



TEACHER DISTRIBUTION PROJECT REPORT

Executive Summary

Prepared for the
Wisconsin Department of Public Instruction

April 2007

WISCONSIN

TEACHER DISTRIBUTION PROJECT

April 2007

Elizabeth Burmaster
State Superintendent
Wisconsin Department of Public Instruction
125 South Webster Street
Madison, WI 53702

Dear Superintendent Burmaster,

The work of the Wisconsin Teacher Distribution Project has been completed; the findings and recommendations are summarized in this Executive Summary Report. The Education Trust, with funding from the Joyce Foundation, sponsored this project to determine if Wisconsin, along with Illinois and Ohio and their respective largest urban districts, had a pattern of low income and students of color being taught by inexperienced teachers. Further, the initiative was designed to assess the correlation with student achievement.

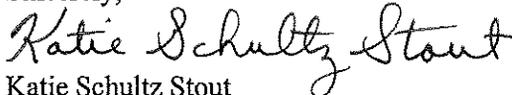
A Project Steering team was convened to lead the project, and I was pleased to serve as Project Chair. The Steering Team membership included teachers, legislators, business community, higher education, school district leadership, Governor's office, teachers' union, Milwaukee Public Schools Teacher Distribution Team, and the Department of Public Instruction, with support provided by the Education Trust. Team members were diligent in their review of data and discussion of findings and recommendations.

Data collection and analysis was challenging. I would commend DPI staff for a remarkable job in compiling data and presenting information. The study found there is an inequity in the distribution of experienced teachers. The study affirmed that poverty and minority percentages in schools are positively correlated, and both are negatively correlated with student achievement. Data reveal that teachers with less experience are more likely to be teaching in high need schools.

The work of the Project Steering Team includes a set of recommendations to address the disparity. The report also acknowledges several of the programs that DPI already has in place to close the achievement gap between economically disadvantaged students, students of color and their peers.

We hope that this report is helpful to you as you encourage districts and other entities to consider the experience levels of teachers working with our students. We know that excellent teachers make a difference for these and other children and believe that everything possible should be done to address the achievement gap as you have so tirelessly advocated. This report points out the importance of teacher assignment and suggests some approaches that might be helpful.

Sincerely,



Katie Schultz Stout
Project Director, Teacher Distribution Project

KS/mew

Encl (2)

WISCONSIN

TEACHER DISTRIBUTION PROJECT REPORT

Prepared for the Wisconsin Department of Public Instruction

Executive Summary

The Wisconsin Department of Public Instruction (DPI) was invited to participate in the *Equal Access to Quality Teachers Project*, an initiative sponsored by The Education Trust and funded by The Joyce Foundation to examine the extent to which inexperienced teachers are teaching in low-income and high minority schools in Wisconsin. The study involved three mid-western states – Illinois, Ohio and Wisconsin – and the largest school district in each of the states.

In proposing the project The Education Trust pointed to several studies that show the least experienced, least qualified, least effective teachers are far more likely to teach low-income and minority students. They contend, “The latest research unequivocally demonstrates the profound impact of teachers on the education of their students. But just as the promise of effective teachers is a key element of any strategy for ensuring that low-income and minority students make academic gains, their lack of access to effective teachers is one of the key barriers holding them back.” In light of this research the current project was designed to examine the differences of teachers in the highest poverty and highest minority schools, and teachers serving in schools with few minority and low-income students. The project design included three stages:

- **Stage 1 – Understanding the Extent of the Problem.** A comprehensive review of student, school, and teacher data to examine the distribution of teachers and the relationship to student performance in schools with varying characteristics.
- **Stage 2 – Understanding the Causes of the Problem.** Consideration of potential factors contributing to the distribution of teachers, including policies at the state, local, and regional levels that influence the supply, recruitment and retention of teachers.
- **Stage 3 – Creating an Action Plan to Address the Problem.** Examination of the findings and development of a multi-pronged set of recommendations to address the teacher distribution issues.

A steering team was convened to lead the project work; membership included representation from the legislature, teachers union, business community, higher education, school leadership associations, Governor’s Office, Milwaukee Public Schools Teacher Distribution Project, and the Department of Public Instruction, with support provided by The Education Trust. (Project Steering Team membership is found in the Appendix.) Katie Schultz Stout, former Director of Teaching and Learning, Wisconsin Education Association Council (WEAC), was hired as Project Director. Outside experts were consulted for data analysis.

