

Summary Report for Teacher Preparation Study

Analysis of Teacher Supply and Demand

Analysis of Teacher Selection and Placement

Evaluation of Teacher Preparation Programs

July 2010

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Introduction

What follows is the summary report for a project undertaken for the Minnesota Office of Higher Education, in partnership with the Minnesota Department of Education, to evaluate K through 12 teacher labor market conditions and the teacher education programs that produce teachers. Key topics to be addressed included current and future teacher supply and demand, teacher hiring and placement practices and an evaluation of teacher preparation programs. This report identifies the key findings from each part of the project, and presents recommendations that follow from these findings.

Key Elements from Each of the Reports

Minnesota Teacher Hiring Practices

- Hiring officials were unambiguous when it came to identifying work ethic and communication skills as essential for a job candidate to have. These two features were identified as essential by nearly three-quarters of respondents (73% and 70%, respectively). And in both cases, all remaining respondents identified these two personal attributes as very important.
- The potential for collaborative work, organizational skills, and demonstrating subject knowledge in an interview were endorsed by over 90% of respondents as at least very important, if not essential. The quality of the student teaching experience was identified as very important or essential by 87% of the respondents.
- The majority of respondents claimed that it is not important for a candidate to be a resident in the school district, while another 29% said it is only somewhat important.
- The majority of all hiring officials (60%) said that it is not important that a candidate has attended a teacher education program near their district.
- When asked if their district preferred candidates from particular Minnesota teacher education programs, 85% of respondents claimed to have no preferences.
- While over half of all respondents reported having schools in their district that are not making adequate yearly progress, only a small minority of these have recruitment and placement practices specifically for these schools.

- When asked if their districts try to find candidates from alternative pathway options, 85% of hiring officials claimed they did not specifically target the recruitment of alternative completers versus traditionally licensed teachers.
- Contributing to the workforce diversity was seen by 53% of respondents as either a very important or essential feature of a candidate. However, over three quarters of respondents said that the diversity of the students in a teacher education program is either not an important feature or only somewhat of an important feature of a teacher education program that they consider when hiring.

Minnesota Teacher Supply and Demand Study

- Minnesota has and continues to produce an overall surplus of teachers when comparing numbers graduated and newly licensed to demand based solely on retirements and attrition. However it should be noted that many factors go into the details of supply and demand of teachers in Minnesota. These include location of vacancy, teachers moving out of Minnesota, graduates not applying for licensure and policy changes. All of these contribute to the continued demand for teachers.
- The surplus of supply holds for licensure areas that are reported as being difficult to fill (e.g., Physics, Mathematics and Special Education), although the surplus is much smaller than it is for licensure areas such as English and Social Studies. This contributes to a perceived shortage in these difficult to fill licensure areas.
- Many districts request Special Permissions for Licenses. It is probable that these special permissions are largely used to cover the loss of teachers through preretirement exit from teaching or migration to another district or school, both of which often give schools and districts insufficient time to fill vacancies through the usual hiring procedures.
- The number of special permissions granted by the Minnesota Board of Teaching is a small and declining percent of the total number of teacher Full Time Equivalents (FTE).

This indicates that the trend is toward it being easier for schools and districts to fill teaching positions, even in perceived shortage areas. However, it should be noted that this reduction in special permissions might also be influenced by policy decisions and changes in the types of special permissions.

- There is no significant difference in the requests for special permissions by geographic region in the State.
- Overall teacher five-year attrition from the profession is approximately 30% in the State. The only region of the State where attrition appears to be significantly higher is the Southwest Central region, where it is approximately 40%. This is considerably less than the 50% rate that is often anecdotally mentioned as the national rate.
- Overall retirement rates remain low, ranging from 1.9% in 2003 to 4.8% in 2008. The increase in 2008 is expected to continue in 2009 and 2010, but to begin to decline again.
- National Center for Education Statistics data projects only a modest increase in enrollments in K-12 through 2017, indicating that current overall rates of teacher preparation are adequate. Moreover, the projected need for additional teachers reaches a peak in 2016, with a total of approximately 3100 additional teachers required by the year 2017. This could be more than adequately covered by the number of newly licensed teachers from Minnesota teacher preparation programs alone (3424 initial licenses in 2008-09). However, because of the multitude of complicating factors in the details of teacher supply and demand, it should be noted that there is no guarantee that the graduates from Minnesota's programs will be aligned to the needs of schools, nor enter the teaching profession.
- Due to their historic and current small volume, alternative pathways to licensure are, at present, not playing a significant role in alleviating demand pressures, even in perceived shortage areas. It should be noted that increased numbers of alternative pathways are being developed, especially in the Twin Cities, however their effects are not yet evident.

Minnesota Teacher Preparation Programs

- The requested analysis of teacher preparation program admission criteria and yield rates to determine the academic standing of incoming students cannot be completed at the institutional and program level at this time because the data is not available. Fortunately, the Minnesota Department of Education, in partnership with the Office of Higher Education, Office of Enterprise Technology, Department of Employment and Economic Development, the P-20 Education Partnership and the State Advisory Council on Early Childhood Education and Care, has very recently received funding to develop a longitudinal data system that is a key step in providing the needed data. This data will allow for a detailed analysis of the academic standing of Minnesota students entering Minnesota teacher preparation programs.
- The requested analysis of the actions by teacher preparation programs to align curriculum with State learning standards presupposes structures and relationships in K-12 education that do not exist in Minnesota. Teacher preparation programs do not align their program curricula with state learning standards for students. Instead, they align their curricula with the teaching standards associated with the licensure requirements that are overseen by the Board of Teaching. The needed link between student learning standards and teacher preparation curricula is made through the alignment of these teaching standards directly with the student learning standards. This is a key focus of the Board of Teaching, and while there is some evidence of good alignment, current work has been limited to standards at the broad level. The Board of Teaching recognizes the need for further detailed analysis and, if needed, further alignment of teaching and learning standards.
- Alignment of licensure requirements and curriculum in the teacher preparation programs is established through the detailed and area specific teaching standards of effective practice established by the Board of Teaching. The Board of Teaching is in the process of changing the method of assuring alignment by moving from the current PEPER system to one with a stronger focus on program effectiveness, called PERCA. PERCA focuses on teacher preparation program outcomes through an assessment of the preparedness and

success of program graduates.

- Aspects of this alignment are also being tested through a recently instituted audit system whereby random (and occasionally targeted) audits examine the uniformity, accuracy and alignment of higher education institutions with Board of Teaching standards and procedures. This audit focuses on the required elements of the teacher preparation programs, in contrast to PERCA, which assesses program effectiveness.
- The ultimate goal of these analyses is to determine whether what a student learns in a teacher preparation program translates into K-12 student achievement when those teachers begin to teach. While this question cannot be answered at present, we will be able to begin to formulate answers once the longitudinal data system is put into place. This system will provide the needed teacher-student data links that will allow one to compare Minnesota trained teachers who then go on to teach in Minnesota with the achievement of their students, and hence the effectiveness of their teacher preparation programs.
- An analysis of the alignment of teacher education programs with best practices would first require some consensus about what constitutes best practices across all of these programs. However, insofar as there is anything one can say about best practices, it is very general (i.e., teacher practical training is important). When one attempts to operationalize these ideas in a form that would allow one to check the alignment between them and the practices of the various programs, one finds that the general idea can be operationalized in so many different ways that such an analysis would, in effect, require a thorough reaccreditation process for each program.
- An additional question arose concerning whether teacher preparation programs follow best practices on induction, mentoring and related professional development. Programs uniformly regard these as important, but currently do not have the financing or other resources needed to support these practices. It should be noted that these are a key focus area of the current Bush Foundation Teacher Effectiveness Initiative.

(See <http://www.bushfoundation.org/education/TEInitiative.asp> for more details.)

Recommendations for Policy Changes

- One of the key lessons learned from the *Minnesota Teacher Supply and Demand Study* is that the perceived shortage of teachers in the state is actually a situation that is due not to the production of new teachers, or an adequate number of teachers, but rather to the constant “churn” of teachers. To adequately understand the reasons for this “churn” requires further study. Thus, recommendations to address this situation cannot go beyond the unsatisfactory claim that we need to discourage teachers from frequently changing jobs. However, work that has been done by others in the state (see Eklund, N., How was Your Day at School? Improving Dialogue about Teacher Job Satisfaction, Search Institute Press, Minneapolis, MN, 2008, for one example) suggests that by improving the working conditions (including environments) of teachers and by making jobs more attractive (not necessarily financially), one would find less job changing and more stability within the teaching profession.
- To understand the connection between teacher education and, subsequently, the achievement of their students, we must engage in long term studies that track teachers and students over time. This requires the kind of longitudinal data that is currently not available. Supporting this sort of long-term study is of primary importance if one is to ever adequately assess the performance of the teacher preparation programs.
- Where a teacher comes from in the state, where they currently live and where they went to school are not significant factors in a teacher hiring decision. However, being able to collaborate, communicating effectively, and having organizational skills are. Since these factors are skills that teacher preparation programs must select and train for if their graduates are to find the positions they desire on graduation, supporting programs in these efforts would in turn assist hiring officials in finding the teachers they want for their schools.

