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OF MICHIGAN**



**EDUCATION REFORM:  
PRE AND POST EMPLOYMENT TEACHER TRAINING**

**JANUARY 2012**

**REPORT 374**

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PUBLIC POLICY RESEARCH IN MICHIGAN**

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# CITIZENS RESEARCH COUNCIL OF MICHIGAN

## PUBLIC K-12 EDUCATION IN MICHIGAN

In 2010, Michigan residents found public primary and secondary education facing numerous challenges:

- State revenues are falling;
- Local revenue growth is stagnating;
- K-12 education service providers are facing escalating cost pressures, with annual growth rates outpacing the projected growth in available resources;
- Spikes in the level of federal education funding resulting from the American Recovery and Reinvestment Act of 2009 (ARRA) will produce a budgetary “cliff” when the additional dollars expire; and
- School district organization and service provision structures are being reviewed with the goals of reducing costs and increasing efficiencies.

Because of the critical importance of education to the state, its economy, and its budget, the Citizens Research Council of Michigan (CRC) began a long-term project researching education in Michigan with an emphasis on the current governance, funding, and service provision structures and their sustainability.

Public education has been governed largely the same way since its inception in the 1800s. It is important to review the current organization of school districts and structure of education governance, as well as to review new and different ways to organize and govern public education, to determine if Michigan's governance structure meets today's needs. The school finance system has been revamped on a more regular basis throughout history. Changes have been made to address a host of concerns, including per-pupil revenue disparities, revenue-raising limitations of state and local tax systems, as well as taxpayer discontent with high property taxes. Michigan's current finance system was last overhauled in 1994 with the passage of Proposal A, providing sufficient experience to reconsider the goals of the finance reforms and determine whether the system has performed as originally contemplated.

In addition to analyzing education governance and revenues, it is important to review cost pressures facing districts and how education services are provided in Michigan. School budgets are dominated by personnel costs, the level of which are largely dictated by decisions made at the local level. Local school operating revenues are fixed by decisions and actions at the state and federal levels, but local school officials are tasked with making spending decisions and matching projected spending levels with available resources. However, those local decisions are often impacted by state laws (e.g., state law requires districts to engage in collective bargaining, to participate in the state-run retirement system, and to serve special education students through the age of 25). The freefall of the Michigan economy since the 2001 recession has impacted all aspects of the state budget, including K-12 education, and requires state and local officials to review how things are done in an attempt to increase revenues and/or reduce costs.



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## Citizens Research Council Education Project

In 2009, CRC was approached by a consortium of education interests and asked to take a comprehensive look at education in Michigan. CRC agreed to do this because of the importance of education to the prosperity of the state, historically and prospectively, and also because of the share of the state budget that education demands. Education is critical to the state and its citizens for many reasons: 1) A successful democracy relies on an educated citizenry. 2) Reeducating workers and preparing students for the global economy are both crucial to transforming Michigan's economy. 3) Education is vital to state and local budgets. 4) Public education represents a government program that many residents directly benefit from, not to mention the indirect benefits associated with living and working with educated people. As with all CRC research, findings and recommendations will flow from objective facts and analyses and will be made publicly available. Funding for this research effort is being provided by the education consortium and some Michigan foundations. CRC is still soliciting funds for this project from the business and foundation communities.

The goal of this comprehensive review of education is to provide the necessary data and expertise to inform the education debate in Lansing and around the state. This is a long-term project that will take much of the focus of CRC in 2010 and into 2011. While an overall project completion date is unknown, CRC plans to approach the project in stages and release reports as they are completed. Topic areas CRC plans to study include education governance, K-12 revenues and school finance, school district spending analyses, public school academies (PSAs) and non-traditional schools, school district service provision and reorganization, and analyses of changes to Michigan's educational system.



# EDUCATION REFORM: PRE AND POST EMPLOYMENT TEACHER TRAINING

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# EDUCATION REFORM: PRE AND POST EMPLOYMENT TEACHER TRAINING

## Key Findings

- **Importance of Teachers** – Recent research demonstrates the importance of teachers to student success with teachers in the same school consistently showing significant differences in gains in student achievement. The economic impact of these differences is sizeable. A teacher one standard deviation above the mean can increase the present value of future earnings of a class of 20 students by over \$400,000 compared to an average teacher. This is not the value added over a teacher's career, but rather the annual impact.

The same research finds that removing the bottom five to eight percent of teachers and replacing them with average teachers nationwide could increase annual U.S. GDP growth by a full percentage point.

Teacher evaluation, tenure, collective bargaining and compensation are all important in ensuring that Michigan has the best teachers. These topics are addressed in future papers. However, research cited in this paper illustrates the importance of having high quality teachers to the state's economic future.

- **Teacher Exporting** – Michigan is a net exporter of teachers. The Michigan Education Association indicates that 5,000 of the 7,500 annual teacher training graduates leave the state each year. On the one hand, the shortage of teaching position in Michigan suggests that Michigan may be able to cherry pick the best and brightest candidates for its limited open teaching slots.

On the other hand, to the extent that these candidates are being trained at public Universities, it suggests that Michigan may not be allocating scarce education resources in the most efficient manner. Each public university in Michigan has its own decision making board, rather than belonging to a tightly unified statewide system, making it challenging to coordinate programs. Changes that raised the admission standards to teaching programs and lowered

the number of graduates may represent a more efficient allocation of public resources. Similarly, the state could seek to close down low performing programs to concentrate resources on the top performing programs.

- **Teacher Training and Certification** – There is no consensus on the appropriate entity for determining entry into the teaching field, whether by examination, by completion of an approved training program or by organizations of teachers, by colleges, or by government officials. The vast majority of Michigan teachers are prepared for teaching at university teacher training programs. The Michigan Department of Education recognizes 33 state programs. The state also requires candidates for certification to pass subject area tests. Michigan recognizes 114 teacher specialties, each with a test for endorsement.

Nationally about one-third of teachers hired since 2005 have come through alternative certification programs. Alternative certifications programs are seen as a way to achieve a number of goals including:

- o Expanding the number of minority teachers
- o Recruiting individuals with significant academic and occupational experience into teaching
- o Expanding the pool of math, science, foreign language, or other specialty teachers available to work in poor and urban districts.

According to the Michigan Department of Education, only 0.7 percent of Michigan teachers completing the certification process in 2006 did so following a non-traditional route. There may be significant benefits to increasing the number of teachers who do not follow the traditional path into teaching. However, policymakers must also be sensitive to the fact that Michigan is already preparing far more teachers through traditional university training programs than the state can hope to employ.

# CRC REPORT

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# EDUCATION REFORM: TEACHERS

## PRE AND POST EMPLOYMENT TEACHER TRAINING

### Introduction

Education is the responsibility of a multitude of contributors: teachers and principals, students, parents and other family members, state and local policy makers and taxpayers. Of all the factors that are under the control of the education system, teachers are probably the most important contributor to student learning. State lawmakers and taxpayers are vitally interested in teachers and teaching because of the importance and cost of public education.

For a student's best chance at financial success, he or she must graduate from high school prepared for advanced education or for a job. And in order to be competitive and to attract job providers, Michigan must have an educated workforce. Unfortunately, Michigan students' performance on national tests indicates that our public education system is not consistently producing the knowledge and skills needed for personal or state success.

#### Part of a Series on Public Education in Michigan

This report is part of a series on public education in Michigan. Other reports include the primer in the series released in January 2010, *Public Education Governance in Michigan*, which describes the complex governance structure and functions carried out by all three levels of government: federal, state, and local. Since January 2010, CRC has released the following reports: *Nontraditional K-12 Schools in Michigan*, which explores the role of charter, parochial, and other means of educating children outside of the public school system; *Early Childhood Education*, which discusses the value of investing in preschool and kindergarten programs; *Child Care and the State*, which describes child care options and average costs and reports what is known about the effects of various child care arrangements on children's development; and *Reform of K-12 School District Governance and Management in Michigan*, which analyzes different models for governing education systems. *State and Local Revenues for Public Education in Michigan* discussed the sources of revenue to fund education, and *Distribution of State Aid to Michigan Schools* discussed the methodologies for distributing those revenues to individual school districts. Future papers will discuss education policy issues, such as school district organization and responses to districts that find themselves in deficit, in more detail.

A number of proposals for improving public education have been offered by political leaders, unions, and other interested parties, and many of these proposals focus on teachers. In addition to ensuring that teachers themselves have adequate training in the subjects they are assigned to teach, approaches to improving teacher effectiveness include recruiting prospective teachers with stronger academic backgrounds; strengthening teacher training programs; replicating proven teaching methods; providing coaching and mentoring to new and underperforming teachers; alternative certification; and requiring improved professional development and continuing education.

State statutes and local school district policies ad-

dress nearly every aspect of what teachers do, and in Michigan, recent legislative changes will affect teacher training and evaluation, tenure, seniority, salaries and benefits, collective bargaining, layoff, recall, and dismissal. This report on the various aspects of pre and post employment teacher training is the first of three installments under the general heading of "*Education Reform: Teachers.*" The second installment will address teacher management performance systems; the third will describe teacher tenure and collective bargaining, as well as teacher salaries, benefits, and related issues. CRC has recently published a series of analyses on important education issues; other reports in the series examine public school funding, governance, non-traditional schools, and early childhood education.

## The Key Ingredient in Education: Teachers

The intuitive knowledge that individual teachers are hugely important is confirmed by recent research that has demonstrated that average gains in learning across classrooms in the same school may be very different.

The general finding about the importance of teachers comes from the fact that the average gains in learning across classrooms, even classrooms within the same school, are very different. Some teachers year after year produce bigger gains in student learning than other teachers. The magnitude of the differences is truly large, with some teachers producing 1½ years of gain in achievement in an academic year while others with equivalent students produce only ½ year of gain. In other words, two students starting at the same level of achievement can know vastly different amounts at the end of a single academic year due solely to the teacher to which they are assigned. If a bad year is compounded by other bad years, it may not be possible for the student to recover. No other attribute of schools comes close to having this much influence on student achievement.<sup>1</sup>

The effect of teaching and learning on educational attainment and on an individual's quality of life have been described in other reports in this series. Hanushek et al attempt to quantify the economic impact of teacher quality, and find that above average teachers produce increased average earnings for their students.

A teacher who is at the 60<sup>th</sup> percentile (0.25 standard deviation above average) raises individual earnings by \$5,292, and this translates into a present value of \$105,830 for a class size of 20 students. A teacher who is one standard deviation above the mean (84<sup>th</sup> percentile) produces over \$400,000 in added earnings for her class of twenty... this is an *annual* increment by the

By eliminating the least effective five to eight percent of teachers and replacing them with average teachers, Hanushek estimates that student achievement would be improved and the resulting present value of future increments to GDP in the U.S. would amount to \$112 trillion.

teacher. Any teacher who stays at the given level of performance produces such an amount each year... a below average teacher leads to a similar decrease in lifetime earnings. Thus, having an effective teacher followed by an equally ineffective teacher will cancel out the gains.