The work of the Steering Team focused on the following project elements:

- ✓ Exploration of multiple dimensions of teacher quality, including the use of multiple measures of teacher knowledge/skills and student learning.
- ✓ Analysis of student data by race/ethnicity, socio-economic status, and academic performance level.
- ✓ Classroom-level analysis of teacher distribution within the urban partner district.
- ✓ School-level analysis of teacher distribution within the state.
- ✓ Consideration of all possible causes of and potential solutions for the maldistribution of teachers.
- ✓ Recommendations that include a process for identifying highly skilled teachers.
- ✓ Public reporting of all findings and recommendations.

The Steering Team identified key elements and data sources available to determine whether Wisconsin would show the same distribution of experienced versus inexperienced teachers cited by The Education Trust in the project design. The team voiced concerns regarding use and the implied definition of the term “teacher quality” and contended that the measures recommended in the project proposal did not provide a comprehensive look at what teacher quality truly involves. Likewise, measurement of student achievement for purposes of the study was limited to standardized tests; it was noted that testing is only one measure of student achievement. Further, it must be acknowledged that a wide range of factors in the community, in families and in schools impact the success of poor and minority students.

Data analysis proved to be a significant challenge given that Wisconsin is a local control state. There is limited state-level data reported. Further, various databases containing information pertinent to the study were not originally designed to interact with each other.

For the Wisconsin analysis, data included teacher certification files, school district and school data, student testing data, free and reduced-price lunch program participant data, student racial identification, and teacher assignment data. Following a review and initial consideration of findings, a workgroup undertook a more detailed examination of data. Tabulations included further breakdown of teacher certification data by experience bands, the examination of data with and without Milwaukee Public School data included, and further analysis of poverty and minority status by deciles.

Findings

The study gathered and analyzed a number of teacher, school, and student characteristics. The purpose was to describe how teacher traits associate with student demographics and schools. While the data has not been unequivocal, several teacher characteristics are notable in the study.

At the outset of the study data was available on teachers from 2003-04 and student data from 2004-05. It is important to note, however, that when the 2004-05 teacher data became available, it documented a significantly higher percentage of fully certified and appropriately licensed

teachers in schools in the 10th decile or large city category. Use of the 2004-05 data would change the results slightly, but not significantly.

From a study of 2,058 schools using 2004-05¹ school year data, key school data were arranged into deciles representing the lowest to highest minority percentage, the lowest to highest poverty percentage (using federal free and reduced-price lunch program participation as a proxy), and the highest to lowest performance on Reading and Mathematics on the 2004-05 Wisconsin Knowledge and Concepts Examination (WKCE). All of these characteristics are highly inter-related. Poverty and minority percentage at schools are positively correlated while both of these characteristics are negatively correlated with student achievement.

Project Premise...

“Now that states have established academic standards and assessments, we have a clearer picture than ever before of which students are receiving the educational opportunities they need, and which are not. Unsurprisingly, many of our greatest challenges to providing these educational opportunities occur in schools with traditionally underserved, low-income and minority students, many of whom reside in large urban areas.”

-Teacher Distribution Project funded by The Joyce Foundation

The data in this study seem to corroborate the existence of teacher disparity in Wisconsin and its association with poverty and race/ethnicity. Characteristics typically linked to successful instruction are at lower levels in the highest needs schools. Using these data, teacher experience is less in the *at-risk* deciles – the decile with the highest poverty, highest minority, and lowest reading and mathematics performance. Lower experience levels are apparent in both total teacher experience and teacher experience within the current district of employment. New teachers (teachers who have less than three years of total experience) are much more prevalent in the highest risk deciles. Other data, while interesting, were not as conclusive. Teacher education (attainment of masters degree or higher) and emergency licensure exhibited no readily interpretable association with school characteristics.