Minnesota Teacher Supply and Demand Study

A Component of the Teacher Preparation Project Undertaken
for the Minnesota Office of Higher Education

July 2010

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Introduction

Policymakers and citizens alike have recently raised a number of questions concerning the supply of and demand for K-12 teachers in Minnesota.

Many of these questions reflect a widespread national concern that there is, or will soon be, a significant shortage of qualified teachers, especially in some key areas such as science, mathematics and special education.

The central questions concerning teacher supply and demand in Minnesota are:

- Is the overall supply of teachers well matched to demand?
- Is there significant oversupply or undersupply, according to
 - Areas of teaching licensure
 - Geographic regions of the state
- Is there expected to be significant oversupply or undersupply in the future?
- What role do alternative pathways to licensure play in teacher supply and demand?

The research undertaken to answer these questions was based on two types of data sources

- National and regional literature on teacher supply and demand since 2000
- Data and reports collected from
 - Minnesota Department of Education (MDE)
 - National Center for Education Statistics (NCES)
 - Minnesota Association of Colleges for Teacher Education (MACTE)

What follows is an account of the key findings of this research, first from the literature review and second from the data analysis.

Findings from the literature review

A literature review of national and Minnesota reports and analyses of K-12 teacher supply and demand was conducted. What follows is a description of the key findings of that review. The bibliography for this literature review is contained in the Appendix.

Key findings

- The Minnesota Department of Education (MDE) performs an analysis of K-12 teacher supply and demand that is reported to the legislature every two years, most recently in January 2009.
- The methodology of the MDE report follows best practices, as identified in “Methodologies used by Midwest Region states for studying teacher supply and demand” (Lindsay, et al., 2009)
- The most valuable analysis of K-12 teacher supply and demand for the purposes of this study is to be found in the work of Richard Ingersoll and his colleagues, and in particular in the 2009 report by Ingersoll and Perda. Their analytic framework goes beyond a focus on numbers of teachers trained and retiring to include the effects of pre-retirement exit from the profession and migration between teaching positions. Thus, it was selected as the basis for the approach taken in the analysis for this study.

Redefining the “Teacher Shortage Problem”

The research by Ingersoll and Perda (2009) focuses on two licensure areas, science and mathematics, that are also identified as areas where Minnesota districts have difficulty filling vacant teaching positions. (See the next section for details of Minnesota’s particular difficulties.)

The standard understanding of the “Teacher Shortage Problem”, according to Ingersoll and Perda, is that there is a shortage of teachers due to a combination of high retirement rates for current teachers and too few teachers being trained. Their research establishes that this understanding of the problem is not correct. Instead, their analysis of national data shows that there are many more teachers being trained and licensed than are retiring. In fact there is an overall surplus of teachers, and this is especially true in areas such as English and Social Studies. However, when one includes the teachers that leave the profession preretirement – that is, those lost to attrition – then there are teaching areas such as science and mathematics where the situation is importantly different. In those areas, there are still enough teachers being trained and licensed to fill the available positions, but the ratio of candidates to available positions is close to one-to-one at the national level. This creates the impression that these positions are hard to fill, especially when compared to areas such as English and Social Studies, where even when attrition is taken into account there are still a large number of candidates for each available position.

Moreover, their analysis is consistent with what we have found with the data in Minnesota where there is both an abundance of teachers trained compared to the small number that are retiring, but also where districts report that there are key licensure areas for which it is difficult to fill available positions. This makes it plausible that it is teacher attrition and migration (teachers moving from one teaching position to another) that are the key factors in the redefined “Teacher Shortage Problem”. The important consequence of this understanding of the issue is that it locates the solution to the problem not in the teacher education programs, but in the schools and districts where the teachers are working. Ingersoll and Perda note that the primary reason for attrition and migration is job dissatisfaction, and summarize the policy implications of this:

The data suggest that a key way to improve teacher retention is to improve the conditions of the teaching job. In our research, we have found that schools with more support for new teachers, more generous salary schedules, fewer student discipline problems, more adequate resources and classroom supplies, more effective leadership, and enhanced faculty input into school decision-making—all have significantly lower levels of teacher turnover ... (p. 38)

It is beyond the scope of this study to develop recommendations for how to improve teacher retention through these or other approaches, especially in the current economic and budget context in the State. In what follows, we will present the key supply and demand data from Minnesota that support the hypothesis that in this state, as with the nation overall, the supply problem lies not with the training of new teachers, but rather the retention of current ones.

Findings from the data analysis

The primary data sources for this analysis were:

- The Minnesota Department of Education (MDE) K-12 “Teacher Supply and Demand” report to the legislature from January 2009, which provided most of the data needed to perform the analysis for this study.

Data sources for the MDE report are

- MDE 2009 Teacher Supply and Demand Survey of district superintendents and administrators
 - MDE Staff Automated Reporting System (STAR)
 - MDE Educator Licensing Division
 - Minnesota Board of Teaching
 - Minnesota Association of Colleges for Teacher Education (MACTE)
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- Additional data on enrollment trends in K-12 were collected from the US government National Center on Education Statistics
 - Recent data on newly licensed teachers from Minnesota teacher preparation programs were collected from MACTE

Key findings

- When looking at the overall number of teachers graduated and newly licensed each year and comparing this to the demand based on retirements and teachers leaving the profession (attrition), Minnesota has and continues to produce an overall surplus of teachers. However it should be noted that many factors go into the details of supply and demand for teachers in

Minnesota. These include location of vacancy, teachers moving out of Minnesota, graduates not applying for licensure and policy changes. All of these contribute to the continued demand for teachers.

Table 1 shows that actual retirement and implied attrition rates are both relatively low, and that the number of new hires into the profession ranged from approximately 2,000 to 2,400 over this time period. (The implied negative attrition in 2008 can reasonably be attributed to the large increase in retirements in that year and the lag in hiring enough new teachers.)

Table 1
Number of Teachers in Minnesota and Attrition Rates for Minnesota Teachers In Terms Of Retirements vs. New Hires

Year	2002	2003	2004	2005	2006	2007	2008
Total employed	55862	56142	56021	56042	55237	55633	55879
Retirements	1460	1063	1211	1293	1388	1410	2692
New hires	2366	2081	2011	2158	2262	2293	2408
Change in total employed		280	-121	21	-805	396	246
Implied attrition		738	921	844	1679	487	-530
Implied attrition %		1.3%	1.6%	1.5%	3.0%	0.9%	-0.9%
Retirement %		1.9%	2.2%	2.3%	2.5%	2.5%	4.8%

SOURCE: MDE 2009 Supply and Demand Report

But Table 2 shows that there are many more teachers being prepared by Minnesota teacher preparation programs than are being hired in a given year. For the years for which we have complete data, we can see that there are approximately 4,100 to 4,800 students graduating, and that even more licensure programs are completed since a given student can do more than one teacher education licensure program.

Table 2
Numbers of Students Graduating and Programs Completed in Minnesota Teacher Preparation Programs

Year	2004	2005	2006	2009
Number of programs completed	5018	5347	5169	4513
Number of students graduating	4514	4810	4650	4060

SOURCE: MDE 2009 Supply and Demand Report and MACTE: <http://mtqm.mnteacher.org/node/8>

Thus, there are about twice as many students graduating every year as there are new hires into the teaching positions in the State. Of course, many of these graduates seek and obtain positions in other states, but there are also many students who do their preparation in other states and then obtain licenses in Minnesota. Of the 10,140 total initial licensees in 2008, 32% were prepared out of state. While this is a significant proportion of the total, it should be noted that the proportion of annual licensees from out of state has been decreasing from a high of 41% in 2002. (Note that the number of initial licenses is larger than the number of licensure programs completed since licenses may also be granted to graduates from previous years.)