An alternative way of estimating the derived demand for effective teachers focuses on the impact of student performance on economic growth. Recent analysis has demonstrated a very close tie between cognitive skills of a country's population and the country's rate of economic growth...<sup>2</sup>

By eliminating the least effective five to eight percent of teachers and replacing them with average teachers, Hanushek estimates that student achievement would be improved (student gains would be reinforced as students progress through the system) and the resulting present value of future in-

crements to GDP in the U.S. would amount to \$112 trillion. "These returns dwarf, for example, all of the discussions of the U.S. economic stimulus packages related to the 2008 recession (\$1 trillion)...The increase in achievement for the U.S. would, according to historic growth patterns, lift the annual U.S. growth rate by over one percent."<sup>3</sup>

## The National Context

Concerns about competitiveness and the investment in and quality of public education in this country have prompted both the federal and state governments to seek policies to improve educational outcomes. Starting with a landmark 1983 report, *A Nation at Risk*, and continuing through a series of federal grant programs, much of the attention has focused on teachers.

### A Nation at Risk

The National Commission on Excellence in Education appointed by President Ronald Reagan released

its report, *A Nation at Risk*, in 1983. Although researchers subsequently challenged certain facts and assumptions upon which the report based its findings and recommendations, the report, which was intended to “define the problems afflicting American education” and which linked that reported education failure to national economic decline, initiated a new era of school reform initiatives. *A Nation at Risk* included findings and recommendations in the areas of strengthened curricula; more rigorous and measurable standards and higher expectations for students; more time spent on learning basics; teachers and teaching; leadership and fiscal support. Findings regarding teaching were as follows:

- Too many teachers were being drawn from the bottom quarter of graduating high school and college students.
- The teacher preparation curriculum was weighted heavily with courses in “educational methods” at the expense of courses in subjects to be taught. A survey of 1,350 institutions training teachers indicated that 41 percent of the time of elementary school teacher candidates was spent in education courses, which reduced the amount of time available for subject matter courses.
- The average salary after 12 years of teaching was at that time only \$17,000 per year, and many teachers were required to supplement their income with part-time and summer employment. In addition, individual teachers had little influence in such critical professional decisions as, for example, textbook selection.
- Despite widespread publicity about an overpopulation of teachers, severe shortages of certain kinds of teachers existed: in the fields of mathematics, science, and foreign languages; and among specialists in education for gifted and talented, language minority, and handicapped students.
- The shortage of teachers in mathematics and science was particularly severe. A 1981 survey of 45 states revealed shortages of mathematics teachers in 43 states, critical shortages of earth sciences teachers in 33 states, and of physics teachers everywhere.

- Half of the newly employed mathematics, science, and English teachers were not qualified to teach these subjects; fewer than one-third of U. S. high schools offered physics taught by qualified teachers.

The Commission found that not enough of the academically able students were being attracted to teaching; that teacher preparation programs needed substantial improvement; that the professional working life of teachers was on the whole unacceptable; and that a serious shortage of teachers existed in key fields.

The recommendations concerning teaching included a number that are still part of the conversation: improving teacher training, performance based pay, career ladders for teachers, and use of master teachers to coach probationary teachers. Recommendations were intended to improve teacher preparation or to make teaching a more rewarding and respected profession:

1. Persons preparing to teach should be required to meet high educational standards, to demonstrate an aptitude for teaching, and to demonstrate competence in an academic discipline. Colleges and universities offering teacher preparation programs should be judged by how well their graduates meet these criteria.
2. Salaries for the teaching profession should be increased and should be professionally competitive, market-sensitive, and performance-based. Salary, promotion, tenure, and retention decisions should be tied to an effective evaluation system that includes peer review so that superior teachers can be rewarded, average ones encouraged, and poor ones either improved or terminated.
3. School boards should adopt an 11-month contract for teachers. This would ensure time for curriculum and professional development, programs for students with special needs, and a more adequate level of teacher compensation.
4. School boards, administrators, and teachers should cooperate to develop career ladders for teachers that distinguish among the beginning



instructor, the experienced teacher, and the master teacher.

5. Substantial nonschool personnel resources should be employed to help solve the immediate problem of the shortage of mathematics and science teachers. Qualified individuals, including recent graduates with mathematics and science degrees, graduate students, and industrial and retired scientists could, with appropriate preparation, immediately begin teaching in these fields. A number of our leading science centers have the capacity to begin educating and retraining teachers immediately. Other areas of critical teacher need, such as English, must also be addressed.
6. Incentives, such as grants and loans, should be made available to attract outstanding students to the teaching profession, particularly in those areas of critical shortage.
7. Master teachers should be involved in designing teacher preparation programs and in supervising teachers during their probationary years.<sup>4</sup>

Public education is primarily a state and local responsibility, but over the past decade, landmark federal legislation and a host of federal grant programs have addressed some of the findings and recommendations identified in *A Nation at Risk*.

## No Child Left Behind

The federal No Child Left Behind Act of 2002 (NCLB) is the most recent iteration of the 1965 Elementary and Secondary Education Act, which has become the primary federal law on public education. NCLB required states to adopt a set of operating requirements for public schools as a condition for receiving federal education funds. States were required to set measurable student achievement goals for all students (including low income students, students

with disabilities, and major racial and ethnic subgroups), require the implementation of scientifically based research practices in the classroom, administer annual statewide standardized tests in reading and math in grades three through eight and once in high school, and categorize test scores in required ways to judge whether schools made adequate yearly progress (AYP).

NCLB requires that all students test at grade level in reading and math by 2014. Failure to achieve adequate yearly progress toward that goal results in increasingly severe penalties, culminating in school closure, conversion to a charter school, hiring a management company to run the school, or state takeover of the school; the alternative is loss of federal funding.

Under NCLB, all states are required to provide highly qualified teachers to all students. A “highly qualified” teacher is defined as one who has a bachelor’s degree, is fully certified, and has demonstrated subject matter competency in the subject matter he or she teaches. In 2008-09, 99.2 percent of core academic classes in all Michigan schools were taught by highly qualified teachers. This compares with 95.8 percent of core academic classes taught by highly qualified teachers nationally. (North Dakota was the only state to report 100 percent. Hawaii reported the lowest state percentage, 72.9, while the District of Columbia reported

only 61.8 percent of core academic classes were taught by highly qualified teachers.)<sup>5</sup>

NCLB requires that all students test at grade level in reading and math by 2014. Failure to achieve adequate yearly progress toward that goal results in increasingly severe penalties, culminating in school closure, conversion to a charter school, hiring a management company to run the school, or state takeover of the school; the alternative is loss of federal funding (\$14.5 billion in federal funding for all states in the coming school year is governed by NCLB).

U.S. Secretary of Education Arne Duncan warned that when test scores from the 2010-11 school year are analyzed, 82 percent of schools in the nation could be labeled as failing.<sup>6</sup> In Michigan in 2010-11, 79 percent of the individual school buildings made AYP and 93 percent of school districts made AYP. This is fewer than the 86 percent of individual school

# EDUCATION REFORM: PRE AND POST EMPLOYMENT TEACHER TRAINING

buildings and 95 percent of school districts that made AYP in 2009-10. The number of high schools in Michigan that made AYP fell from 82 percent in 2009-10 to 60 percent in 2010-11.<sup>7</sup>

As the 2014 target date draws near, pressure to change the federal law and/or grant waivers from the existing law is increasing. Some states have notified the U.S. Department of Education that they will freeze proficiency targets at 2009-2010 levels in order to limit the number of schools that fail to make adequate yearly progress, and the Secretary of Education has announced that he will offer waivers of NCLB testing standards to states. Waivers could address the requirement that all children be proficient in English

and math by 2014, the requirement that districts identify schools that fail to make AYP, and restrictions on how some federal money must be spent. Some states are requesting waivers allowing them to develop their own accountability systems that place more weight on student growth.<sup>8</sup> Though Secretary of Education Arne Duncan has announced that waivers will be granted, states will still be required to pursue their own reform efforts, including more stringent teacher effectiveness evaluation systems based on student test scores, reducing the achievement gap, and increasing graduation rates.<sup>9</sup>

Michigan has requested waivers seeking ten more years to reach the proficiency deadline, and to lower

**Table 1**  
**Michigan Record of Achievement**

	Reading Achievement					
	4th Graders			8th Graders		
	Percent Proficient on State Test: 2008-09	Percent Basic on NAEP: 2008-09	Percent Proficient on NAEP: 2008-09	Percent Proficient on State Test: 2008-09	Percent Basic on NAEP: 2008-09	Percent Proficient on NAEP: 2008-09
All	76.7%	64%	30%	77.0%	72%	31%
White	82.9%	72%	36%	82.0%	79%	36%
Black	56.6%	35%	9%	59.4%	46%	9%
Hispanic	64.0%	51%	17%	67.2%	60%	26%
Low Income	64.9%	48%	15%	64.9%	56%	15%

  

	Math Achievement					
	4th Graders			8th Graders		
	Percent Proficient on State Test: 2008-09	Percent Basic on NAEP: 2008-09	Percent Proficient on NAEP: 2008-09	Percent Proficient on State Test: 2008-09	Percent Basic on NAEP: 2008-09	Percent Proficient on NAEP: 2008-09
All	87.8%	78%	35%	74.7%	68%	31%
White	91.9%	86%	43%	80.8%	77%	37%
Black	74.1%	48%	9%	52.6%	32%	5%
Hispanic	81.1%	71%	20%	64.8%	62%	17%
Low Income	80.7%	64%	17%	62.4%	50%	13%

Source: "Michigan State Snapshot," U.S. Department of Education, at [www.eddataexpress.ed.gov/state-report.cfm?state=MI](http://www.eddataexpress.ed.gov/state-report.cfm?state=MI)



the target to 80 percent scoring proficient on the Michigan Educational Assessment Program and Michigan Merit Exam. One of the reasons given for the waiver request is to accommodate changes to the passing scores on the Michigan standardized tests.<sup>10</sup>

Because NCLB punishes schools for failure to meet goals, states were unintentionally encouraged to set those goals low to ensure success. Thus, even though students meet state standards, they could fail to obtain an education that prepares them for college or career. While state standards vary, national tests including the National Assessment of Educational Progress (NAEP) allow comparisons among states. The disparity in proficiency standards between tests adopted by Michigan under NCLB and NAEP is displayed in **Table 1** from the U.S. Department of Education.