Table 2. Teacher Characteristics by School Poverty Percentage Statewide

<i>All Levels</i>						
	Average Experience in District	Average Total Experience	% "New" Teachers (< 3 Years Experience)	% Teachers with 3 or more Years Experience Outside District	% with Masters Degree or Better	Percent with Emergency License
1st (Lowest Poverty)	11.8	14.9	11.7%	36.9%	43.8%	0.7%
2nd	11.9	14.9	13.2%	35.5%	42.7%	0.8%
3rd	12.1	15.1	12.9%	35.1%	41.8%	1.7%
4th	12.4	15.2	12.5%	33.6%	42.7%	1.3%
5th	13.0	15.8	11.8%	33.7%	41.2%	1.0%
6th	13.0	15.8	11.7%	32.6%	42.4%	0.8%
7th	12.5	15.2	12.5%	31.7%	43.0%	1.2%

¹ For teacher certification, 2003-04 data were used. For more detailed information on data sourcing, refer to the full report for supporting data and analysis at <http://dpi.wi.gov/tepd/research.html>.

<i>All Levels</i>						
	Average Experience in District	Average Total Experience	% "New" Teachers (< 3 Years Experience)	% Teachers with 3 or more Years Experience Outside District	% with Masters Degree or Better	Percent with Emergency License
8 th	12.6	15.0	12.4%	28.7%	40.3%	1.3%
9 th	12.0	14.3	14.2%	27.8%	41.2%	1.1%
10 th (Highest Poverty)	10.1	11.2	26.2%	13.1%	40.8%	1.5%

<i>Elementary</i>						
	Average Experience in District	Average Total Experience	% "New" Teachers (< 3 Years Experience)	% Teachers with 3 or more Years Experience Outside District	% with Masters Degree or Better	Percent with Emergency License
1 st (Lowest Poverty)	11.9	15.0	10.8%	38.1%	43.0%	0.4%
2 nd	11.9	14.8	12.5%	34.9%	43.3%	0.4%
3 rd	11.9	14.7	12.3%	33.5%	41.3%	1.1%
4 th	12.8	15.6	11.3%	33.7%	42.9%	1.1%
5 th	13.2	16.1	11.0%	34.4%	42.9%	0.8%
6 th	13.3	16.2	10.4%	33.1%	44.1%	0.5%
7 th	12.8	15.5	11.1%	32.3%	46.5%	1.0%
8 th	12.8	15.2	11.3%	29.2%	38.5%	1.3%
9 th	12.0	14.3	13.7%	28.6%	42.0%	0.8%
10 th (Highest Poverty)	10.2	11.3	26.2%	13.0%	40.5%	1.0%

There is a negative relationship between experience and level of poverty. For example, in the 10th decile (highest level of poverty) 26% of teachers have less than three years of experience. For all other deciles, the percents are about one-half. Conversely, in the bottom decile (lowest poverty) 37-38% of teachers have three or more years of experience outside the district. This would indicate that teachers are attracted to districts/schools with fewer poor students and may, in fact, be leaving poor schools and districts as they gain experience.

Although percentages of teachers with full, appropriate licensure for their current assignment exhibit disparities much like teacher experience, it was not a robust measure. These data are relevant, but may require further investigation before drawing more specific inferences.

In making recommendations related to this data it is important to acknowledge many programs and initiatives currently in place to assist minority and poor students, as well as parents, teachers and administrators, working to improve student learning. State Superintendent Burmaster's *New Wisconsin Promise* outlines the commitment to ensure a quality education for every child. Initiatives such as SAGE class-size reduction programs, Pre-K and four-year-old kindergarten,

continuing emphasis on standards and accountability, and recognition of best practices through the New Wisconsin Promise Conference are examples of efforts aimed at closing the achievement gap between economically disadvantaged students, students of color and their peers. Efforts exemplified by the Wisconsin Quality Educator Initiative, the Quality Educator Interactive, Wallace Wisconsin Urban Schools Leadership Project, National Board for Professional Teaching Standards Certified Teachers (NBPTS), Wisconsin Master Educator Assessment Process, and the work of the Professional Standards Council for Teachers are aimed at ensuring quality teachers and strong leadership. Wisconsin's research-based and collaboratively developed approach to competency-based professional development is recognized as a leader in the nation.

Framing the work of this project in its larger context is not only important, but also consistent with Project Steering Team discussions. There was consensus on the importance of recruiting and retaining excellent teachers to work with students in schools with high levels of minority and poor students. Discrepancies in teacher experience and certification exist at different levels throughout the state; and the state and local districts must work collaboratively to address these variations.