- It is important to note that the apparent surplus of supply also holds for licensure areas that are reported as being difficult to fill (e.g., Physics, Mathematics and Special Education), although the surplus is much smaller than it is for licensure areas such as English and Social Studies.

The 2009 Teacher Supply and Demand Surveys identified the following as perceived shortage areas. These are listed from districts' perceptions of the most to the least critical:

- Mathematics
- Physics
- Chemistry
- Special Education-EBD
- Science 5-8
- Mathematics 5-8
- Special Education-Early Childhood
- Deaf and Hard of Hearing

The MDE defines the replacement rate for a licensure area as the number of initial licenses granted in the licensure area divided by the total number of retirements in that area. (MDE 2009 Supply and Demand Report, p.21) Table 3 makes it appear that there is no shortage of supply in these areas of perceived shortage. However, we should note that in addition to retirement, teachers leave the profession pre-retirement (see Table 1). If we include an attrition factor then we get an adjusted replacement rate that shows that, even in the worst cases, there are two initial licenses granted for each position opened up due to retirement or attrition. (We make the simplifying assumption that the attrition per licensure area equals the overall attrition rate. More will be said on this in what follows.)

Table 3
Replacement Rates for Perceived Shortage Areas

Licensure area	Replacement rate	Adjusted replacement rate
Mathematics	6	3
Physics	4	2
Chemistry	4	2
Special Education-EBD	8	4
Science 5-8	19	10
Mathematics 5-8	6	3
Special Education-Early Childhood	5	3
Deaf and Hard of Hearing	3	2

SOURCE: MDE 2009 Supply and Demand Report

- Despite the apparently adequate supply at the state level, both overall and even in perceived shortage areas, many districts still request Special Permissions for Licenses. It is probable that these special permissions are largely used to cover the loss of a teacher through preretirement exit from teaching or migration to another district or school, both of which often give schools and districts insufficient time to fill vacancies through the usual hiring procedures. This is the key factor in the supply and demand equation: teachers in perceived shortage areas are difficult to replace because there is not a large enough pool of candidates to ensure that

schools and districts can hire a teacher that suits their particular needs. (It is important to note that the numbers of special permission requests per licensure area is correlated with the perceived shortage areas as identified by the survey of districts hiring needs. (MDE 2009 Supply and Demand Report, p. 14). This indicates that the survey report of perceptions of shortage areas is a reliable indicator of where districts and schools are experiencing difficulty in filling vacancies, regardless of the state-level adequate supply.)

However, it should be noted that “the number of special permissions granted by the Minnesota Board of Teaching tends to be decreasing ... [and that they represent only] 3.3% of all teachers teaching in Minnesota schools during the 2007-2008 school year.” (MDE 2009 Supply and Demand Report, p.39) This small and declining percent of the total amount of teacher FTE indicates that the trend is toward it being easier for schools and districts to fill teaching positions, even in perceived shortage areas. Although it should be noted that this reduction in special permissions may also be influenced by policy decisions and changes in the types of special permissions. (Note as well that the number of special permissions in perceived shortage areas has also declined at similar rates, justifying the simplifying assumption above concerning attrition rates in these areas. (MDE 2009 Supply and Demand Report, p. 37))

- There is no significant difference in the requests for special permissions by geographic region in the State, indicating that the supply and demand balance is roughly equivalent across regions. (MDE 2009 Supply and Demand Report, p.37) (The abovementioned correlation between special permissions and the results of the Teacher Supply and Demand Surveys warrants this use of the regional distribution of special permissions as an indicator of regional supply and demand.)

Of course, there are likely to be different supply and demand forces at work in different regions of the state, but these different forces do not yield any significant difference in the supply and demand balance in different regions.

- Overall teacher five-year attrition from the profession is approximately 30% in the State. This is considerably less than the 50% rate that is often anecdotally mentioned as the national rate.

The only region of the State where attrition appears to be significantly higher is the Southwest Central region, where it is approximately 40%. However, it is not clear whether the higher attrition rate in this region is actually significant, given the small number of teachers in a given cohort (approximately 45 since 2002). (MDE 2009 Supply and Demand Report, pp. 25-28)

It should be noted that these higher attrition rates early in a teacher's career are consistent with the low overall attrition rates reported above. This is because after eight or nine years the attrition rate falls off dramatically, and the large majority of teachers in the state have been teaching for at least that many years. (MDE 2009 Supply and Demand Report, p.25)

- Overall retirement levels remain low, ranging from 1.9% in 2003 to 4.8% in 2008. [See Table 1.] (MDE 2009 Supply and Demand Report, p.20)

The increase in 2008 is expected to continue in 2009 and 2010, but to begin to decline again. This is due to the distribution of ages for current teachers

and the median retirement age, which has remained stable at approximately 59 years. (Ingersoll and Perda 2009, p.15)

- NCES data projects only a modest increase in enrollments in K-12 through 2017, indicating that current rates of teacher preparation are adequate.

As can be seen in Table 4, below, the projected need for additional teachers (e.g. 101 more in 2011) reaches a peak at 641 in 2016, with a total of approximately 3100 additional teachers required by the year 2017. This is more than adequately covered by the number of newly licensed teachers from Minnesota teacher preparation programs alone (3424 initial licenses in 2008-09*), as can be seen by comparing this number to the typical size of the cohort of new teachers (2408 first-year teachers in 2008**).

* MACTE <http://mtqm.mnteacherred.org/node/8#completers>

** MDE 2009 Supply and Demand Report, p.25

Table 4
Projected Enrollment in Grades PK-12 in Public Elementary and Secondary (in thousands)

Year	2009	2010	2011	2012	2013	2014	2015	2016	2017
Minnesota*	826.3	826.0	827.5	831.7	837.9	846.3	855.2	864.7	874.1
Annual enrollment change	0.27%	0.04%	0.18%	0.51%	0.74%	1.00%	1.05%	1.11%	1.09%
Number of teachers needed*	55,726	55,702	55,803	56,087	56,504	57,070	57,669	58,310	58,946
Change in needed number of teachers	-153	-24	101	283	417	566	599	641	636
Number of teachers in 2008	55,879								
% Enrollment increase 2009-2017	5.5%								
Total increase in number of teachers 2009-17	3067								

* Assuming current student/teacher ratio

SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data (CCD), "State Nonfiscal Survey of Public Elementary/Secondary Education," 1999–2000 through 2005–06; and State Public Elementary and Secondary Enrollment Model, 1980–2005. (This data was prepared December 2007.)

- Alternative pathways to licensure are, at present, not playing a significant role in alleviating demand pressures, even in perceived shortage areas. It should be noted that increased numbers of alternative pathways are being developed, especially in the Twin Cities, however their effects are not yet evident.

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Minnesota Teacher Hiring Practices

Results of the Minnesota State Teacher Selection and
Placement Survey

Administered from March 14, 2010 through April 16, 2010

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Introduction

In March and April of 2010, the desirable qualities of teacher candidates, as judged by hiring officials at public school districts and charter schools, were assessed through an on-line survey. This report summarizes the results of the *Minnesota State Teacher Selection and Placement Survey* conducted with hiring officials throughout the state of Minnesota. The survey is a 17-item survey that addresses hiring officials' preferences in four domains: educational background features of candidates that are specific to the candidate (e.g. GPA), educational background features that are attributable to a candidate's teacher education program (e.g. the program's curriculum), professional qualifications of candidates (e.g. teaching experience), and personal attributes of candidates (e.g. communication skills).

To be eligible for the survey, a school or charter must have been listed in the Minnesota Department of Education's 2009 – 2010 *List of Minnesota School Districts*. Within that list, a school or charter must have been identified as a Minnesota Unit Type 01 (Independent Districts or Schools), Type 03 (Special Districts or Schools) or Type 07 (Charter Schools).

Three hundred and thirty eight districts were randomly selected from the 2009 – 2010 *List of Minnesota School Districts*. This list provides contact information for the individual in charge of the district. In some cases that individual re-directed us to another person to fill in the survey who was deemed more appropriate. Two-thirds of the surveys (66%) were sent to public school Superintendents. Other groups consisted of charter district Directors (29%); public school Principals (2%); public school Human Resource Directors (2%); and Other (1%) (which included job descriptions

such as Program Administrator, Director of Administration, and Director of Teaching and Learning).

Response Rates

The survey was administered electronically between March and April of 2010. Of the 338 hiring officials sampled and sent email invitations to take the survey, 311 were successfully sent (27 surveys were returned as undeliverable). Of these, 105 completed surveys were returned for a response rate of 34 percent (see Table 1). Response rates by type of hiring official (Superintendents, Directors, Principals, etc.) were not calculated because the surveys were submitted anonymously.