In fourth grade reading, 76.7 percent of students were judged “proficient” by the Michigan Educational Assessment Program, although only 30 percent were rated “proficient” on the NAEP, a difference of 46.7 percentage points. In eighth grade reading, the disparity between the MEAP and NAEP proficiency ratings was 46 percent; in fourth grade math, the disparity was 52.8 percent; in eighth grade math, 43.7 percent. In February, 2011, Michigan State Board of Education members voted to raise passing thresholds (also known as “cut scores”) on the MEAP and Michigan Merit Exam tests to better correlate with national tests. The higher standards will cause pass rates to decline in every school and school district in the state, and the percentage of schools that fail to meet average yearly progress under No Child Left Behind could increase from 14 percent to 66 percent.

Nonetheless, the statewide, standardized testing required by NCLB provides the basis for data systems that can provide longitudinal data on students and link individual student achievement scores to specific teachers.

### Race to the Top

In 2009, President Barack Obama announced the first, \$4.35 billion, Race to the Top competitive grant program for states. The program was “designed to spur systemic reform and embrace innovative approaches

to teaching and learning in America's schools.” Among the reform areas targeted were “Attracting and keeping great teachers and leaders in America's classrooms, by expanding effective support to teachers and principals; reforming and improving teacher preparation; revising teacher evaluation, compensation, and retention policies to encourage and reward effectiveness; and working to ensure that our most talented teachers are placed in the schools and subjects where they are needed the most.” This goal was supported by another: “Supporting data systems that inform decisions and improve instruction, by fully implementing a statewide longitudinal data system, assessing and using data to drive instruction, and making data more accessible to key stakeholders.”<sup>11</sup> States that prohibited linking student achievement data to teacher and principal evaluations were not eligible to apply for the largest amount of discretionary funds ever made available through the federal Department of Education.

This federal program helped to focus state education reform efforts to redefine teacher training and evaluation, to better define and use data on student growth and achievement, and to formally link teaching effectiveness to individual teacher compensation and retention. Michigan was one of many states that changed state laws in late 2009 and early 2010 to incorporate the federal standards and goals. While Michigan has so far not been successful in the Race to the Top competition for federal funding, some statutory changes adopted to improve the state's competitiveness for the grant remain in effect, and a third round of grant funding has been announced.

### Other Federal Programs

Among the federal programs that provide funds to states to develop and implement programs to improve teaching are the following:

- *Improving Teacher Quality State Grants* is a formula program known as Title II that requires states to define effective and highly effective teachers and principals and use these definitions in teacher and principal evaluation systems. States and districts have to ensure that effective teachers and leaders are distributed fairly across schools.

## EDUCATION REFORM: PRE AND POST EMPLOYMENT TEACHER TRAINING

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- The proposed *Teacher and Leader Innovation Fund*, modeled on the Teacher Incentive Fund, would provide competitive grants to districts for programs that reward and train effective teachers.
- *Teacher and Leader Pathways* is a competitive grant program to improve preparation programs for teachers and school leaders.
- *Presidential Teaching Fellows* is a new program to provide formula grants to states for scholarships of up to \$10,000 to those attending high performing teacher education programs and committing to teaching in a high needs school for three years.
- *Hawkins Centers of Excellence* is a new program to expand teacher preparation programs at institutions that primarily serve racial and ethnic minorities.
- *Federal Teacher Quality Partnership* grants provide matching funding for residency programs

that assign teacher candidates to mentor teachers in high needs schools for an entire year of on-the-job training.

The availability of federal funding is intended to incentivize states, school districts, teacher training colleges, and individuals in ways that improve teaching.

The federal influence on public education has been exercised through grant programs, studies, and presidential exhortations, but public education is primarily the responsibility of states and local school districts. States and local school districts have provided the laboratories within which various approaches have been tested, and in recent years, states and local districts have pursued a number of different strategies in an effort to improve test scores and graduation rates. All of these efforts, whether successful or not, affected teachers and students in some way.

## Teacher Education and Certification

### Teacher Education Traditions

For over a century, various efforts to improve K-12 education have recognized the importance of formal teacher education programs. Teacher education programs for elementary and secondary school teachers became established in colleges and universities in the early 20<sup>th</sup> Century, accompanied by discussions about the best methods for preparing teachers. Various approaches have reflected the values and practices being advocated and employed in other sectors, as well as the data then available. Kenneth M. Zeichner and Daniel P. Liston recognize four categories of teacher education traditions: the academic tradition; the social efficiency tradition; the developmentalist tradition; and the social reconstructionist tradition.<sup>12</sup>

The *academic tradition* assumes that a classical liberal arts education, combined with an apprenticeship experience in a school, is adequate preparation for a teacher. This approach is critical of formal teacher education programs that emphasize pedagogy, which is considered to be intellectually inferior and trivial. Most recently, this academic tradition has provided a philosophical basis for Teach for America (TFA), which has placed over 28,000 high performing college graduates with various majors into schools in low-income communities. Teach for America teachers receive a rigorous five-week training during the summer, one-on-one coaching during their two-year teaching commitment, and access to an extensive bank of online resources that provides lesson plans, videos, and a forum for corps members and alumni. The program had over 46,000 applicants for 4,400 teaching slots in 2010-11. Teach for America has been criticized by teachers' unions, especially in circumstances where those unions' members have been laid off, or are threatened with layoffs.<sup>13</sup>

The *social efficiency tradition* of the 1920s attempted a "scientific" study and analysis of the duties and traits of excellent teachers. An analysis of the work

performed by effective teachers was to serve as the basis for teacher preparation programs. Competency/Performance Based Teacher Education, advocated in the 1960s and 1970s, reflected this approach. Recent applications of this approach include efforts to teach specific skills that are associated with student learning, and using research on effective teaching to develop general principles that can guide teachers' decision making and problem solving. As an example, the University of Michigan's School of Education is overhauling the way it teaches teachers to teach, to emphasize the high leverage skills that research has shown are possessed by good

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teachers.<sup>14</sup>

The student-centered *developmentalist tradition* is an outgrowth of the child study movement and assumes that the natural development of the learner should determine what should be taught. According to this approach, teachers must understand the natural pattern of child development and growth, and must be passionate in order to excite children about learning. Advocates of the developmentalist tradition value creative and imaginative teachers with interesting lives. Advocates of this approach expect teachers to adopt an experimental approach to teaching. The Montessori teaching method is in the developmentalist tradition in its emphasis on providing developmentally appropriate learning opportunities for children.

The *social reconstructionist tradition* defines schooling and teacher training as "elements in a movement toward a more just society." In the early stages of the tradition, advocates wanted teachers to promote a social program that would correct what they saw as the "evils of capitalism" (poverty, discrimination, lack of access to health care, etc.) either through direct indoctrination or through experimentation and reflective inquiry that led to social improvements. This tradition encompasses a focus on improving the education of poor children, cross cultural communication, and empowering students. Programs includ-

ing Head Start, which is aimed in part at improving the school readiness of disadvantaged preschool children, retain a vestige of this tradition.

### Teaching as Career

Because state laws define teaching as a profession that requires specific education, certification, and student teaching, it is a career choice that must be intentional and planned. For many people considering a career, teaching is a calling or mission, a vocation that will allow them to share their love of children, their love of helping others, perhaps their love of an academic subject. Perhaps having been inspired by a teacher themselves, they will cherish their involvement in students' learning and growing, and their own participation in a learning and teaching community. Teaching may be perceived as a job that is inherently satisfying and personally rewarding, that allows an individual to make a positive difference in children's lives, and to contribute in a very positive way to society.

For some young people who intend to go to college and like children, the long summer vacation, relatively short school day, job security, pay and benefits, and traditional status associated with teaching are also attractive. The attraction may be particularly strong for those who value time off and for individuals who build their career expectations around being able to coordinate their work schedule with their own children's school schedule.

The relative ease of admittance to teaching programs may be a factor for some individuals. While some schools of education have high standards, standards for admittance to, and graduation from, other schools of education have been less than stringent. Arthur Levine notes that "While aspiring secondary school teachers do well compared to the national averages on SAT and GRE exams, the scores of future elementary school teachers fall near the bottom of test takers. Their GRE scores are 100 points below the national average."<sup>15</sup>

According to a 2010 McKinsey and Company report, only 23 percent of new teachers in the U.S. come from the top third of the college academic cohort. In high poverty schools, only 14 percent of new teachers come from the top third of the academic cohort. While U.S. research on whether teachers' academic backgrounds significantly predict classroom effectiveness is very mixed, the U.S. situation contrasts with the world's best performing school districts (Singapore, Finland, and South Korea), where 100 percent of teachers are recruited from the top third of the academic cohort. Noting that "the quality of an education system cannot exceed the quality of its teachers," this report identifies recruiting top third students to be teachers as a best practice in those nations with the best school systems.<sup>16</sup>

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The relatively lower academic standing of new teachers also contrasts with previous generations in the U.S., when women and minorities had fewer professional options (in the 1970s, more than half of all

college educated, working women were teachers; now, only about 15 percent of all college educated, working women are teachers). Older female teachers may include a disproportionate share of those who had higher academic standing and felt that they had fewer viable alternative professional career options.<sup>17</sup>

Older teachers are retiring and being replaced by younger teachers. A 2011 national survey found that the proportion of teachers 50 and older declined from 42 percent in 2005 to 31 percent in 2011, the proportion of teachers with at least 25 years' of experience declined from 27 percent to 17 percent in the same period, and only 13 percent of teachers expect to be retired in the next five years (in 2005, 22 percent expected to be retired in five years). Eighty-four percent of teachers are female; 84 percent are white. Almost half (48 percent) of traditionally prepared teachers teach elementary education; 29 percent of teachers who went through alternative teacher preparation teach elementary education.<sup>18</sup>

The same survey asked teachers to identify their satisfaction with various aspects of teaching. The aspect that generated the highest satisfaction levels were “relationships with students” (97 percent very or somewhat satisfied), relationships with other teachers (96 percent), and relationships with parents of students (92 percent). The aspects of teaching that teachers were least satisfied with were salary (45 percent somewhat or very dissatisfied), status of teachers in their community (38 percent), and tests of student achievement (38 percent). Other areas of relatively high dissatisfaction were “quality of professional development” (30 percent somewhat or very dissatisfied), “present textbooks” (29 percent) and “professional development opportunities” (28 percent).<sup>19</sup>

Whatever a prospective teacher’s demographic, motivation, or academic standing, the reality is that effective teaching requires a great deal more time, training, effort, intelligence, and energy than many people appreciate. The teaching environment in public schools is changing rapidly in response to funding pressures, changes in technology, changes in state laws, and efforts to hold teachers individually accountable for student achievement. And, in addition to the ever evolving challenges presented by students and parents, administrators and elected officials, there is now a fear that disinvestment in public education is being disguised as reform.

