (45% in child related fields)	not reported
Preschool directors	81% (73% in child related fields)	Not reported

Data source: 2006 Child Care Workforce in Minnesota survey, Chase, Moore, Pierce & Arnold, 2007

Notable trends emerge in the 2006 Child Care Workforce in Minnesota survey. For example, while a majority of child-care providers receive training in health, safety, and nutrition, only 35% of family child-care providers and 59% of center-based teachers receive training in assessment and planning. Providing training options focused on assessment and planning is crucial if children are to enter kindergarten ready for academic success.

In addition to the teacher licensure options required by state law, there is also the Minnesota Child Care Credential (MCCC). This credential is a two-year program (or one year fast track option) that includes 123 training hours. The program incentivizes participation by offering reward rebates (up to 75% off the standard tuition rates) to participants who join early and stay in the program.

Summary of Stakeholder Perspectives: Interviews with education stakeholders allowed us to identify a number of areas of strength and needs in the Twin Cities. Recurrent themes were clustered around a need for data literacy, providing teachers with the requisite training to address the achievement gap and the role of cultural competency in skillful teaching practice.

Data Literacy: Stakeholders interviewed for this report expressed consistent concern about teacher candidates' ability to use data - specifically, interpreting and using diagnostic evidence to improve instruction and implement interventions for specific students. Stakeholders thought this issue was of primary importance for teacher training institutions to take up in their training programs, essential for aspiring teachers to demonstrate data literacy before entering the classroom, and critical for schools and districts to reinforce in the course of professional development and teacher evaluation.

Need for teachers capable of addressing achievement gaps: Related to the data literacy challenge, a second pressing need identified by stakeholders is for teachers who not only recognize the existence of persistent achievement gaps but are adequately prepared to address them with high quality targeted instruction and interventions. Stakeholders pointed out that

there is important work underway to create public awareness of what can be done to address the achievement gap. Specifically, the Minneapolis Foundation launched the RESET Education campaign to focus on increasing public awareness of five principles that are viewed as critical for closing the achievement gap (real time use of data, expectations not excuses, strong school leadership, effective teaching and time on task). Partners in this effort include Minneapolis Public Schools, Teach for America, the African American leadership forum, the Minnesota Minority Education Partnership, Achieve Minneapolis, MINNCan, Charter School Partners, and Empower (a parent advocacy organization). The RESET campaign is a public service campaign – there are trailers in local movie theaters, ads in newspapers, billboards around the community, presence in social media, and a series of sponsored events aired by Minnesota public radio.

While the public education effort towards increased awareness is critical, stakeholders expressed concern that **teachers must not just be aware of what practices are effective, but be able to implement them with fidelity**. Stakeholders felt this demands close attention by IHE's, school district professional development, not for profits, and other groups focused on teacher quality.

Cultural competency: Stakeholders also emphasized that shifting demographics across the state and the implications of those shifts for educators. Increases in the number of dual language learners, students living in poverty, migrant students and students facing homelessness and neglect pose significant challenges to the work force. While an increasingly diverse workforce is not a singular solution to this challenge, it is a critical part of the solution. The fact the workforce is becoming less diverse raises serious flags about recruitment and training efforts underway across Minnesota.

Licensure Reciprocity: Stakeholders noted that Minnesota's reciprocity policies are extremely restrictive and do not recognize teachers who have been successful in other places as teachers that could be successful in Minnesota. The state's licensure requirements are perceived to protect Minnesota teachers, making it difficult to recruit talent from outside the state. One stakeholder explained that it is possible that a teacher with five years of experience, a master's degree in education policy and demonstrated success in raising student achievement in another state would likely be required to take a number of additional teacher education courses in order to get certified to teach in Minnesota. The licensure requirements are also not attractive to individuals with industry work experience. Another stakeholder noted that he had an MBA degree and ten years experience leading a Fortune 500 company and had to take a basic PowerPoint and Excel class in order to be certified to teach Business Administration in the state of Minnesota.

Last in First Out (LIFO): As stated earlier, the Last in First Out (LIFO) policy means that the least senior staff is let go first while more senior staff is protected when districts make layoffs. As the teacher evaluation system is put into place, stakeholders expressed a desire for LIFO to be replaced by more robust data to inform hiring and layoff decisions. Minnesota is one of twelve states with a LIFO policy in place.

Perception of High Quality Teacher Preparation in the State: Stakeholders repeatedly pointed out a disconnect between the quality of teachers IHEs are perceived to produce and the results

observed in Twin Cities districts and across the state. Put another way, Minnesota should not consider the fact that teaching candidates are hired as a proxy for a high quality preparation program.

Stakeholders suggested this issue would be best addressed by building state level data and reporting systems, to ensure IHE's have better visibility on where their graduates teach, how long they stay, the distribution of their graduates evaluation ratings and their graduate's impact on reliable measures of student learning over time. This would serve two other critical purposes: It would enable potential teacher candidates to select the strongest teacher preparation programs and provide schools and school systems with meaningful data to guide hiring decisions.