Hiring officials from independent districts or schools responded to the survey at higher rates than those from charter schools. While our sample was constructed to represent the ratio of Type 07 to Types 01 or 03 districts in the population (roughly one-third to two-thirds, respectively), over three quarters of respondents (77%) were from Type 01 or 03 districts.

Table 2 contains summary statistics for the response rates to each open-ended question. The particular responses to these items are presented in the Appendix. These responses have been analyzed for content themes and the results of this analysis are reflected in the subject headings for the open-ended items.

Table 1
Minnesota State Teacher Selection and Placement Survey Response Rates

	Total	Number Sampled*	Number Responded	Response Rate
District Hiring Officials (01, 03 and 07)	486	311	105	34%
Minnesota Unit Type 01 or 03	332	208	81	39%
Minnesota Unit Type 07	154	103	24	23%

*Note: number sampled is based upon total surveys delivered

Table 2
Summary of Responses to Open-ended Items

Items 4a, 7a, 9	Comment	No Comment	Percent Commenting
Are there any other features of a candidate, not listed above, that you judge to be important when hiring?	46	59	43.8%
Are there any other features of a teacher education program, not listed above, that you judge to be important when hiring?	17	88	16.2%
Does your district prefer candidates from particular (sic) teacher education programs (other than the Minnesota programs listed)?	2	103	1.9%

Limitations

This survey was designed to identify the types of traits that hiring officials look for in a teacher candidate. A number of considerations should be kept in mind when drawing larger inferences from this study. First, one should keep in mind that the opinions summarized in this report reflect a single person's opinions at a particular time. While some districts have hiring procedures that rely upon the judgments of just one individual when making hiring decisions, many districts have procedures that involve a number of individuals and/or a number of steps in the decision making process. Each of these may affect the actual criteria that are used in making a final hiring decision.

One should also keep in mind that many of the questions on this survey concern qualities that are identified through a portfolio. How the person moves from this point through the interview process is a distinct question. The main focus of the survey was the qualifications and qualities of a candidate that would be required for a hiring official to consider interviewing the candidate. The survey did not aim to address the question of what qualities a candidate needs to demonstrate in an in-person interview.

Finally, there is also a question of the relationship between hiring criteria and success as a teacher. Although it may be an obvious point, it is nevertheless worth noting that what districts look for may not directly translate into a successful teacher. Thus, this survey is not an answer to the question of what qualities make a successful teacher.

About the Participants

Participants were selected from the Minnesota Department of Education's 2009 – 2010 *List of Minnesota School Districts*. Minnesota Unit Type 01 (Independent Districts or Schools), Type 03 (Special Districts or Schools) or Type 07 (Charter Schools) were selected to participate from among all units on this list because of the types of teachers hired by these units – general education K-12 teachers. Other units were identified as either hiring for special purposes (e.g., vocational co-ops, special education co-ops, state schools for the deaf and blind) or as units not hiring K-12 teachers (technical and community colleges) and were not included in the survey.

Key Findings

- Participants were from rural (66%), urban (13%) and suburban (21%) districts. This distribution approximates that reported by the National Center for Educational Statistics (NCES) for 2005 – 2006 for the state. Here we find that town and rural districts constitute 71%, urban districts (large, medium and small) constitute 17%, and suburban districts (large, medium and small) constitute 12% of the state's districts. Differences between this national report and the survey results may be due largely to self-reporting in the survey in contrast with the very specific criteria for classification given by the NCES. For more, see: <http://nces.ed.gov/ccd/ccdLocaleCodeDistrict.asp>.
- Over three quarters (77%) of the Type 01 school respondents were from rural districts, while nearly half (46%) of the 07 respondents were from urban districts.

- Most hiring officials (60%) make three or fewer hires per year. The majority (81%) of these districts are rural.
- A small proportion (17%) of districts hire 10 or more teachers a year. Three quarters (72%) of these are suburban schools. This could be indicative of either significant growth in these districts or a high rate of turnover in the teaching staff.
- Even given a very conservative estimate of hires per year (assuming the minimum number of hires per year for each category), hiring officials can be estimated to be making 1,378 teacher hires annually.

Table 3
Hiring Officials' Rates of Hires Per Year

Hires Per Year	N (% of N)	%
0 – 3	63	60
<i>Rural</i>	51 (81)	
<i>Suburban</i>	5 (8)	
<i>Urban</i>	7 (11)	
4 – 9	24	23
<i>Rural</i>	15 (62)	
<i>Suburban</i>	4 (17)	
<i>Urban</i>	5 (21)	
10 or more	18	17
<i>Rural</i>	3 (17)	
<i>Suburban</i>	13 (72)	
<i>Urban</i>	2 (11)	

Hiring Preferences Results

District Superintendents, Charter Directors, Principals, Human Resource Directors, Program Administrators, Directors of Administration, and Directors of Teaching and Learning comprised the group of hiring officials included in the survey. These hiring official were asked to assess qualities of teacher candidates that included educational background features specific to candidates (such as the candidate's GPA) as well as those more generally attributable to the candidate's teacher education program (such as program curriculum), professional qualifications of candidates (for example, letters of recommendation) and personal attributes of candidates (such as a candidate's communication skills).

Key Findings

- Hiring officials were unambiguous when it came to identifying a number of features and qualifications as essential for a job candidate to have. In particular, nearly all hiring officials (87%) identified licensure in the subject to be taught as essential, as well as having an undergraduate major in the subject to be taught (71%) (Tables 4 and 5). While these may not be surprising (given that they are legally mandated with the exception of special permissions hires), we also find that respondents felt similarly about work ethic and communication skills. These latter two features were identified as essential by nearly three-quarters of respondents (73% and 70%, respectively). And in both cases, all remaining respondents identified these two personal attributes as very important (Table 6).
- A number of other features were endorsed by the vast majority of respondents as at least very important, if not essential. In this category we find that 98% of respondents said that the potential for collaborative

work is either very important or essential. This is true as well for organizational skills (91% said they are either very important or essential) (Table 6). Demonstrating subject knowledge in an interview (95%) and the quality of the student teaching experience (87%) also stood out as either very important or essential (Tables 5 and 7).

- At the other extreme, we find more than half (52%) of the respondents claiming that it is not important for a candidate to be a resident in the school district, while another 29% said it is only somewhat important. Of the 17% of respondents that said it was very important (although not essential) for a candidate to be a resident of the district, all were in rural districts (Table 6).
- Similarly, over half of all hiring officials (59%) said that it is not important that a candidate has attended a teacher education program near their district, with another 33% saying that this feature is only somewhat important (Table 8).
- While over half of all respondents (56%) reported having schools in their district that are not making adequate yearly progress, only a small minority (17%) of these have recruitment and placement practices specifically for these schools (Table 9).
- Of the districts that reporting having schools that are not making adequate yearly progress, nearly two-thirds (64%) rural districts, 22% are suburban districts and 14% are urban districts. This distribution mirrors the distribution of rural (66%), suburban (21%) and urban (13%) districts responding to the survey, suggesting that this concern is shared equally among these three types of districts.

- When asked if their districts try to find candidates from alternative licensure options (see Appendix, item 10 of the Survey Instrument), 85% of hiring officials claimed they did not. This does not entail that candidates from alternative pathways to licensure are either excluded or treated differently than candidates from traditional programs when they do apply. No correlation was found between trying to find such candidates and type of district (Type 01/03 or Type 07).
- While contributing to the workforce diversity was seen by 53% of respondents as either a very important or essential feature of a candidate (Table 6), over three quarters of respondents said that the diversity of the students in a teacher education program is either not an important feature (32%) or only somewhat of an important feature (44%) of a teacher education program that they considered when hiring (Table 8).
- When asked if their district preferred candidates from particular Minnesota teacher education programs, 85% of respondents claimed to have no preferences.
- Of the features of candidates that the vast majority of respondents identified as either very important or essential – work ethic, communication skills, potential for collaborative work, organizational skills, quality of the student teaching experience and demonstration of subject knowledge in interview – only the potential for collaborative work and the quality of the student teaching experience were significantly correlated with any demographic features of the respondents. In particular, while the quality of the student teaching experience was viewed as either very important or essential by most respondents, this feature was viewed as slightly more important by Type 01/03 districts than by Type 07. It was also viewed as slightly

more important by rural districts than suburban, and by suburban than urban districts. The potential for collaborative work, while viewed as very important or essential by 98% of respondents, was viewed as slightly more important by urban than suburban, and by suburban than rural districts.