### Teacher Training

In colonial America, teachers were required to be of good moral character, as judged by one or more local ministers, though much less attention seems to have been paid to a prospective teacher’s subject knowledge or ability to teach. In the later 19<sup>th</sup> Century, while many teachers were trained in county teachers’ institutes or city normal schools (often part of a public high school), a number of state universities were authorized to grant teaching certificates to any graduate who wanted one.

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Teachers in the U.S. are now generally required to have an undergraduate major or minor in education, a result of more than a century of efforts by professional educators to shape the education system and professionalize teaching. According to a 2010 McKinsey and Company report, “The Department of Education reports that about 80% of teachers enter the profession through traditional certification paths in schools and departments of education. While some of the nation’s over 1,450 schools, colleges and departments of education offer rigorous training, many are held in low regard. More than half of teachers are trained in schools with low admission standards; many accept virtually any high school graduate who applies.”<sup>20</sup>

In order to teach in Michigan, a candidate must successfully complete a course of study at an approved teacher preparation institution, including passing a basic skills test and the elementary education test and/or one or more subject area tests related to the specific content the teacher will be endorsed to teach. The basic skills test includes math, reading, and writing. Some teacher training programs require the applicant to pass all three basic skills subtests before admission into the program; state law requires passing all three subtests before student teaching. One obvious way to improve the quality of teacher candidates would be to require all applicants to pass the basic skills test before admission to any teacher training program; another way would be to increase the requirements for passing the test. Alternatively, a relatively high minimum score on the ACT or SAT could be required for admission to any teacher preparation program.

The Michigan Department of Education requires prospective teachers in the traditional certification program to earn at least a major and a minor in a subject area (English, mathematics, fine arts, etc.), and not less than 40 semester hours of general education. The content area major or minor appears on the individual’s teaching certificate as an endorsement if the person passes the appropriate subject



## The Michigan State Normal School/Eastern Michigan University

The first teachers' training school west of the Allegheny Mountains, the Michigan State Normal School, was established by the state in 1849 and enrolled its first class of 122 students in 1853. The Normal School taught basic secondary level classes that prepared students to be teachers; classes covered teaching methods and material appropriate for a variety of levels. Normal School students selected either the English Course, which was a two-year program to prepare primary school teachers (English Course students were required to be at least 14 years old), or the Classics Course, a three-year program for secondary school teachers and those students preparing for college (Classics Course students were required to be at least 13 years old). To be admitted to the Normal School, students were required either to have a high school diploma or to pass an entrance examination; the school could grant both high school diplomas and teaching certificates.

In 1899, Michigan State Normal School became Michigan State Normal College, reflecting the change from a secondary school to a four-year college, the first teacher training school in the U.S. to have a four-year degree program for teachers. In 1956 Michigan State Normal College became Eastern Michigan College; in 1959 it became Eastern Michigan University.<sup>a</sup>

<sup>a</sup> "A Brief History of EMU," Eastern Michigan University website, <http://www.emich.edu/walkingtour/hist.htm>.

area test. Michigan also requires 20 semester hours of theoretical and practical study of learning and teaching, and at least six of those hours must provide for directed student teaching.

### Subject Area Training

One of the most contentious issues in education continues to be the relative value of training in subject matter content versus training in teaching. A related issue is how specific credentials should be: whether teachers should be licensed to teach specific subjects (physics or science in general, Spanish or foreign language, trigonometry or mathematics) and under what conditions.<sup>21</sup> According to Diane Ravitch, "We don't have a problem of teachers lacking degrees. Teachers today have more degrees than ever before in our history; the bachelor's degree is ubiquitous, and about half even have a master's degree. We do, however, have a problem with the academic preparation of teachers: only a minority - 39% - have a bachelor's

or graduate degree in ANY academic field. The majority of teachers today have a degree in education, and many have both a B.A. and an M.A. in pedagogy."<sup>22</sup>

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While it is clear that adequate knowledge of the subject being taught is necessary, teachers also need verbal and cognitive abilities and knowledge of how to teach the subject. Some may argue that teachers should be subject area experts, but there are few empirical studies that link teachers' knowledge and student outcomes. One study that did investigate the effect of teachers' content knowledge and pedagogical content knowledge was performed in Germany, where math teacher candidates attend either an academic track or a non-academic track. Teachers on the academic track receive training comparable to a master's degree in mathematics, while the non-academic track emphasizes pedagogy and offers only limited math courses. As expected, teachers on the academic

## The Detroit Normal Training School for Teachers/Wayne State University

Prior to 1881, teachers in Michigan were either prepared by the Michigan State Normal School located in Ypsilanti or were untrained public school graduates who passed a certification examination and were granted a temporary teaching certificate. In 1881, the Detroit Board of Education approved the establishment of the Detroit Normal Training School for Teachers, which in its first year admitted 15 female high school graduates for a one-year course of study consisting of one semester of theory of the arts and pedagogy and one semester of practice teaching. The program was expanded to a two-year course of study within a decade, and in 1918, the first male students were admitted. In 1920, the school became the Detroit Teachers College. Tuition was charged for the first time in 1922 (\$15 per year). The Detroit Teachers College became a four-year, degree granting institution in 1923 and in 1933 the name was changed to the College of Education. In 1934, the College of Education combined with other city colleges to form Wayne University, which at that time was administered by the Detroit Board of Education. In 1956, Wayne University became a state institution, Wayne State University.<sup>a</sup>

<sup>a</sup> "History of the College – College of Education – Wayne State University," Wayne State University, <http://coe.wayne.edu/about/history.php>.

track had higher content knowledge. This study found that "Pedagogical Content Knowledge (PCK)—the area relating specifically to the main activity of teachers, namely, communicating subject matter to students—makes the greatest contribution to explaining student progress. This knowledge cannot be learned incidentally, but rather is acquired in structured learning environments."<sup>23</sup>

The Office of Professional Preparation Services of the Michigan Department of Education lists 114 approved teacher specialties. Michigan teacher candidates who pass only the basic skills test and the elementary education test may teach all subjects in grades kindergarten through five, and may teach all subjects in self contained classrooms only in grades six through eight. (The National Council on Teacher Quality recommends that middle school teachers in self contained classrooms be required to pass subject matter tests calibrated to middle school in every core area they teach.<sup>24</sup>)

Subject area tests correspond to endorsement areas, and candidates for secondary certification to teach grades six through 12 must pass the subject area test for each major or minor area for which they seek endorsement. Although subject area tests may be taken at any time, state law requires that they be passed before certification as secondary teachers. Some teachers from other states and

teachers wishing to add a new endorsement to their certification are required to take tests.<sup>25</sup>

Tests for content areas are developed and/or selected by the state superintendent of public instruction based on criteria recommended by a teacher examination advisory committee comprised of representatives of approved teacher education institutions and Michigan education organizations and associations. Four or five of the tests for specialty areas are redeveloped annually, with new cut scores. The content areas listed on the Department of Education website include those listed in the **Appendix**.

### Subject Area Test Results

The subject area tests, which collectively are called the Michigan Test for Teacher Certification (MTTC), are given if at least one eligible applicant applies. The proportion of test takers who are successful varies greatly by subject matter and year.

In 2008-09, 10,196 of 12,859 test takers were initially successful on one of 70 content area tests that were given. For eight of these content area tests, there was only one test taker; for another seven tests, there were only two or three test takers; for 22 of the content area tests there were fewer than ten test takers.



**Table 2**  
**Michigan Test for Teacher Certification**  
**Annual Summary of State Results:**  
**Initial Test Attempt and Cumulative Test Attempt of Eligible, First-Time Test Takers**

Program Year: September 2008– August 2009

Statewide Content Area Results for Tests with over 250 Test Takers

<u>Test</u>	<u>N*</u>	<u>Attempt Type</u>			
		<u>Initial</u>		<u>Cumulative</u>	
		<u>N Pass</u>	<u>Percent Pass</u>	<u>N Pass</u>	<u>Percent Pass</u>
Elementary Education	2,804	2,613	93.2	2,713	96.8
Early Childhood Education	662	615	92.9	632	95.5
Learning Disabilities	475	437	92.0	448	94.3
Cognitive Impairment	453	403	89.0	418	92.3
Mathematics (Secondary)	365	316	86.6	337	92.3
Emotionally Impaired	256	211	82.4	229	89.5
Mathematics (Elementary)	644	494	76.7	536	83.2
Physical Education	277	211	76.2	232	83.8
English	785	582	74.1	634	80.8
History	603	434	72.0	484	80.3
Language Arts (Elementary)	963	627	65.1	691	71.8
Integrated Science (Elementary)	491	299	60.9	334	68.0
Social Studies	993	585	58.9	649	65.4
All Tests	12,859	10,196	79.3%	10,895	84.7%

\* "N" is the number of eligible test takers during the year.

Source: Michigan Department of Education (website)

Eligible test takers were certified by their teacher preparation program. The test takers who passed the subject area test on the first attempt are designated "initial" and the total test takers who pass during the program year September 2008 through August 2009, including those who pass after one or more attempts if the first attempt occurred during the program year, are designated "cumulative." Tests are listed in order based on the percentage of initial test takers who were successful (of the most popular tests, the largest percentage of initial test takers, over 93 percent, passed the elementary education test). (See **Table 2**.)

There were 2,684 fewer test takers in 2008-09 than in 2006-07; the overall pass rate declined from 90.2 percent to 84.7 percent. Of the 75 content areas tested in both years, 47 had cumulative pass data reported in both 2006-07 and 2008-09 (the percentage that pass is not reported if there were fewer than ten test takers), and the percentage of test takers who were successful fell in 36 of those 47 content areas over the two years. Either the tests were made more difficult (only four or five tests are redeveloped each year), or the later test takers were more poorly prepared.

A total of 42,834 subject area tests were administered during the cumulative years September 2006 through August 2009: the initial pass rate was 84.0 percent and the cumulative pass rate was 90.8 percent. Initial pass rates ranged from 35.3 percent for business administration (17 test takers during the three years) to 100.0 percent for agricultural education and for dance, though the numbers taking each of those tests were very small (16 test takers for agricultural education and 23 for dance). For nine of the subject areas tested in the three years from September 2006 through August 2009, there were fewer than ten test takers; for each of the 12 subjects listed in **Table 3**, there were more than 1,000 test takers.

Over the three-year period, the largest number of test takers, 9,346, took the elementary education test, and 92.9 percent of them were successful on their first attempt (the cumulative pass rate was 98.3 percent). The second largest group of test takers was the 3,117 who took the social studies exam, but only 69.4 percent of them were successful on their first try.