At the same time we cannot pretend that addressing the teacher distribution is sufficient. There is clear evidence that other important conditions have a great impact on student learning and cannot be ignored. For example, poverty is correlated with low student achievement. There is also clear evidence that mother's education level has a significant effect on learning. Community resources such as the availability of family sustaining wages, affordable housing, recreation and cultural resources are critical in providing the learning experiences that a child needs before and during the school years.

This study does, however, indicate the existence of a teacher disparity in Wisconsin. Data reveal that teachers with less experience are more likely to be teaching in high need schools. To that end, the following recommendations are advanced to ensure more equitable distribution of experienced, highly skilled teachers.

Recommendations

Recommendations that follow are extensive and outline a wide range of action related to recruitment, retention, data, recognition, and policy development and implementation. They address the multi-faceted scope of factors that impact teacher quality and present challenges for high need schools. It will take broad-based collaboration to achieve the desired results. As the Wisconsin Department of Public Instruction, in collaboration with other educational partners, distributes this report, recommendations will be advanced on how to recruit, retain, and recognize well-prepared teachers in schools with high percentages of minority and low income students and low levels of achievement.

Each recommendation is followed by a notation of suggested entity(ies) that have interest in or responsibility related to this recommendation.

Recruitment:

- Adequately fund Wisconsin Quality Educator Initiative (PI 34) Induction and Mentoring Programs (*policymakers and districts*).
- Hire teachers for high need schools in the spring of the year to ensure high need schools have early access to the most highly skilled teachers (*districts*).
- Examine contracts for items such as mentoring, professional development, preparation time, class size, assignments, salary and benefits that will help recruit and retain teachers in high need schools (*districts and teacher unions*).
- Collaborate to enact improvements in Wisconsin school funding formula to provide adequate funding that will enable schools to offer high quality programs to all students (*policymakers and business leaders*).
- Involve teachers in school level hiring decisions and policymaking (*districts and unions*).
- Implement flexible residency requirements (*policymakers*).
- Survey recent teacher graduates to determine the factors that attract teachers to certain districts and schools (*teacher unions, higher education, and DPI*).
- Provide facilities and educational resources that are modern, spacious and conducive to good learning (*districts*).
- Develop community introductory tours and informational materials designed to attract teachers to schools with particular focus on high need students (*communities and districts with business leaders out front*).
- Develop parent groups in high need schools that concentrate their efforts on providing high quality parenting programs and family experiences (*PTA, parent groups, and districts*).
- Implement programs designed to recruit, support and encourage local students interested in teaching careers. Efforts should include clubs at the elementary, middle, high school and college levels; and statewide conferences developed and presented by accomplished classroom teachers. It is imperative to “build our own” teachers for the future (*all*).
- Incorporate information about this study and the needs of low income and minority students in leadership training opportunities for principals and administrators. Emphasize the importance of good recruitment and retention of highly skilled teachers (*DPI, AWSA, WASDA*).
- Require field experiences in high need schools for students seeking teacher certification (*DPI and higher education*).

Retention:

- Establish funds for differentiated teacher compensation programs. Stipulate further that the districts receiving grants would base all or part of teacher salary increases on one of the following factors: (a) an increase in teacher’s knowledge of teaching and the content in the subject he/she teaches or an improvement in teaching skills; (b) assignment of additional leadership responsibilities, including mentoring other teachers; (c) assignment of teachers to a grade level or subject area in which there are shortages; and (d) the assignment of a teacher to a school that is difficult to staff or that has low achievement. To achieve this goal, there should be support for the Differentiated Teacher Compensation Project (*Governor and policymakers*).
- Negotiate contract language that gives incentives for teaching in schools with high rates of minority and low income students (*teacher unions and districts*).
- Provide additional state funding for mentoring in high need schools (*policymakers*).

- Offer low interest home loans for teachers who remain in high need schools (*policymakers and business community*).
- Create professional development schools, teacher centers and teacher academies that bring practicing teachers and higher education faculty together in an effort to provide high quality professional development to teachers in high need schools (*districts and higher education*).
- Fully fund masters degree programs for teachers in high need schools if they commit to stay there for a defined period of time (*districts*).
- Ensure that teachers have high quality working conditions, including small class sizes, adequate materials, high-quality professional development, time for collaborative planning with colleagues and strong administrative support (*districts and teacher unions*).
- Offer student loan forgiveness for teachers who remain in high need schools (*policymakers and districts*).