Summary of Open-Ended Comments

Nearly half (44%) of all respondents offered additional comments when asked whether there were other features of a candidate that were not already identified that they judged to be important when hiring. A number of general categories of comments were identified from among these. Having a positive attitude, a giving spirit and being a team player were among the personal attributes of a candidate that were frequently identified. Being able to motivate and build relationships with students, pedagogical innovation, a sense of professionalism and compatibility with the school's mission (including compatibility with a rural community setting) were some of the professional attributes that were acknowledged. (See the Appendix, 'Open Ended Comments' for more details.)

When asked if there were any other features of a teacher education program, not listed, that they judged to be important when hiring, 16% of respondents identified some feature as important. While no clear themes emerged from these responses, the features that were identified are also listed in the Appendix.

Table 4

Hiring Officials' Judgments Concerning the Importance of Various Educational Background Features (Given in Percentage of Respondents)

	Not Important	Somewhat Important	Very Important	Essential	Mode	M(SD)
GPA	5	53	39	3	2	2.4 (.6)
Undergraduate Major in Subject to be Taught	1	6	22	71	4	3.6 (.6)
Undergraduate Minor in Subject to be Taught	14	39	35	12	2	2.4 (.9)
Advanced Degree	23	59	16	1	2	2.0 (.7)
Basic Skills Test	11	31	26	32	4	2.8 (1.0)

Note: Scale is 1 = 'Not Important', 2 = 'Somewhat Important', 3 = 'Very Important' and 4 = 'Essential'.

Table 5

Hiring Officials' Judgments Concerning the Importance of Various Professional Qualifications (Given in Percentage of Respondents)

	Not Important	Somewhat Important	Very Important	Essential	Mode	M(SD)
Teaching Related Experience	2	25	55	18	3	2.9 (.7)
Professional Letters of Reference	1	20	52	27	3	3.1 (.7)
Personal Recommendations	8	24	53	15	3	2.8 (.8)
Licensure in Subject to be Taught	0	1	13	87	4	3.9 (.4)
Licensure Exam Scores	11	42	41	8	2, 3	2.5 (.8)
Quality of Teaching Portfolio	13	26	50	12	3	2.6 (.9)
Subject Knowledge Demonstrated in Interview	1	4	39	56	4	3.5 (.6)
Federal "Highly Qualified" Designation	13	27	30	31	4	2.8 (1.0)
Qualified to Teach Multiple Subjects	5	30	52	14	3	2.7 (.8)
Other Work Experience	3	46	48	4	3	2.5 (.6)

Table 6

Hiring Officials' Judgments Concerning the Importance of Various Personal Attributes (Given in Percentage of Respondents)

	Not Important	Somewhat Important	Very Important	Essential	Mode	M(SD)
Professional or Career Goals	1	22	68	10	3	2.9 (.6)
Work Ethic	0	0	27	73	4	3.7 (.4)
Potential for Collaborative Work	0	2	46	52	4	3.5 (.5)
Communication Skills	1	0	30	70	4	3.7 (.5)
Willingness to be Involved in Extra-curricular Activities	4	31	55	11	3	2.7 (.7)
Demonstrated Organizational Skills	0	9	64	28	3	3.2 (.5)
Community Involvement or Leadership	4	30	60	7	3	2.7 (.7)
Contribution to Workforce Diversity	9	39	42	11	3	2.6 (.8)
Residence in School District	52	30	17	1	1	1.7 (.8)

Table 7

Hiring Officials' Judgments Concerning the Importance of Academic Features of a Candidate's Teacher Education Program (Given in Percentage of Respondents)

	Not Important	Somewhat Important	Very Important	Essential	Mode	M(SD)
Overall Reputation of the Program	5	40	47	9	3	2.6 (.7)
Program Curriculum	6	32	54	9	3	2.7 (.7)
Strength of Program in Particular Area of Teaching	5	27	60	9	3	2.7 (.7)
Quality of Faculty in Program	14	43	39	4	3	2.3 (.8)
Quality of Student Teaching Experience	2	12	51	36	3	3.2 (.7)
Program's Reputation in Educational Research	17	58	22	3	2	2.1 (.7)

Table 8

Hiring Officials' Judgments Concerning the Importance of Non-Academic Features of a Candidate's Teacher Education Program (Given in Percentage of Respondents)

	Not Important	Somewhat Important	Very Important	Essential	Mode	M(SD)
Past Success with Teachers Hired from Program	9	36	47	9	3	2.5 (.8)
Proximity of the Program to the District	60	33	8	0	1	1.5 (.6)
Continued Professional Support for the Teacher After Placement.	21	38	38	3	3	2.2 (.8)
Diversity of the Students in the Program	32	44	18	6	2	2.0 (.9)
Professional Relationship Between Someone in the Program and Someone in the District	30	48	21	1	2	1.9 (.7)
Personal Relationship Between Someone in the Program and Someone in the District	40	44	16	0	2	1.8 (.7)

Table 9

Recruitment and Placement Practices for School Not Making Adequate Yearly Progress Toward All Students Proficient by 2014 (Given in Percentage of Respondents)

	No	Yes
Does your district have schools that are not making adequate yearly progress?	44	56
Does your district have recruitment and placement practices specifically for these schools?	60	33

Appendix

Open Ended Comments

Survey Instrument

Open Ended Comments

4a. Are there any other features of a candidate, not listed above, that you judge to be important when hiring?

Professionalism

- Professional appearance ...
- Demonstrated interest and dedication to the teaching profession...i.e. involvement in professional organizations that further knowledge and art of teaching.
- Appearance, dress at interview ...
- Sense of professionalism ...
- Indicators of integrity.

Institutional compatibility

- Do they know something about the school they are interviewing ...
- Fit with the institution.
- Knowledge of or willingness to learn more about Montessori and/or IB (guiding philosophies of our school).
- Loyal to the district. No past union leadership roles or if they do, they must have a history of working for the best result for students and the district. Must have the attitude that I will work hard and do my best and not hide behind a union.
- Compatibility with mission of school, compatibility with discipline philosophy of school, commitment to academics ...
- Montessori Certification.

Team Player

- Willingness to work as a team and take on committee duties.
- Ability to show he/she is a team player ...
- We try and determine how they will work on a team (of adults).
- Ability to get along/work with others.
- Personality and ability to interact with the interview team.
- Working with parents, keeping them continually updated.

Compatibility with Rural Community

- Will the candidate fit into our community? That is something we try to discern because we are a small, rural community and small and rural is not for everybody.
- Ability to fit into a small rural schools setting.
- During the interview the candidate must demonstrate a sense of “reality” when discussing the teaching profession. I want the candidate to know what they are going to be dealing with if they accept a position in rural school district. Limited resources, curriculum materials, field trips, etc.

Positive Attitude

- Positive Attitude.
- Passion for being in the field.
- Positive Personality, Friendly Approach.
- Positive personal attitude and approach ...
- Attitude toward the work - a can-do attitude with resiliency. A willingness to learn - ongoing personal and professional development. Character - good character traits of honesty, integrity, and serving as a positive role model for youth.
- Relentless in the pursuit of student achievement. Uses failures as a learning opportunity and builds on this to increase future successes. Uses data to drive and inform instruction. Uses assessment as a tool to promote academic success.
- Fundamental belief that all students can learn.
- Personal life satisfaction ...

Pedagogical Innovation

- I like to look for their want to try things in education that are past the usual practices. Are they willing to take some risks, look to the future, and are they passionate about their subject area. The students need this.
- Creativity in lesson development ...
- Ability to be creative and think beyond today and look at what tomorrow’s learning environment might be ...
- Knowledge and use of pedagogies such as differentiated instruction, SIOP, Envoy, etc.

Diversity and Cultural Competence

- Commitment to diversity: experiences with other cultures, abilities, demographics ...
- It is essential for candidates to have experience in working with students from diverse backgrounds.

- Cultural competence of the teacher and the ability to integrate multicultural knowledge in day-to-day instruction.
- Ability and experience in working with a diverse student population, demonstrated ability to meet the needs of ALL students, familiarity and knowledge regarding effective instructional strategies, ability to engage and inspire students in the learning, knowledge understanding and desire to grow in understanding other cultures, confidence in examining and discussing impact of race in relation to student achievement and classroom instruction, takes responsibility for student achievement in his/her classroom.