As noted, issues include whether the range of tests is appropriate, whether the tests are valid indicators of the knowledge needed for successful teaching, and whether the passing point is set at the correct level.

**Table 3**  
**Michigan Test for Teacher Certification**  
**Three-Year Summary of State Results: Initial & Cumulative**  
**Initial Test Attempt and Cumulative Test Attempt of Eligible, First-Time Test Takers**

Program Years: September 2006 – August 2009

Statewide Content Area Results for Tests with over 1,000 Test Takers

Test	N*	Attempt Type			
		Initial		Cumulative	
		N Pass	Percent Pass	N Pass	Percent Pass
Elementary Education	9,346	8,686	92.9	9,184	98.3
Early Childhood Education	2,188	2,010	91.9	2,130	97.3
Learning Disabilities	1,494	1,364	91.3	1,449	97.0
Mathematics (Secondary)	1,185	1,067	90.0	1,125	94.9
Physical Education	1,059	932	88.0	995	94.0
English	2,826	2,436	86.2	2,576	91.2
Cognitive Impairment	1,179	993	84.2	1,123	95.3
Mathematics (Elementary)	2,004	1,649	82.3	1,792	89.4
History	2,176	1,757	80.7	1,939	89.1
Language Arts (Elementary)	2,997	2,276	75.9	2,509	83.7
Integrated Science (Elementary)	1,367	957	70.0	1,063	77.8
Social Studies	<u>3,117</u>	<u>2,164</u>	69.4	<u>2,421</u>	77.7
All Tests	42,834	35,983	84.0%	38,903	90.8%

\* "N" is the number of eligible test takers during the year.

Source: Michigan Department of Education (website)

## Michigan Teacher Colleges

In 2009-10, there were 97,798 teachers in Michigan public K-12 schools.<sup>26</sup> Nearly all were graduates of teacher training institutions. The Michigan Board of Education has approved 33 Michigan colleges and universities to prepare teachers and recommend them for a certificate to teach. Kalamazoo College (located in Kalamazoo) and Hillsdale College (located in Hillsdale) have discontinued offering teacher preparation. Baker College (sites in multiple locations, being mentored by Madonna University) and the College for Creative Studies (in Detroit, being mentored by Marygrove College) are under preliminary approval and work with mentor institutions, and Finlandia University (in Hancock, being mentored by Concordia University) and Robert B. Miller College (in Battle Creek, being mentored by Aquinas College) are under probationary approval.<sup>27</sup> Candidates in a developing teacher education program can be recommended for certification by a mentoring institution.

The federal Higher Education Act has required states to rate teacher preparation programs using their own criteria since 2001. States are required to assist those programs that are not performing satisfactorily. Michigan rates teacher colleges as “exemplary,” “satisfactory,” “at risk,” or “low performing” based on a 70 point scoring system. Points are awarded not just on passage rates on certification exams (30 of the current maximum of 70 points in the rating scale), but also on the program review status of endorsement programs offered (a maximum of ten points); participant completion rates within six years (a maximum of ten points); surveys of teacher candidates ( five points) and supervisors (five points); the degree to which programs prepare teachers for high demand assignments (five points); and diversity or the extent of minority preparation (five points). An additional assessment category of “teaching success rate,” defined as the number of new teachers from an institution evaluated as satisfactory or better, will be implemented over time as more systematic information becomes available from the Center for Educational Performance and Information (CEPI) and from institutional follow up.<sup>28</sup> The state has mandated that student achievement will be an in-

Michigan rates teacher colleges as “exemplary,” “satisfactory,” “at risk,” or “low performing” based on a 70 point scoring system.

creasingly important part of teacher evaluations, allowing for indirect inclusion of student achievement in judging teacher training institutions.

As noted, the most heavily weighted criterion in the teacher preparation program performance rubric uses the three-year aggregate of results of the specialty content area tests. If the aggregated, three-year score

for individuals validated by the institution is 90 percent or higher, the institution receives 30 points in the scoring system; an aggregate score of 85 to 89 percent results in an allocation of 25 points; an aggregate score of 80 to 84 percent results in an allocation of 20 points; if the aggregated score is below 80 percent,

the institution receives no points. For the academic year 2009-10, 14 programs received the maximum 30 points and 13 received 25 points. The three low performing programs (Adrian, Olivet, and Lake Superior State University) received no points in this category; another three programs (Ferris, Marygrove, and University of Detroit-Mercy) received 20 points.

Performance of prospective teachers on content area tests is measurable and meaningful. Other components of the evaluation seem less meaningful: every program received the maximum five points for teacher exit surveys and every program received the maximum ten points for program review status. Every program except one received the maximum five points in the “supervisor surveys” category (Northern received no points).

All but five programs received the maximum five points on “high need content.” Of those five, two (Adrian and Lake Superior State University) were rated low-performing and one (Alma) was in the at-risk category. Siena Heights and Western were rated satisfactory. There was more variability in the scores granted in the “diversity” category: six programs received no points; 16 received three points, and 11 received the maximum five points.

There was considerable variation in the program completion rate. Only University of Detroit-Mercy received a low four points. Four programs (Eastern, Concordia, Michigan Tech, and Olivet) received six points. Eight programs received eight points, and 19

received the maximum of ten points. Robert B. Miller, a newly approved probationary institution, does not have a six year cohort to measure and was not rated on this metric, though the sum of its other scores

(58) placed it in the “satisfactory” grade overall.

**Table 4** lists the overall score for each teacher training program. Of the 33 programs listed, two (Albion

**Table 4**  
**Teacher Preparation Institution Performance Scores — Academic Year 2009-10**

<u>Exemplary Institutions</u>	<u>Overall Score</u>
Albion	70
Andrews	70
Calvin	68
Grand Valley State	68
Hope	68
U of M	68
Aquinas (incl. Robert B. Miller)	66
Central Michigan	66
Eastern	66
Michigan State	66
Hillsdale	65
Oakland	65
U of M-Dearborn	65
Cornerstone	63
Madonna (incl. Baker)	63
Northern	63
Saginaw Valley	63
Spring Arbor	63
Wayne	63
<u>Satisfactory Institutions</u>	<u>Overall Score</u>
U of M-Flint	61
Ferris	60
Marygrove (incl. CCS)	60
Siena Heights	60
Robert B. Miller	N/A
Rochester	58
Western	58
Concordia	56
Michigan Tech56	
<u>At-Risk</u>	<u>Overall Score</u>
University of Detroit-Mercy	54
Alma	53
<u>Low-Performing</u>	<u>Overall Score</u>
Adrian	35
Olivet	34
Lake Superior State	33

Source: Memorandum from Michael P. Flanagan to the State Board of Education, July 25, 2011

**Table 5**  
**State Evaluations of Selected Teacher Training Programs**

	<u>2007-08</u>	<u>2008-09</u>	<u>2009-10</u>	<u>2010-11</u>
Adrian	Satisfactory	At Risk	Low Perf.	Low Perf.
Alma	Satisfactory	Satisfactory	At Risk	At Risk
Lake Superior State	At Risk	At Risk	Low Perf.	Low Perf.
Marygrove	Low Perf.	Low Perf.	Satisfactory	Satisfactory
Olivet	Satisfactory	Low Perf.	Low Perf.	Low Perf.
University of Detroit-Mercy	Low Perf.	Low Perf.	Low Perf.	At Risk

and Andrews) received the maximum number of points in each rating category and were among the 19 programs that were rated exemplary. Scores for the four mentee institutions are included in those of the mentor institutions.

The Michigan Department of Education has strategies for corrective action, support, and penalties for at-risk and low-performing programs. While there is some movement between rating categories over the years, some programs appear to be consistently troubled. (See **Table 5**.)

Teacher training programs may elect to obtain national accreditation. The National Council for Accreditation of Teacher Education (NCATE) is an independent organization that partners with states but applies its own standards, conducts an extensive initial on-site examination of programs and periodic reviews thereafter, and determines NCATE accreditation status. NCATE accredited institutions are Andrews University, Concordia College, Eastern Michigan University, Grand Valley State University, Madonna University, Saginaw Valley State University, and Western Michigan University.<sup>29</sup>

### Student Teaching

In a 2011 survey, 83 percent of teachers rated clinical/field based experiences as “very valuable” in developing competence to teach. This was the same proportion that rated “one’s own teaching experiences” as very valuable, and far more than the number who rated as “very valuable” courses in content areas (64 percent); professional development ac-

tivities (45 percent); education methods courses (35 percent); or the College of Education faculty (22 percent).<sup>30</sup>

Student teaching is intended to provide authentic, real-world experience that allows the teacher candidate to observe and practice skills under the direction of an experienced mentor teacher. About 200,000 teacher candidates from about 1,400 U.S. teacher training institutions student teach each year. This first clinical experience includes planning instruction, developing instructional materials, teaching lessons, guiding small group activities, maintaining order in the classroom, and meeting with faculty and parents<sup>31</sup>

The student teaching experience at Eastern Michigan University’s College of Education includes the following stages:

1. Observation – In the initial stage of experience, the candidate will primarily observe and analyze the teaching situation. Specifically, the candidate should become aware of the knowledge base in such areas as curriculum, discipline, planning, preparation, in-class performance, and become acquainted with numerous other duties involved with teaching in the assigned classroom and school.
2. Participation - As soon as possible the candidate enters the participatory stage. During this phase, the candidate makes applications of the knowledge base as he or she assists the cooperating teacher in various activities as di-

rected. This involves beginning to take over classroom responsibilities.

3. Instruction – The candidate will assume direct responsibility in all areas of teaching, usually beginning with one class or subject or a series of lessons and adding additional classes until a full teaching load is reached. The candidate should maintain this full teaching load for at least two to four weeks.<sup>32</sup>

The National Council on Teacher Quality (NCTQ) recommends that the student teaching experience be at least ten weeks long, and that the teacher training institution (rather than the K-12 district or the student teacher) select cooperating teachers who have at least three years of teaching experience and who have the mentoring skills to have a positive impact on the student teacher. NCTQ's review of student teaching found that there are neither enough qualified cooperating teachers nor the need for new elementary teachers to justify the large number of student teachers that are placed each year, that teacher training institutions lack rigorous criteria for the selection of cooperating teachers, that school districts tend to control student teacher placement, and that teacher training institutions do not take advantage of opportunities to provide guidance and feedback to student teachers.