Input versus output models: A number of stakeholders noted that the Board of Teaching has historically had an 'input' orientation to teacher preparation – where program design focused on courses, credits accumulated, and the parameters associated with clinical training experiences. The Board of Teaching has made a significant shift in the last few years, to focus on developing performance standards. The introduction of the EdTPA has the potential to support this shift.

MTLE Basic skills test: Vigorous debate is underway in the state about the role of the basic skills test in teacher licensing. Minnesota's Basic Skills Test was repeatedly identified as a barrier to diversifying the teacher preparation pipeline. There are very disparate opinions about the validity and reliability of the test and various stakeholders expressed concern the test was introduced without adequate supports in place for those who must take it. While all stakeholders acknowledge that teacher must have basic skills, several stakeholders recommend the state review the use of MTLE as the single metric for basic skills and look at examples of how other high performing states and nations determine who is well prepared to teach.

RECOMMENDATIONS FOR BUILDING A STRONGER TEACHER PIPELINE

The recommendations included here are ambitious, borne of our investigation of the teacher human-capital landscape in the Twin Cities and a natural outgrowth of Minnesota's commitment to being a national education leader. Some of these recommendations are underway, others would break very new ground. Taken as a whole they would help to ensure the students who depend on schooling the most would learn more deeply, and be legitimately prepared for post secondary school, careers and life.

Increase the Diversity of Minnesota's Teacher Pool: Aggressively work to recruit a more diverse teacher pool, by incenting teacher preparation institutions to actively recruit, train and support diverse candidates; investigate and implement methods of assessing new teacher quality that do not serve as a barrier to the profession for large numbers of candidates of color; identify successful local and national models for transitioning teaching assistants, career changers and other strong aspiring teacher candidates of color into the classroom.

Enable Strong Out of State Candidates to Serve Minnesota Students: Eliminate restrictive state 'reciprocity' policies that serve as perverse incentives for successful teachers from out of state to work as teachers in Minnesota.

Hold Teacher Preparation Accountable for Quality: Provide a public annual report on the quality of teachers prepared by higher education institutions and through alternative pathways, providing visibility on where graduates teach, how long they stay, the distribution of graduates evaluation ratings and graduates impact on reliable measures of student learning.

Continue to Improve Data Systems: Continue working to build a coherent, state level data system that integrates early childhood, K-12 and higher education data in ways that will guide policy and be useful to practitioners. In tandem, establish clear standards for data management and data reporting, storage, sharing, access and use.

Improve Performance Standards for Teacher Licensure: Accelerate the Minnesota Board of Teaching efforts to revise performance standards for teacher education program licensure, to focus on outcomes (e.g. results on EdTPA and other 'gates' to entry, teacher retention, teacher evaluation ratings, student learning), and a few high leverage domains during their clinical preparation (e.g. 'data literacy' skills, differentiating instruction for diverse learners, effective methods for addressing achievement gaps).

Improve Staffing Flexibility: In the face of budget cuts, population decline or school reorganization, eliminate last in first out (LIFO) provisions that limit school flexibility building the highest quality teacher teams.

Align Early Childhood and K-12 Professional Standards: Fully align the Core Competencies for Early Childhood Practitioners and the Minnesota Board of teaching standards, including raising training requirements and salary structure for early childhood professionals in the State of Minnesota.

ABOUT FOOD FOR THOUGHT

This publication was commissioned by The McKnight Foundation as part of the “Food for Thought” series — a collection of third-party reports that inform our program strategies and are shared with the fields we support.

This publication is available for download at www.mcknight.org.

ABOUT THE McKNIGHT FOUNDATION

The McKnight Foundation, a Minnesota-based family foundation, seeks to improve the quality of life for present and future generations. Through grantmaking, collaboration, and encouragement of strategic policy reform, we use our resources to attend, unite, and empower those we serve. Program interests include regional economic and community development, Minnesota’s arts and artists, early literacy, youth development, Midwest climate and energy, Mississippi River water quality, neuroscience, international crop research, and community-building in Southeast Asia. Our primary geographic focus is the state of Minnesota, with significant support also directed to strategies throughout the U.S. and in Africa, Southeast Asia, and Latin America.

Founded in 1953 and endowed by William and Maude McKnight, the Minnesota-based Foundation had assets of approximately \$2 billion and granted about \$86 million in 2013.

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Urban Teacher Residency United (UTRU) is a not-for-profit organization that serves a growing national network of innovative teacher preparation programs.

Founded in 2007, UTRU is the only organization in the nation dedicated to developing, launching, supporting, and accelerating the impact of residency programs. UTRU partners with school districts, charter management organizations, institutions of higher education, not-for-profits, and states to develop teacher residency programs as quality pipelines of effective and diverse new teachers. Learn more at www.utrunitied.org.

PHOTO CREDIT

Cover — Urban Education Institute, University of Chicago

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