Student Relationships

- Relationship to students—if the teacher cannot relate well to the students...it is very difficult for teaching to take place.
- Experience dealing with very challenged students. Experience dealing with gang-affiliated students.
- Ability to motivate students.
- Experience working with children.
- Demonstrated ability to build relationships with students; purpose for teaching needs to be student growth.
- Demonstrates a commitment to the learning of all students ...
- Able to establish and maintain positive relationships with students. Builds on student strengths to promote and build success. Desire to work with students from low socioeconomic background.

Bilingual

- As an Immersion School, the level of skill in the target language is essential.
- Bilingual.
- Fully proficient in Spanish and English.

Classroom Management Skills

- That the reference letters refer to ability to manage classrooms and being on on-going learner.
- A communicable plan for classroom management ...

Giving Spirit

- Activities that they have been involved with or have volunteered for. Does the individual have a willingness to volunteer and give of oneself.
- Being “other centered” or exhibiting a spirit of service...

Miscellaneous

- Do they understand what the expectations are for a teacher? Can they identify how they add value to a child's education experience? Are they in the field of teaching for themselves or for the students? Bottom line: What is their purpose for teaching?
- I expect teachers to model the type of adult we want our children to become. (A minor in a subject does not qualify the person to teach the subject.)
- What college they graduated from.
- Experience in closing the achievement gap and ensuring academic success for all learners.
- We offer interviews to all Veterans in order to be in compliance with the Veteran's Preference Act.
- Graduate degree in subject matter or content rather than just a graduate degree in education or curriculum.

7a. Are there any other features of a teacher education program, not listed above, that you judge to be important when hiring?

- Recommendation from supervisor... quality of classroom management training, unfortunately, this is mostly non-existent.
- I would be more inclined to be impressed with programs that focused on the type of teachers they were producing over the experiences being offered to its students.
- We depend on the program to select people that appropriate for the classroom. We provide new teachers with a mentor for three years and require they attend the New Teacher Class each month of their first year on the job.
- Requirement to become certified as a Montessori teacher
- The program itself focuses on recognizing and meeting students' needs.
- Current and technologically adept
- Commitment to recruit diverse pool of candidates
- Evidence that the teacher education program aligns with best practices developed within the district (UbD, NUA, SIOP, differentiated instruction, race-based diversity training)
- Program must have strong focus on cultural competency. The program works directly with HR on student teacher placement.
- It must be an accredited educational institution
- As an Immersion School, I need to know if schools use a proficiency exam before placing student teachers

- Amount of field experience students have, not only students teaching, but other experiences within the schools; not just one school, but various to see and experience the differences in facilities and systems.
- Is it a “hands on” learning or educational program or more book and philosophy learning - learning by doing is better.
- Developing program partnerships with the placement program.
- We do not look at candidates who received their educational certification from only a one-year Master’s program.
- How are we supposed to know any of this. All we know is general reputation.
- Tell candidates NOT to e-mail their credentials as attachments unless they are instructed to do so. I honestly will simply delete their applications...period! I have had many addressed in the cover letter to: To Whom it Concerns Since I state my name in the ad, I am assuming they are just showing a lack of maturity or lack of work ethic. I won’t stand for either.

9. Does your district prefer candidates from particular (sic) teacher education programs (other than the Minnesota programs listed)?

- University of North Dakota
- North Dakota State University
- University of Wisconsin Eau Claire
- University of Wisconsin River Falls
- University of Wisconsin Stout

Survey Instrument

Minnesota Teacher Selection and Placement Survey

Thank you for taking the time to complete this survey. As the hiring official for your school district or charter school, we are interested in what you can tell us about teacher hiring practices. Please select your answers based upon your recent experiences and what you judge to be important in making hiring decisions. (For purposes of this survey, both school districts and charter schools will be referred to as "districts" following Minnesota Department of Education usage.)

The first series of questions asks you to reflect upon candidates you hire and the educational, professional and personal qualities of these candidates that make them desirable.

1. How important are the following educational background features when hiring a candidate? Click one per line.

	Not important	Somewhat important	Very important	Essential
Grade point average	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Undergraduate major in subject to be taught	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Undergraduate minor in subject to be taught	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Advanced degree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Basic Skills Test (Pre-Professional Skills Test)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

2. How important are the following professional qualifications when hiring a candidate? Click one per line.

	Not important	Somewhat important	Very important	Essential
Teaching related experience	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Professional letters of reference	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Personal recommendations	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Licensure in subject to be taught	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Licensure exam scores	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Quality of teaching portfolio	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Subject knowledge demonstrated in interview	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Federal "Highly Qualified" designation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Qualified to teach multiple subjects	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other work experience	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

3. How important are the following personal attributes when hiring a candidate? Click one per line.

	Not important	Somewhat important	Very important	Essential
Professional or career goals	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Work ethic	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Potential for collaborative work	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Communication skills	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Willingness to be involved in extra-curricular activities	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Demonstrated organizational skills	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Community involvement or leadership	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Contribution to workforce diversity	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Residence in school district	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

4. Are there any other features of a candidate, not listed above, that you judge to be important when hiring?

- ☐ Yes
☐ No

4a. If yes, please specify.

The next series of questions asks you to reflect upon candidates you hire and any qualities of their teacher education program that make them desirable.

5. How important are the following academic features of a teacher education program when hiring? Click one per line.

	Not important	Somewhat important	Very important	Essential
Overall reputation of program	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Program curriculum	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Strength of program in particular area of teaching (e.g., strength in math)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Quality of faculty in program	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Quality of student teaching experience	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Program's reputation in educational research	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
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6. How important are the following non-academic features of a teacher education program when hiring?
Click one per line.

	Not important	Somewhat important	Very important	Essential
Past success with teachers hired from program	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Proximity of the program to the district	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Continued professional support for the teacher after placement	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Diversity of the students in the program	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Professional relationship between the district and the program	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Personal relationship between someone in the program and someone in the district	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

7. Are there any other features of a teacher education program, not listed above, that you judge to be important when hiring?

- ☐ Yes
☐ No

7a. If yes, please specify.

8. Does your district prefer candidates from particular teacher education program(s)?

- ☐ Yes (if yes, please continue with question #9)
☐ No (if no, please skip to question #10)

9. If yes, which? (Select all that apply.)

- | | |
|--|---|
| <input type="checkbox"/> Augsburg College | <input type="checkbox"/> Minnesota State University, Moorhead |
| <input type="checkbox"/> Bemidji State University | <input type="checkbox"/> North Central University |
| <input type="checkbox"/> Bethany Lutheran College | <input type="checkbox"/> Northwestern College |
| <input type="checkbox"/> Bethel University | <input type="checkbox"/> Southwest Minnesota State University |
| <input type="checkbox"/> Capella University | <input type="checkbox"/> St. Catherine University |
| <input type="checkbox"/> Carleton College | <input type="checkbox"/> St. Cloud State University |
| <input type="checkbox"/> College of Saint Benedict/Saint John's University | <input type="checkbox"/> St. Mary's University of Minnesota |
| <input type="checkbox"/> College of St. Scholastica | <input type="checkbox"/> St. Olaf College |
| <input type="checkbox"/> Concordia College | <input type="checkbox"/> University of Minnesota - Crookston |
| <input type="checkbox"/> Concordia University | <input type="checkbox"/> University of Minnesota - Duluth |

- ☐ Crown College
☐ Gustavus Adolphus College
☐ Hamline University
☐ Martin Luther College
☐ Metropolitan State University
☐ Minnesota State University, Mankato
☐ Other(s):

☐ University of Minnesota - Morris
☐ University of Minnesota - Twin Cities
☐ University of St. Thomas
☐ Walden University
☐ Winona State University

10. Does your district try to find candidates from alternative licensure options?

- ☐ Yes (if yes, please continue with question #11)
☐ No (if no, please skip to question #12)

11. How important are the following features of alternative licensure options when hiring? Click one per line.

	Not important	Somewhat important	Very important	Essential
Reputation of licensure option	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Mentoring	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Field-based training	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Candidates with previous work experience	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Candidates with diverse educational backgrounds	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Past success with teachers hired from licensure option	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Rigor of program requirements	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

The next series of questions concern your recruitment and placement practices for schools in your district that are not currently making adequate yearly progress toward all students being proficient in 2014.

12. Does your district have schools that are not making adequate yearly progress? Alternatively, is your charter not making adequate yearly progress?

- ☐ Yes (please continue with question #13)
☐ No (please proceed to question #15)

13. Do you have teacher recruitment and placement practices specifically for these schools?

- ☐ Yes (please continue with question #14)
☐ No (please proceed to question #15)

14a. How important are the following educational qualifications in the recruitment and placement practices for these schools?