NCTQ recommends that the student teacher's university supervisor observe the student teacher's delivery of instruction at least five times throughout a semester, and that each observation be followed by time for conferencing with written feedback aligned with identified competencies.<sup>33</sup> The National Council for Accreditation of Teacher Education (NCATE) recommends making school districts partners in preparing and assessing teacher candidates, revamping curricula to ensure alignment with field-based experiences, using multiple measures to assess teacher candidate's effect on student learning, giving candidates the opportunity to work in hard-to-staff schools, and other improvements.<sup>34</sup> Inadequate

dialogue and collaboration between professors and mentor teachers may lead to a student teacher experience that more resembles a custody agreement than a partnership, according to one cooperating teacher.<sup>35</sup>

New models for preparing teachers include the year-long apprenticeship or residency model, which makes teacher education a five-year program and gives teacher candidates a longer time to develop classroom management and other necessary skills.

## Recommendations for Teacher Colleges

New models for preparing teachers include the year-long apprenticeship or residency model, which makes teacher education a five-year program and gives teacher candidates a longer time to develop classroom management and other necessary skills.

Arthur Levine noted the lack of a standard approach to teacher preparation in the U.S. (for example, field work requirements vary from 30 hours to 300 hours) and the wide variations in teacher program quality, with most teachers prepared in lower quality programs. In *Educating School Teachers*, Levine asserted that many individuals graduate from U.S. teacher education programs without the skills and knowledge they need to be effective teachers, a conclusion he based on surveys of

teacher education alumni and school principals. Education school lessons are described as "out of date, more theoretical than practical, and are thin in content...In addition to being disconnected from schools, faculty members remain disconnected from the rest of the university because their research is considered lacking in academic rigor by their faculty peers." "Universities use their teacher education programs as 'cash cows,' requiring them to generate revenue to fund more prestigious departments. This forces them to increase their enrollments and lower their admission standards. Schools with low admission standards also tend to have low graduation requirements."<sup>36</sup>

While Levine found no significant difference in students' math or reading achievement based on whether their teachers were certified at institutions that were or were not accredited by the National Council for the Accreditation of Teacher Education



(NCATE), he did find a significant relationship between the type of university the teacher attended and their students' achievement. The study classified institutions using the Carnegie Classification at the time: doctoral extensive; doctoral intensive; and Masters I. Of all university trained teachers, 87 percent graduated from an institution in one of these three categories, and 54 percent graduated from Masters I institutions, where students generally have lower standardized admission test scores and lower high school grades compared to students at doctoral universities. "Controlling for experience, the study found that students with teachers prepared at Masters I universities have significantly lower growth in math and somewhat lower growth in reading than those with teachers who prepared at doctoral universities."<sup>37</sup>

Levine offers five recommendations to strengthen teacher education:

- Transform education schools from ivory towers into professional schools focused on school practice.
- Focus on student achievement as the primary measure of the success of teacher education programs.
- Make five-year teacher education programs the norm.
- Establish effective mechanisms for teacher education quality control.
- 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.<sup>38</sup>

The National Council on Teacher Quality reports that in 2010, 14 states (Michigan is not included among the 14) had adopted policies for holding teacher preparation programs accountable based on the academic performance of students taught by their graduates.<sup>39</sup> As data become available to link student performance to individual teachers in Michigan, this

information should also be used to inform the ratings of teacher preparation institutions, to the extent possible. The same limitations exist on this approach to rating colleges as exist to rating teachers: standardized tests are not given in every class in every grade; teaching to the test; teacher avoidance of hard-to-teach students.

Many more teachers graduate from Michigan teacher training institutes each year than are hired in the state. Michigan exports teachers: the Michigan Education Association indicates that about 5,000 of the average of 7,500 annual teacher training graduates leave the state.

Many more teachers graduate from Michigan teacher training institutes each year than are hired in the state. Michigan exports teachers: the Michigan Education Association indicates that about 5,000 of the average of 7,500 annual teacher training graduates leave the state. Michigan granted 7,980 provisional teaching certificates this year (up 35 percent from the previous year), but the number of teaching positions is declining, as is the number of public school students.<sup>40</sup> Demographic changes, per pupil funding cuts, and increased cost pressures portend further reductions in the number of teaching positions.

A necessary question concerns the appropriate number of teacher training institutions, especially when some programs are very small and prospective teachers from some institutions have low rates of passing state content area tests. The issue is made more complex by the fact that some of the smallest programs are private, rather than publicly funded, and that location makes some programs accessible to students who would otherwise not have access. Each public university in Michigan has its own policy making board, rather than belonging to a tightly unified statewide system, challenging efforts to coordinate programs. The state could, however, consider a more aggressive system for revoking its approval of low performing teacher preparation programs. (According to the "Standards, Requirements, and Procedures for Initial Approval of Teacher Preparation Institutions" approved by the State Board of Education on September 25, 2003, a program's application for final approval of a teacher training program must include "acceptable outcome data, including an 80% minimum collective pass rate on specialty area MTTC



tests.” Under this criterion, Adrian, Olivet, and Lake Superior State teacher training programs would not receive approval.) More aggressive efforts to revoke state approval of inferior teacher training institutions would increase pressure on colleges to exercise more selectivity in admissions and to improve programs.

At present, and into the foreseeable future, Michigan has more teachers than teaching positions. Of the 36 states that report monthly data on local government education employment to the Bureau of

Labor Statistics, Michigan reported the largest decline (4.5 percent from 2010 to 2011) of the 25 states that had lost local education positions.<sup>41</sup> Nationally, about 186,000 teachers are produced by traditional teacher education programs each year, and only about 77,000 are hired immediately after graduation.<sup>42</sup> While colleges and universities that offer teacher training could be expected to defend their programs, it may well be that fewer, higher quality teacher training programs would be in the best interest of taxpayers and students.

### U of M's Teacher Education Initiative

While all teacher preparation programs should be expected to be concerned with improving their product, the University of Michigan has a formal program to address this issue. U of M's Teacher Education Initiative (TEI) is a research program designed to improve the quality of teacher training by redesigning how teachers are prepared for practice. The goal of TEI “is to design a program that helps student teachers develop disciplinary knowledge and skill that are flexible in the special ways that teaching requires, and learn to attend to and build upon diverse pupils’ ideas, interpretations, and solutions in the complex environment of schools.”

At the center of this work is the development of curriculum and pedagogy that focuses on preparing beginning teachers for practice. Our graduates must be able to carry out the core tasks of teaching. They must be able to engage youth in complex academic work, develop their interests and skills, and represent complicated ideas in accessible ways. This involves skills in making judgments, taking action, and assessing the results. It entails deliberate attention to who students are, and to how culture, race, and gender shape what students bring to the classroom and how they interpret and respond to instruction. In short, teachers must learn to *do* complex relational, psychological, social, and intellectual work, not just talk about doing it.

To build a program that can do this we are engaging in three major lines of work: building a curriculum organized around the core domains of teachers’ work; designing activities and tools, including digital materials, that will help teachers achieve competent performance in these domains; and creating a system of performance assessments to use throughout our program. In addition, we are building special school and classroom settings that will serve simultaneously as laboratories for the study of teaching and learning and as sites purposefully designed for learning teaching. Like the surgical theaters common in medical schools, these physical environments will be set up to support close observation and interaction, as well as videotaping and other forms of record-making. Practitioners who work in these settings will be skillful in making practice visible to novices, and in making its elements available for their learning. These laboratories will serve not only student teachers, but also faculty members and doctoral students who are conducting research on teaching and learning, preparing to become teacher educators, and studying their own teacher education practice.<sup>a</sup>

TEI is a long-term research and development project that is separate from U of M's teacher preparation program.

<sup>a</sup> University of Michigan, School of Education, Teacher Education Initiative website [http://umich.edu/tei/about\\_tei](http://umich.edu/tei/about_tei).

## Teacher Certification

As noted on the University of Michigan Teacher Education Initiative website, there is not, and has never been, complete agreement on the best method to ensure teacher quality and effectiveness. Nor is there agreement on the appropriate entity or process that should determine entry into the teaching field, whether by examination, by completion of an approved training program, by organizations of teachers, by colleges of education, by local or state officials, or by national criteria.<sup>43</sup>

Michigan and other states seek to ensure teacher quality and effectiveness by means of a certification process that specifies entry qualifications. The problem is that accreditation is viewed as a compliance-based process rather than a standard of quality preparation.<sup>44</sup>

The federal No Child Left Behind Act requires that teachers be fully certified, in the belief that would raise student performance. More than 90 percent of teachers in the U.S. are certified, and in some regions it is over 95 percent. Some states require teachers to have earned a master's degree in order to be fully certified. However, research has found no consistent correlation of credentials, degrees including master's degrees, (or experience after the first few years, or teacher test scores) with teaching skills.<sup>45</sup>

A certified teacher holds a valid teaching certificate as defined by the state board of education. Every state requires that teachers complete certain requirements in order to be certified to teach in that state. These requirements generally include completion of an approved education program, completion of a student teaching program, passing a standardized test such as the MTTC, and submission of background information to the appropriate state agency.

## Traditional Certification

As noted previously, Michigan law (MCL 380.1531) requires that an aspiring teacher pass a basic skills examination before that person is enrolled for student teaching and pass the elementary certification

examination and subject area examination, as applicable, before the person is recommended for certification. Between 2001 and 2006, an average of 8,012 teachers received initial certification to teach in Michigan.<sup>46</sup> State law requires that candidates for certification complete coursework in first aid and CPR and pass criminal records checks.

Michigan requires that a person employed in an elementary or secondary school with instructional responsibilities must have a certificate, permit or vocational authorization. Michigan issues the following types of certificates:

- Provisional certificate (this initial teaching license requires successful completion of an approved teacher preparation program including student teaching and passage of the Michigan Test for Teacher Certification; it is valid for up to six years)
- Two-year extended provisional certificate (if the applicant's provisional certificate expired less than ten years prior, the applicant has at least one year of satisfactory teaching experience, is enrolled in a planned program, and is sponsored by a public or private school)
- Professional education certificate (the advanced teaching license requires additional coursework and experience and three years of successful teaching with a Provisional Certificate; must be renewed every five years)
- Interim occupational certificate (the initial vocational license)
- Occupational education certificate (the advanced vocational license)
- Temporary teacher employment authorization (a one year, non-renewable authorization issued to candidates with valid out-of-state teaching certificates)
- Interim teaching certificate (issued to a degreed individual who passes the test for teacher certification and appropriate subject area exams and is enrolled in an approved alternate route teaching program)
- Substitute permit (requires completion of 90 semester hours at a four-year college or university)<sup>47</sup>

The rapid rise of charter schools has resulted in some states adopting different approaches to certification requirements for charter school teachers. In Michigan, charter school and private (including parochial) school teachers must be certified; certification criteria are the same for these teachers as for traditional public school teachers.

The Revised School Code provides for the suspension of the teaching certificate of a teacher convicted of any felony or of specific misdemeanors.