Data:

- Continue to develop a data-management system in a manner that will more easily allow the interface of data sets for research purposes (*DPI*).
- Disseminate information about available data and research capabilities in order to facilitate further research of this type (*all*).

Funding:

- Provide additional funding for Wisconsin schools and target funds to high need schools for the specific purpose of recruiting, retaining and providing professional development for teachers in these schools (*policymakers*).
- Increase state funding to support high quality implementation of PI 34 in high need schools (*policymakers*).

Professional Development:

- Bring together faculty from K-12 schools and higher education on a regular basis to pursue promising efforts designed to prepare teachers for opportunities available in high need schools (*all*).
- Provide funding to make teacher and administrator leadership programs readily available for staff in high need schools (*all*).
- Encourage districts to use self-assessment tools for school improvement in high need schools, and use results to improve school quality and student learning. Some tools are currently available from DPI and WEAC/NEA (*districts and teacher unions*).

Recognition:

- Coordinate and enhance recognition programs for teachers who achieve National Board for Professional Teaching Standards and/or Wisconsin Master Educator certification (*all*).
- Continue to conduct special recognition programs for teachers in Wisconsin's Schools of Recognition (*all*).

Conclusion

This study provided an initial look at the extent to which inexperienced teachers are teaching in low-income and high-minority schools in Wisconsin and the relationship to student performance. The recommendations outline steps that can be taken to improve access to highly-skilled, fully-certified and licensed teachers for students in high need schools. Further, it is noted that the search for data was not easy and reinforces the need for better systems that enable meaningful research essential to ensure academic success for all students.

The structure of schools and school districts, policy leadership in districts, quality of administrator and teacher leadership, availability of instructional resources, school climate, and family support all contribute to a teacher's ability to teach and a student's ability to learn. All of these factors must be addressed if we are to meet the needs of the most needy of our school population. Identifying these factors does not signal defeat, but presents the reality that teachers and students can achieve only when the entire community takes responsibility. It is hoped that the information in this report will help to show the challenges and generate effective action.

The executive summary and full report are available on the Wisconsin Department of Public Instruction website at <http://dpi.wi.gov/tepd/research.html>.

APPENDIX

Teacher Distribution Project Steering Team

Katie Schultz Stout, Project Director

Teacher Distribution Project

Russell Allen
Teaching and Learning Research Consultant
Wisconsin Education Association Council

Tom Beattie, Executive Director
Association of Wisconsin School Administrators

Diane Craney
Government Relations Program Specialist
Wisconsin Education Association Council

Laurie Derse, Assistant Director
Teacher Education, Professional Development, and Licensing
Wisconsin Department of Public Instruction

Stephen Freese, Former State Representative
Wisconsin State Assembly

Charlene Gearing, Director
Teaching and Learning
Wisconsin Education Association Council

Karen Goerlinger, Teacher
Marinette School District

Liam Goldrick, Former Education Policy Advisor
Office of the Governor

Rozalia Harris, Teacher
Milwaukee Public Schools

Deb Lindsey, Director
Assessment and Accountability
Milwaukee Public Schools

Jim Lynch, Associate Executive Director
Association of Wisconsin School Administrators

Deborah J. Mahaffey
Assistant State Superintendent
Division for Academic Excellence
Wisconsin Department of Public Instruction

Stephanie Malaney, Teacher
Appleton Area School District

Vicki McCormick, President
Greendale School Board

The Honorable SONDY POPE-ROBERTS
State Representative
Wisconsin State Assembly

Cindy Raven, Research Specialist
Milwaukee Public Schools

Sharon Wilhelm, Interim Associate Vice President
University of Wisconsin System Administration

Resource Consultants:

Heather Peske, Senior Associate
The Education Trust

Don McIsaac, Professor Emeritus
University of Wisconsin-Madison

Jason Engle, Education Consultant
Office of Educational Accountability
Wisconsin Department of Public Instruction

Robert Kott, Information Services Technician
Teacher Education, Professional Development, and Licensing
Wisconsin Department of Public Instruction

Mary Weber, Executive Staff Assistant
Division for Academic Excellence
Wisconsin Department of Public Instruction

Elaine Keenan, Information Services Technician
Applications Development Team
Wisconsin Department of Public Instruction

David Blough, Senior Institutional Planner
Office of Policy Analysis and Research
University of Wisconsin System Administration