	Not important	Somewhat important	Very important	Essential
Grade point average	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Undergraduate major in subject to be taught	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Undergraduate minor in subject to be taught	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Advanced degree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Basic Skills Test (Pre-Professional Skills Test)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

14b. How important are the following professional qualifications in the recruitment and placement practices for these schools?

	Not important	Somewhat important	Very important	Essential
Teaching related experience	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Professional letters of references	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Personal recommendations	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Licensure in subject to be taught	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Licensure exam scores	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Quality of teaching portfolio	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Subject knowledge demonstrated in interview	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Federal "Highly Qualified" designation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Qualified to teach multiple subjects	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Alternative licensure	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other work experience	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

14c. How important are the following personal qualifications in the recruitment and placement practices for these schools?

	Not important	Somewhat important	Very important	Essential
Professional or career goals	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Work ethic	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Potential for collaborative work	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Communication skills	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Willingness to be involved in extra-curricular activities	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Demonstrated organizational skills	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Community involvement or leadership	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Contribution to workforce diversity	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Residence in school district

☐☐☐☐

- 15. Which type of district do you work for?

- 16. On average, how many hires per year would you say your district makes?

- 17. How would you characterize your school district?

Finished. Thank you.

Minnesota Teacher Preparation Programs

A Component of the Teacher Preparation Project
Undertaken for the Minnesota Office of Higher Education

July 2010

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Introduction

The goal of this study was to answer some key questions about the effectiveness of teacher preparation programs in Minnesota. Areas of focus were:

- Characteristics of students entering these programs
- Alignment of program curricula with both state learning standards and licensure requirements
- Identification of best practices in teacher preparation, and alignment of programs with these best practices

We found that the data required to properly answer these questions either does not currently exist or is not available in a uniform format. In addition, we learned that some of these questions presuppose structures and relationships in K-12 education that do not exist in Minnesota. Despite these challenges, much was learned about how to reformulate these questions so as to get to the ultimate goal: an evaluation of the effectiveness of the state's teacher education programs. But more than just a reformulation of the questions will be required; in addition, there needs to be data that will help provide clear answers. Fortunately, the Minnesota Department of Education, in partnership with the Office of Higher Education, Office of Enterprise Technology, Department of Employment and Economic Development, as well as the P-20 Education Partnership and the State Advisory Council on Early Childhood Education and Care, has very recently received funding to develop a longitudinal data system that is a key step in providing the needed data. In addition, the Board of Teaching is moving forward with a redesigned program approval system requiring uniform data from licensure programs, and thereby allowing for meaningful analysis of program characteristics.

Summary of Literature Review

A literature review was conducted to examine reports and analyses of best practices for improving student achievement by teacher preparation programs nationally. What follows is a description of the key findings of that review. The bibliography for this literature review is contained in the Appendix.

Key Findings

- It will not be surprising to anyone to learn that there is a vast and quickly growing body of literature on best practices for improving student achievement by teacher preparation programs. Moreover, it should not be surprising that there is no perfect consensus view presented by the scholars and scientists who have performed this research. This is, in large part, due to the fact that best practices are difficult to clearly articulate when the goals of teacher preparation are themselves neither straightforward nor universally agreed upon. While it may seem obvious that the goal of a teacher preparation program is to graduate teachers who then teach well, the difficulty arises when we try to be specific and concrete about what it means to teach well. And the problem is not completely solved by saying that to teach well is to improve student achievement, for then one has merely transformed the problem into giving an adequate and agreed upon account of student achievement.
- Given this complex context for establishing best practices, it is notable and encouraging that there is an emerging view that teacher preparation programs have indeed often fallen short in providing the best training for teachers, and that there are a reasonably small number of practices

that are being put in place in many programs that are critical to improving teacher preparation programs. One of these, and arguably the most important, is that programs train their students through a strongly enhanced focus on clinical practice. This is the process of learning to teach by teaching in a real classroom with expert guidance and feedback. Such clinical practice carefully integrates what the student teacher has learned about teaching and how students learn.

- Two of the most influential contemporary analyses of teacher preparation best practices are to be found in the work of Linda Darling-Hammond and her colleagues (in particular in her 2010 report), and the work of Arthur Levine as represented by his 2006 report. While there is broad agreement on some of the key components that constitute these best practices – as we shall see from the comments from Secretary Duncan below – there is of course no detailed set of recommendations that researchers have signed off on. Thus, we expand on the comments of Secretary Duncan by examining the recommendations of Darling-Hammond and Levine.

Remarks of Education Secretary Duncan

In October 2009, Secretary Arne Duncan delivered a speech “Teacher Preparation: Reforming the Uncertain Profession” at the Columbia Teachers College. He outlines what he takes to be the best practices as follows.

In the end, I don't think the ingredients of a good teacher preparation are much of a mystery anymore. Our best programs are coherent, up-to-date, research-based, and provide students with subject mastery. They have a strong and substantial field-based program in local public schools that drives much of the course work in classroom management and student learning and prepares students to teach diverse pupils in high-needs settings. And these programs have a shared vision of what constitutes good teaching and best practices—including a single-minded focus on improving student learning and using data to inform instruction. (Duncan,

2009, retrieved from
<http://www2.ed.gov/news/speeches/2009/10/10222009.html>)

His description of a “substantial field-based program in local public schools” is exactly what Darling-Hammond refers to as the “practice in practice” clinical component that is key to successful programs. As we shall see in the next section, most of the other elements of best practices that Duncan lists are prominent in Darling-Hammond’s and Levine’s work. The one element that Duncan adds is the use of data to inform instruction, however this item is implicit in their research, and most likely highlighted by Duncan for various policy reasons.

Best Practices in Teacher Preparation Programs

In her 2010 article “Teacher Education and the American Future”, Linda Darling-Hammond presents a list of best practices in teacher preparation programs, drawing on her research and the emerging expert consensus in the field.

She cites with approval this list of what is essential for best practices from a study in New York City:

- Programs’ careful oversight of the quality of student teaching experiences
- The match between the context of student teaching and candidates’ later teaching assignments, in terms of grade levels, subject matter, and type of students
- The amount of coursework in reading and mathematics content and methods of teaching
- A focus in courses on helping candidates learn to use specific practices and tools that are then applied in their clinical experiences
- Candidates’ opportunities to study the local district curriculum
- A capstone project (typically a portfolio of work done in classrooms with students)

- Programs' percentage of tenure-line faculty, which the researchers viewed as a possible proxy for institutional investment and program stability

This list is then compared to similar results compiled by other sets of researchers:

[These researchers] have found that powerful teacher education programs have a clinical curriculum as well as a didactic curriculum. They teach candidates to turn analysis into action by applying what they are learning in curriculum plans, teaching applications, and other performance assessments that are organized around professional teaching standards. These attempts receive detailed feedback, with opportunities to retry and continue to improve, and they are followed by systematic reflection on student learning in relation to teaching. (Darling-Hammond, 2010, p.40)

In Darling-Hammond's (2010) estimation, "One thing that is clear from current studies of strong programs is that learning to practice *in* practice, with expert guidance, is essential to becoming a great teacher of students with a wide range of needs." (p. 40)

This emphasis on practice is also central to the recommendations presented by Arthur Levine. In his 2006 report, "Educating School Teachers", he presents a set of recommendations for a successful teacher preparation program. (Levine 2006, pp.9-10) (Comments follow each recommendation.)

- Transform education schools from ivory towers into professional schools focused on school practice
 - This mirrors Darling-Hammond's emphasis on practice in practice, and highlights the need to treat teacher education as professional clinical training.
- Focus on student achievement as the primary measure of the success of teacher education programs

- Note that this does not simply identify student achievement with performance on standardized tests, although such tests will almost inevitably be at least a component of how student achievement is measured.
- Putting in place the longitudinal data systems that would support this focus on student achievement would allow “... us to begin answering a number of basic, but still unanswered, questions about teacher education, including: What type of teacher preparation is most effective in promoting classroom learning? What curriculum produces the best teachers? What faculty qualifications are the most helpful?” (Levine, p.9)
- Make five-year teacher education programs the norm
 - This is to allow for both content mastery and the needed education in teaching and child development.
- Establish effective mechanisms for teacher education quality control
 - The emphasis here is on increasing the rigor of program accreditation, a process that would also require the same longitudinal data systems that would allow for tracking of the teaching effectiveness of graduates of programs.
- Close failing teacher education programs, strengthen promising ones, and expand excellent programs. Create incentives for outstanding students and career changers to enter teacher education at doctoral universities
 - This final recommendation stands out as distinct from the recommendations made by Duncan and Darling-Hammond, and is based on Levine’s research that shows a correlation between a teacher being trained at a doctoral institution and increased growth in achievement for that teacher’s students.