### Alternative Certification

About 500,000 of the 3.6 million teachers in the U.S. have entered teaching through routes other than traditional teacher training institutions.<sup>48</sup> Nationally, about a third of teachers hired since 2005 entered teaching through an alternative program.<sup>49</sup>

Various goals have been promoted to support development of alternative routes to teacher certification:

- Expanding the pool of minority and underrepresented teacher candidates to promote diversity of culture and gender
- Reducing the number of uncertified teachers employed
- Recruiting individuals with significant academic and occupational experience to teaching
- Facilitating the outplacement of retired or laid off business and industry personnel
- Expanding the pool of math, science, foreign language, or other specialty teachers available to work in rural and poor urban districts.<sup>50</sup>

Nationally in 2005-06, 34,171 individuals completed alternative teacher preparation programs and 194,999 completed traditional routes; 14.9 percent of all of the people who completed teacher training in that year followed alternative routes. In some states, the proportions were much higher: in Texas, 9,798 (41.0 percent) completed alternative routes and 14,079 completed traditional routes; in Califor-

In Michigan, charter school and private (including parochial) school teachers must be certified; certification criteria are the same for these teachers as for traditional public school teachers.

nia, 4,780 (22.9 percent) completed alternative routes and 16,065 completed traditional routes; in New York, 4,804 (16.5 percent) completed alternative routes and 24,300 completed traditional routes.<sup>51</sup>

Across the U.S., nearly all alternative routes to teacher certification are collaborations among the state licensing authority, institutions of higher learning, and local

school districts. One example, Teach for America, places recent college graduates in urban and rural public schools through alternative certification programs.<sup>52</sup> A 2011 survey completed by 1,076 teachers in the U.S. found striking differences in attitudes between teachers from nontraditional routes and graduates of traditional college campus based teacher education programs on school reform issues including tenure, performance pay,

and using student achievement to evaluate teacher effectiveness.<sup>53</sup>

Michigan is one of 48 states that have approved alternative routes to teacher certification. Michigan's non-traditional route allows an individual to work as a teacher for three years while completing certification requirements. According to PA 202 of 2009, an Interim Teaching Certificate is issued to an individual who is a participant in a state approved alternative teaching program; has at least a Bachelor's Degree from an accredited institution of higher education, with a GPA of a 3.0 on a 4.0 scale; and passed the basic skills examination and the appropriate subject area examination prior to acceptance or admission to the alternate route program. While working under the Interim Certificate, the individual must pass a criminal history check; receive intensive observation and coaching; and complete three years of satisfactory teaching experience.<sup>54</sup> Approved teacher education programs may apply to the state for approval of alternative certification programs.

According to U.S. Department of Education information, there were 8,136 individuals in Michigan in 2005-06 who completed all the requirements of traditional teacher preparation programs and 59 individuals (0.7 percent) who completed alternative

teacher preparation routes (there were none in 2000-01, 2001-02, and 2002-03; 121 in 2003-04; and 102 in 2004-05).

### Proposed Master Teacher Certificate

The 2011 NCEI national survey of teachers found that 55 percent of respondent teachers rated mentor teachers “very helpful” in developing competence to teach; another 20 percent rated mentor teacher somewhat helpful; 14 percent indicated “no support provided” to this question. Mentor teachers were rated very helpful more than “other school personnel,” “school principal,” “college/university personnel,” or any other group.<sup>55</sup>

Governor Snyder has proposed adding a master teacher category to the teacher certification system. The term “master teacher” has been recognized in state statute (for example, MCL 380.1525 (1)(g) provides that state and federal funds for professional development may be used by school districts to provide sabbatical leaves for up to one academic year for selected master teachers to aid in professional development). The proposed master teacher credential is intended to recognize excellent teachers and ensure that they can find satisfying career paths that keep them in the classroom. The performance based credential would certify the holder to act as a new teacher mentor and school instructional leader and would make the holder eligible for higher pay.

The use of master or consulting teachers is being tested in fewer than 100 U.S. school districts that have adopted formal Peer Assistance Review (PAR) programs. These programs use consulting teachers, who are recognized experts, to mentor new teachers and to work with underperforming veteran teachers. Mentoring of new teachers is designed to help new teachers through the difficult first year and improve retention rates for promising rookie teachers.

Assigning consulting teachers to struggling veteran teachers is designed to improve performance; under negotiated rules in the Toledo, Ohio PAR program, failure to improve results in termination (at a

much lower cost than firing a tenured teacher under most contracts). Principals initiate the assignment of consulting teachers, who are experienced veteran teachers employed by the district, to provide intensive mentoring and peer evaluation to underperforming teachers.<sup>56</sup>

According to one experienced teacher coach, coaching is a high leverage way to improve student learning, contribute to teacher retention, build instructional capacity, improve relationships between colleagues, and establish a way for teachers to collaborate. The practice is relatively undefined, and roles may differ according to the situation. According to this source, teacher coaches may encounter distrust or resistance from teachers, may not have clearly defined roles and responsibilities, and may be expected to transform teaching and learning in ways that are unrealistic.<sup>57</sup> These experiences could be used to design stronger, better defined programs.

### Teacher Selection

Teachers who have been certified may apply for jobs in school districts or charter schools, often online, and provide requested personal information and records of education, work experience, and teaching certificate. A letter of interest or cover letter, resume, and letters of recommendation may be requested. Typically, school districts’ human resources departments consider applicants and make hiring decisions based on immediate and long-term staffing needs. Districts may seek new, inexperienced teachers who are less expensive. Or, districts may prefer more experienced teachers with additional credentials, though they generally command higher salaries. Although research has discredited the value of traditional credentials such as masters’ degrees and years of teaching (beyond the first three to five years), it is clearly important for schools and districts to screen prospective teachers carefully to ensure quality and effectiveness. Hiring decisions may be made more complicated because the value of extensive coursework in education, as opposed to content areas, especially for secondary teachers, is being challenged.

The National Council on Teacher Quality advises that more effective teachers score relatively higher on tests of literacy, and that colleges that are more selective in their admissions produce more effective teachers. Some of the most important teacher attributes, such as being dedicated, energetic, inspirational, and having good organizational skills, are the hardest to measure.<sup>58</sup>

Hiring decisions may also be informed by the research conducted by Teach for America, which identified seven attributes of teachers who produced the largest learning gains: high achieving; responsible; critical thinker; organized; motivating; respectful; and shares the goals of the organization.<sup>59</sup>

For some charter school proponents, a school principal's ability to hire and fire teachers is a key factor in a school's success. In Michigan, this idea is being applied in the Education Achievement System, the recently created statewide school district that will assume operation of the lowest performing five percent of public schools. In these schools, principals will be empowered to hire the best teachers they can find. According to a plan announced by state and Detroit officials, the statewide district will begin operating schools in September 2012, and will initially include the 39 lowest performing schools located in Detroit.

Teacher hiring that consists of the traditional background check and review of transcripts, licensing test scores, and resume is being replaced in some districts outside of Michigan. The District of Columbia is taping teaching auditions by applicants for teaching jobs in the district and making those videos available for principals to review. Denver, Pittsburgh, and Tulsa have also received foundation funding to support adoption of "strategic hiring," which is defined as collecting more information on candidates, developing stronger relations with teacher preparation programs, and better tracking new hires' class-

room performance. While districts seek selection measures that will improve teacher quality, research has yet to identify any one feature that strongly predicts whether a teacher will be highly effective.<sup>60</sup>

According to an Education Week article, many districts plan to connect their teacher evaluation system to their hiring system, hoping to find correlations that can be used to select the highest potential candidates. Other districts have purchased prescreening instruments that they hope will produce a good pool of teacher candidates.<sup>61</sup>

The number of teachers employed in public schools in Michigan is declining. In December 2005, the Michigan Department of Education reported 103,888 full time equivalent (FTE) teachers and a teacher "headcount" of 117,973. In fall of 2010, there were 101,229 FTE teachers and a teacher headcount of 105,061. Layoff criteria are receiving more attention than hiring criteria.

The National Council on Teacher Quality advises that more effective teachers score relatively higher on tests of literacy, and that colleges that are more selective in their admissions produce more effective teachers. Some of the most important teacher attributes, such as being dedicated, energetic, inspirational, and having good organizational skills, are the hardest to measure.

### Teacher Education during Employment

Teacher training does not end with graduation from a school of education, or with student teaching or certification, or even with getting the first teaching job. A series of laws and state regulations have been adopted to ensure that new and experienced teachers themselves continue to learn.

### New Teacher Induction and Mentoring Program

Michigan is among the states that have responded to very high rates of new teacher turnover (nationally, nearly half of new teachers leave the classroom within the first five years) by establishing induction and mentoring programs for new teachers. Comprehensive induction programs include mentoring, common planning time and collaboration with other teachers, ongoing professional development, participation in an external network of teachers, and standards based



evaluation. Various models have been developed (the New Teacher Center Induction Model developed at the University of California, Santa Cruz and the Pathwise Framework Induction Program developed by Educational Testing Service are among these) and there is reportedly evidence that participation in these programs has reduced attrition among new teachers, improved teacher performance on some measures, and saved money for school districts.<sup>62</sup>

In Michigan, new teachers receive support from locally provided induction and mentoring programs, which were mandated by the state in 1993. The program is included in the Revised School Code, and requires all new classroom teachers to be mentored by a master teacher ("master teacher" is an assignment, not a state issued credential), or college professor or retired master teacher, and to have 15 days of intensive professional development during the first three years of employment. (MCL 380.1526) The new teacher must also receive a professional development plan (described in the next section).

The intent of the mentor, the professional development plan, the structured induction program, and the 15 days of professional development is to help the new teacher move from being a student to being an instructor and a member of a professional community. The emphasis is on instruction and classroom management. The Michigan State Board of Education, Michigan Department of Education, and Michigan State University partnered to create the ASSIST (Advocating Strong Standards-Based Induction Support for Teachers) web site to support the teacher induction program.

A review of 15 empirical studies of teacher induction programs from 1999 through 2010 found that programs that are more comprehensive, or longer, or include more depth of support appear to be better. This study found the following effects:

Michigan law mandates the creation and provision of individualized development plans (IDPs) for new probationary teachers and for tenured teachers who receive a rating of ineffective or minimally effective on an annual year-end performance evaluation.

## *Effects on Commitment and Retention*

- Almost all of the studies reviewed showed that beginning teachers who participated in some kind of induction program had higher satisfaction, commitment, or retention.

## *Effects on Classroom Practices*

- Most of the studies reviewed showed that beginning teachers who participated in some kind of induction program performed better at various aspects of teaching, such as keeping students on task, developing workable lesson plans, using effective student questioning practices, adjusting classroom activities to meet students' interests, maintaining a positive classroom atmosphere, and demonstrating successful classroom management.