With the comments of Duncan and the recommendations of Darling-Hammond and Levine, we have three themes that emerge:

- An enhanced focus on the role of practice
- The importance of subject mastery in addition to knowing how to teach and how students learn
- The value of up-to-date research-based teacher preparation programs

We can add to these three:

- The focus on K-12 student learning (as a function of teachers graduating from a program) as a measure of program success

This last is an element not explicitly listed by Darling-Hammond, but prominent in Duncan and Levine and certainly implicit in her findings.

This gives us four themes that can be identified as emerging best practices in teacher preparation programs.

Analysis

The analysis component of this project consists of four topics:

- An analysis of teacher preparation program admission criteria and yield rates to determine the academic standing of incoming students (this should include any changes over time to increase the rigor of these criteria)
- An analysis of the actions by teacher preparation programs to align curriculum with State learning standards
- An analysis of actions by the Board of Teaching to align licensure requirements and program curriculum
- An analysis of the alignment of teacher education programs with best practices as identified in the literature review, including efforts to support graduate induction, mentoring and professional development

Admission Criteria and Yield Rates

This analysis cannot be completed at the institutional and program level because the data is not available. The Minnesota Association of Colleges for Teacher Preparation (MACTE) does collect some of this data, but does not make public data for the 31 individual institutions, or for the 646 undergraduate and 307 graduate programs that these institutions collectively offer. (See <http://mtqm.mnteacher.org/node/8> for the data that is available.)

However, MACTE does make public cumulative data about GPAs of program applicants:

The minimum GPA required for admission into MACTE teacher education programs varies by institution and program. On average, the minimum GPA required by programs for admission into undergraduate programs is 2.57, and 2.80 for graduate programs. However, admission to a teacher preparation program can be

competitive. The actual average GPA of teacher education candidates admitted into programs is actually 3.31 for undergraduate programs and 3.53 for graduate programs. (Retrieved from <http://mtqm.mnteacher.org/node/5>)

These GPAs for students actually admitted into the programs indicate that, at least at the collective level, there is evidence that Minnesota's teacher preparation programs are admitting well-qualified students.

When MDE completes the current longitudinal data project mentioned earlier, the institutional and program level data will be available to evaluate the academic standing of these students at the desired level of detail.

This grant will allow us to put in place the final pieces of our longitudinal data systems so we can follow students from kindergarten into college and careers," said Commissioner Alice Seagren. "It will provide us with critical information to measure whether students are being successfully prepared by our P-12 educational system and will also allow the department to create more user friendly access to data for parents, educators and researchers. (Retrieved from http://education.state.mn.us/MDE/About_MDE/News_Center/Press_Releases/017454)

Thus, there will be data on students graduating from secondary schools or undergraduate programs in Minnesota and then entering undergraduate and graduate teacher preparation programs in the state. This data will allow for a detailed analysis of the academic standing of these Minnesota students entering Minnesota teacher preparation programs.

Aligning Programs with State Learning Standards

This requested analysis presupposes structures and relationships in K-12 education that do not exist in Minnesota. Teacher preparation programs do not align their program curricula with state learning standards for students. Instead, they align their curricula with the teaching standards associated with the licensure requirements that are overseen by the Board of Teaching. The needed link between student learning standards and teacher

preparation curricula is made through the alignment of these teaching standards directly with the student learning standards. This is a process carried out by the Board of Teaching. Preliminary evidence of this alignment comes from a 2007 study that indicates that this alignment is very good.

The results show that the following licenses were very highly aligned, indicating teachers are prepared with the knowledge and skills required to deliver a responsive K-12 curriculum to Minnesota students: K-6 Elementary Education, 5-12 Mathematics, 5-12 Communication Arts and Literature, 5-12 Social Studies, and 5-8 Science. Most of the state's academic standards (81%) have three or more standards in the preparation requirements for these entry-level teaching licenses.

High school Science licenses for Chemistry, Earth and Space Science, Life Science, and Physics were also highly aligned in terms of matching preparation requirements with academic standards: 82-98% of Science academic standards had three or more standards in the preparation requirements. However, these findings may be distinguished from the other licenses because there are relatively few state academic standards for these 9-12 Science areas. Since the licensure rules for the 9-12 Science licenses are still quite detailed, entry-level preparation should be seen as both intensive and extensive. In fact, most of the 9-12 academic standards in Science have six or more corresponding training requirements. (Lombard, T. 2007. "A Study to Determine the Degree of Alignment Between Minnesota Teacher Licensing/Preparation Standards and Minnesota K-12 Academic Standards for Students," retrieved from http://education.state.mn.us/mdeprod/idcplg?IdcService=GET_FILE&dDocName=032424&RevisionSelectionMethod=latestReleased&Rendition=primary)

This alignment of teaching and learning standards continues to be a key focus of the Board of Teaching given its importance in completing the connection between the curricula of teacher preparation programs and the learning standards for K-12 students. While this report provides some evidence of alignment, the study was limited to standards at the broad level. The Board of Teaching recognizes the need for further detailed analysis and, if needed, further alignment of teaching and learning standards.

Aligning Licensure Requirements and Preparation Program Curriculum

Alignment of licensure requirements and curriculum in the teacher preparation programs is established through the detailed and area specific teaching standards of effective practice established by the Board of Teaching. The Board of Teaching is in the process of changing the method of assuring alignment by moving from the current PEPER system to one with a stronger focus on program effectiveness, called PERCA. PERCA focuses on teacher preparation program outcomes through an assessment of the preparedness and success of the programs graduates. (For more on the schedule for implementing this strategy, see p.26 of <http://www.mnteachered.org/files/BOT%20Spring%202010-Balmer%20white.ppt>)

Aspects of this alignment are also being tested through a recently instituted audit system whereby random (and occasionally targeted) audits examine the uniformity, accuracy and alignment of higher education institutions with Board of Teaching standards and procedures. This audit focuses on the required elements of the teacher preparation programs, in contrast to PERCA, which assesses program effectiveness. The MDE has currently completed approximately one-third of the audits, and are “seeing good alignment and have met with institutions for more clarification as needed.” (Retrieved from <http://www.mnteachered.org/files/MDE%20Spring%202010-Melick.pdf>)

It is important to note that one of the central goals of these alignments is to determine if student learning in teacher preparation programs translates into K-12 student achievement when these teachers begin to teach. That question will be more directly answerable once the MDE longitudinal data system is put into place. This system will provide the needed teacher-

student data links that will allow one to compare Minnesota trained teachers who then go on to teach in Minnesota with the achievement of their students, and hence the effectiveness of their teacher preparation programs.

Aligning Curriculum with Best Practices

Our review of best practices in teacher preparation yielded four key themes

- Enhanced focus on the role of practice
- Importance of subject mastery in addition to knowing how to teach and how students learn
- Value of up-to-date research-based teacher preparation programs
- The focus on K-12 student learning (as a function of teachers graduating from a program) as a measure of program success

There is a major impediment to determining the alignment of the teacher preparation programs with these best practices. The first, and most important, is that these themes are not in the detailed operational form that would allow one to clearly check the alignment between them and the practices of the various programs. For example, the generally agreed upon importance of teacher practical training can be implemented in so many different ways that it is not straightforward to determine whether or not a program is satisfying this practice. Similarly the emphasis on subject mastery can be achieved in a variety of ways and there is no agreed upon small set of pathways to mastery.

In effect, what this requested analysis is asking for is a key component of the rigorous accreditation process that currently does not exist and that Levine list as one of his key recommendations. While teacher preparation programs are run by people who are keenly aware of these best practices, and eager to implement them, the nuanced and detailed assessment that a

full accreditation process provides is the way to determine whether each of these programs is putting these practices in place.

There was an additional question concerning whether teacher preparation programs following best practices on induction, mentoring and related professional development. The short answer, coming from discussions with representatives from MACTE, is that the programs uniformly regard these as important, but that programs currently do not have the financing or other resources needed to support induction, mentoring and professional development for their graduates. It should be noted that these are a key focus area of the current Bush Foundation Teacher Effectiveness Initiative. (See <http://www.bushfoundation.org/education/TEInitiative.asp> for more details.)

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