## *Effects on Student Achievement*

- Almost all of the studies reviewed showed that students of beginning teachers who participated in some kind of induction program had higher scores, or gains, on academic achievement tests.<sup>63</sup>

## **Individualized Development Plan**

Michigan law mandates the creation and provision of individualized development plans (IDPs) for new probationary teachers and for tenured teachers who receive a rating of ineffective or minimally effective on an annual year-end performance evaluation. The law requires that an individualized development plan be developed by appropriate administrative personnel in consultation with the individual teacher, and that the teacher make progress toward individual development goals within a specified time period of not more than 180 days.

*Assist Beginning Teachers* is a website supported by Michigan State University and the Michigan State

Board of Education and funded by the U.S. Department of Education that provides resources for principals and teachers. That site describes a process in which the principal works with a new teacher to develop an IDP and proposes a series of questions for consideration in the development process:

- Will this work lead to improved student progress?
- Will it increase the new teacher's commitment to this school and to the profession?
- Will it support the beginning teacher's instructional performance?
- Will it promote their personal and professional well-being?
- Will it help the new teacher learn more about the school culture?
- Will it address the entry-level standards and required induction plan for Michigan teachers?<sup>64</sup>

According to this source, when helping new teachers develop their IDPs, school leaders should be mindful of principles of adult learning: learning is an active process that occurs over time; it is driven by the learner and often focuses on issues that are meaningful to them; it is typically experimental in nature; it can often be fueled by rich, diverse and accessible sources of information; inquiring into one's assumptions can deepen the learning process.<sup>65</sup>

## Professional Development

Michigan law requires that the board of every public school district, intermediate school district, and public school academy must provide at least five days of teacher professional development each school year (these are in addition to professional development required in the teacher induction program). A teacher's refusal to participate in professional development may be considered as not successfully completing the year of teaching or as not meeting the conditions of employment.

Professional development includes activities paid for or supported by the district that serve the purpose of increasing student learning; that are aligned with the school improvement plan; and that are planned, ongoing, and intensive. These activities may include curriculum development meetings, school improve-

ment committee meetings, study groups, action research, conferences, workshops, university or college classes, sessions dedicated to qualifying for certification, online courses, and on-line learning. Mentoring a new teacher and student teacher supervision may also be considered professional development if new knowledge is gained by the veteran teacher.

The Michigan Department of Education defines "quality professional development" as follows:

- Is for the purpose of enhancing teaching and learning.
- Is consistent with building and district school improvement plans and, when available, NCA goals and district strategic plans.
- Is part of an ongoing comprehensive professional development plan that addresses the long-term professional needs of the individual as well as the long-term change of practice in the building and district.
- Is characterized by the knowledge of educational needs of students, the study of proven research and inclusive of the best use of new technologies.
- Includes best principles of adult learning that includes design by the educators and non-teaching staff for whom the professional development is intended.
- Occurs when educators and non-teaching staff collaborate and share knowledge with each other.
- Requires ongoing reflection.
- Is helpful to all school staff as they work to meet the needs of students who learn in different ways and come from diverse backgrounds.
- Is no less than one hour in length.<sup>66</sup>

A district's professional development program is considered unrelated to the teacher's requirement to acquire at least 18 semester hours at an approved teacher preparation institution to earn the profes-



sional education certificate or six semester hours of continuing education credits for renewal of the certificate. There are, however, special arrangements that would allow both obligations to be met by the same program or course.

## Continuing Education Requirements

Michigan is among the states that require teachers to complete a specific number of continuing education credits to maintain certification.

The renewal requirement for the Professional Education certificate includes the completion of six semester hours of appropriate coursework through an approved institution, or 18 hours of State Board-Continuing Education Units (SB-CEUs), or a combination of both. In addition to workshops, seminars, trainings and conferences, non-traditional professional development activities are also eligible for SB-CEU credit, if preapproved by the state department. These activities include serving as a mentor teacher, serving as a supervising/cooperating teacher, serving on a state board appointed advisory committee, serving on a school or district I improvement team, serving on a school committee, and serv-

Michigan is among the states that require teachers to complete a specific number of continuing education credits to maintain certification.

ing on an approved accreditation review or site visit team. Completion of the portfolio component of the National Board for Professional Teaching Standards earns 9 SB-CEUs. Completion of the certification process and being awarded certification from the National Board for Professional Teaching Standards earns 18 SB-CEUs, as does completion of the renewal process for certification.

The relevance of continuing education credits has been questioned, and the Governor has proposed new requirements that credits be clearly linked to teacher skill-building.

## Masters Degrees

Traditionally, teachers have received pay increases for obtaining a master's degree. There were 178,564 master's degrees in education granted in the U.S. in 2008-09; this was 27 percent of all master's degrees granted. The demand for graduate education degrees has made this a lucrative area for universities, but research has failed to prove a link between a teacher having a master's degree and improved student achievement.<sup>67</sup>

## Conclusion

Research confirms the importance of teachers, but there is surprisingly little consensus on the best way to train, select, and develop effective teachers. In fact, many of the traditional programs for training, certifying, and continuing development of teachers are being challenged. Debate continues on whether subject area expertise or educational methods should be the focus of teacher training. The federal No Child Left Behind act implemented a policy requiring “highly qualified” teachers, a credentials based designation assumed, but not proven, to correlate with effectiveness. Race to the Top, another federal program, was designed to spur teaching innovations within the assumptions embedded in the program.

As Michigan struggles to fund public universities and students struggle to pay for their courses, it seems appropriate to question the need for 33 teacher training programs. Relatively low standards for entry and numerous public and private teacher training programs increase accessibility. Teacher turnover in the first few years is very high, and Michigan exports teachers trained here but unable to find jobs in the state. Because the number of students and the number of teachers in the state is declining, this may be a good time to institute a more aggressive policy to withdraw approval of at-risk and low performing programs while at the same time increasing support for quality programs. Requiring teacher training programs to obtain national accreditation could be one way to address the quality issue. The easy approach is to continue to “let the buyer beware,” and to continue to allow many colleges and universities to enroll students who are less likely to graduate and to graduate students who are less likely to be certified or employed as teachers.

Teacher certification is compliance based: graduate from an approved teacher training program, pass the appropriate academic tests and background check, complete student teaching. All of these criteria are important (and easy to verify), but both excellent and ineffective teachers have met them, which indicates that they are not sufficient to ensure that an individual has the qualities needed to be a good teacher. As students in Michigan and the U.S. continue to slide in national and international competitions, we need a better approach to identify teachers who will be successful...indeed, we need a better definition of a successful teacher. As they

struggle to select promising candidates, some school districts are requiring auditions to help in hiring decisions, assuming that administrators can perceive teaching talent through that approach.

A number of policies are in place to ensure that beginning teachers get the mentoring they need, that low rated teachers receive the individualized help they need to improve, and that all teachers receive professional development and continuing education. The quality of these interventions and development opportunities varies. Adoption of special training and of a new category of certification for master/mentor teachers who would be teacher trainers located on site in schools may be one approach to improving the quality and relevance of in-service training.

The typical teacher will get better with experience, but only during the first few years. “She will develop her craft, learn her tasks, learn classroom management, and find ways to help students learn. The existing evidence does not, however, suggest any clear way to provide this experience before entry into the classroom or to reduce the adjustments that will need to be made once in the classroom. For example, changes in teacher preparation or more extensive induction and mentoring programs, while effective policies, have yet to be shown to significantly alter the early career learning of teachers. Similarly, even very intensive professional development to help teachers become more effective after they are already in the classroom has shown little impact on student achievement.”<sup>68</sup>

In spite of the failure of research to identify specific effective interventions, lawmakers change statutes affecting teachers because they want to improve public education and because they have the power to make those legislative changes. If changes improve the applicable training teachers receive before and after employment and facilitate the removal of ineffective teachers, those changes may improve the quality of education. If, however, the many other factors that affect student performance (and that are not susceptible to legislative dictate) are not addressed, the success of reforms will be limited. And if the school funding resources needed to implement reforms are not available, the effects will be limited.

## Appendix

Teacher subject areas listed on the Department of Education website include the following:

**English Language Arts:** Communication Arts; Journalism; Reading; Speech; English; Language Arts; Reading Specialist

**Social Science:** Anthropology; Behavioral Studies; Economics; History; Psychology; Sociology; Geography; Political Science; Social Studies

**Science:** Biology; Earth-Space Science; Physical Sciences; Chemistry; Integrated Science; Physics

**World Language/Bilingual/ESL:** American Sign Language; Arabic (Modern Standard); Bilingual Arabic; Bilingual Arabic; Bilingual Chaldean; Bilingual Chinese; Bilingual Filipino; Bilingual French; Bilingual German; Bilingual Greek; Bilingual Hebrew; Bilingual Italian; Bilingual Japanese; Bilingual Korean; Bilingual Ojibwe; Bilingual Other; Bilingual Polish; Bilingual Russian; Bilingual Servo-Croatian/Bosnian; Bilingual Spanish; Bilingual Vietnamese; Chinese (mandarin); English as a Second Language; French; German; Greek; Hebrew; Italian; Japanese; Latin; Polish; Russian; Spanish

**Business:** Business Management, Marketing, and Technology; Marketing Education

**Family and Consumers:** Family and Consumer Sciences

**Health, Physical Education:** Health Education; Physical Education; Recreation

**Technology Related:** Computer Science; Educational Technology; Industrial Technology; Technology and Design

**Library Media:** Library Media

**Environmental Studies:** Environmental Studies

**Guidance and Counseling:** Guidance and Counseling

**Visual and Performing Arts:** Dance; Fine Arts; Music Education; Visual Arts Education; Visual arts Education Specialist

**Academic Study of Religions:** Academic Study of Religions

**Special Education:** Autism Spectrum Disorder; Cognitive Impairment; Emotional Impairment; Hearing Impairment; Learning Disabilities; Physical Education for Students with Disabilities; Physical or Other Health Impairment; Speech and Language Impairment; Visual Impairment

**Career and Technical Education:** Vocational Agriscience and Natural Resources; Vocational Business Services; Vocational Child Care; Vocational Cosmetology; Vocational Family and Consumer Science; Vocational Health Sciences; Vocational Hospitality; Vocational Law Enforcement/Fire Science; Vocational Marketing Education; Vocational Teacher Cadet; Vocational Technical

**Early Childhood Education:** Early Childhood Education

**Middle Level:** Middle Level (refers to early adolescence and middle school)

**Mathematics:** Mathematics

**Agricultural Education:** Agriscience and Natural Resources

## Endnotes

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