

Michigan

Preparing Teachers for a New Era

What will it take to prepare a new generation of teachers who are able to work successfully with an increasingly diverse student population and help their students achieve new rigorous learning goals? What are the key features of teacher education programs that can provide the public schools with such teachers? And what are the implications of our best answers to these questions for state policy? For state policymakers, university leaders, and district officials charged with ensuring that all children are taught by highly qualified teachers, it is imperative to answer these questions about teacher quality. Finding the answers and acting on them require the commitment, collaboration, and coordination of a number of public and private institutions and agencies, and of multiple levels of government. Access to a high-quality teacher education program can affect teachers' productivity, the longevity of their careers, and the quality of the learning opportunities provided for their students.

Through its Teachers for a New Era (TNE) initiative, Carnegie Corporation of New York, with support from the Annenberg and Ford Foundations, is stimulating a thoughtful search for answers by supporting ambitious reforms in selected teacher education programs across the country. Drawing on the wisdom of national professional organizations, reform commissions, and the research community, Carnegie is challenging these institutions to develop exemplary teacher preparation programs based on three design principles:

2003–2004 Snapshot

Approved Teacher Preparation Programs:	32
Initial Teacher Certificates Issued by the State:	8,451
K–12 public school teachers:	92,805

1. **Decisions Driven by Evidence.** The new teacher education programs would be guided by a culture of evidence. Program content and pedagogical practice would be based on credible evidence drawn from research literature and from the experience of their students. Program effectiveness would be determined by the impact of their graduates on student achievement, and these data would drive the continuous improvement of their programs.

2. **Effective Engagement of Arts and Sciences Faculties.** The education of prospective teachers would include the full engagement of faculty members in the disciplines of the arts and sciences (A&S) to ensure teachers obtained the depth of subject-matter understanding and pedagogical content knowledge needed to understand and address students' learning needs. A&S faculties would collaborate with teacher educators to ensure that prospective teachers were well prepared to teach the curricula of the public schools served by the institution.

3. **Emphasis on Teaching as a Clinical Practice Profession.** Teacher education would integrate academically rigorous experiences with immersion in clinical practice. This would entail close cooperation between colleges of education and K–12 schools, use of exemplary K–12 teachers as clinical faculty appointed to the college of education, and support for residency programs for beginning teachers over a two-year period of induction.

With support from Carnegie, 11 institutions in 10 states are redesigning their teacher preparation programs according to these three

design principles. They are critically reconsidering their use of the knowledge base, their collection and use of evidence, their curriculum and standards, and their school-based relationships in order to produce higher-quality teacher candidates. It is hoped that the accomplishments of these institutions will offer interested policymakers, university leaders, and state education officials blueprints and tools to help them develop improved teacher preparation programs. Such programs will be capable of producing the teachers we need to raise the performance of the public schools and close the achievement gaps that perpetuate social inequities.

Clearly, states have an important role to play in this work. Through leadership, policymaking, resource allocations, and oversight, state governments shape the environments in which public and private teacher preparation programs operate. They can encourage and support efforts by these programs to restructure so as to foster a culture of evidence, engage A&S faculties, and provide prospective teachers with the rich and sustained clinical experiences and support they need.

For each of the 10 states in which TNE institutions operate, CPRE has developed a policy profile that explores the interaction of state policies and programs with the core ideas and practices associated with Carnegie's three design principles. For each state, we first provide a brief description of how the TNE institution is acting on the three design principles. Then we describe the current policy context for teacher preparation and the state role and policy strategies for improving and ensuring teacher quality. Next we explore specific policies and programs in the state related to the three design principles to identify those that are supportive, those that may need strengthening, and those that need reconsideration by policymakers, state department officials, and teacher preparation institutions. This profile focuses on Michigan, and where appropriate we offer concrete examples from the restructuring now under way

at Michigan State University (MSU), one of the 11 institutions to receive a TNE grant.

The MSU Design

MSU is the fifth-largest producer of prospective teachers in the state. In 2003–2004, over 570 teacher candidates graduated through MSU's integrated baccalaureate/postbaccalaureate internship program, which includes a full-year teaching internship in Michigan schools.

In 2002, MSU received a \$5 million challenge grant from Carnegie Corporation's TNE initiative. The reforms are organized around the three design principles. One strand has focused on the development of internal Teacher Knowledge Standards (TKSs) which identify the subject-matter content, pedagogy, technology, and cultural differences for teacher candidates to master at different stages of their professional development: end of baccalaureate (emergent), end of internship (novice), and end of induction (target). The TKSs provide an organizing framework for course redesign, assessment development, and, more broadly, ongoing university-wide dialogue around teacher education. A second strand of work focuses on the use of evidence to inform teacher preparation. An assessment team supports the evaluation of curriculum revisions and the development of new assessment instruments to measure teacher candidate learning. Through the Promoting Rigorous Outcomes in Mathematics and Science Education (PROM/SE) project, MSU is exploring how to connect K–12 student learning with teacher quality. A third strand focuses on the development of a new induction program. An induction team is developing curriculum for both mentors and teachers in their first two years on the job, and examining the effectiveness of different support strategies.

Education Policy Context

Governance Landscape. In Michigan, public institutions of higher education (IHEs) have “constitutional autonomy” and as such are

overseen by individual governing boards whose members are either appointed by the governor or selected through statewide elections. In lieu of a state agency or centralized board responsible for overall IHE coordination, IHE leaders and state officials consider market pressures and professional standards the primary accountability mechanisms for ensuring the quality, relevance, and cost-effectiveness of teacher preparation programs.

An elected State Board of Education (SBE) holds primary policymaking responsibility for both teacher preparation and K–12 education. The SBE sets priorities, proposes changes to the Revised School Code, and issues recommendations to the Michigan Legislature regarding education programs and funding. The state superintendent oversees the Michigan Department of Education (MDE), which is responsible for implementing and enforcing SBE policies and the Revised School Code. Through its Office of Professional Preparation Services (OPPS), the MDE issues teacher certificates, reviews and recommends teacher preparation programs for SBE approval, oversees the state’s teacher testing program, and encourages high-quality professional development and local induction programs for practicing pre-K–12 teachers.

The governor holds an advisory role on the SBE as a nonvoting *ex officio* member. Through executive orders, the governor issues new policies and adjusts funding allocations across public agencies, including the MDE, local school districts, and universities.

Market accountability is seen as a central mechanism for securing program quality, yet assumptions about information access and competitive pricing are not fully realized in the Michigan context. First, key consumers, such as prospective teachers, district administrators, and school principals have little comparative information about teacher preparation program features and quality. There are no formalized mechanisms in Michigan for capturing the preferences and satisfaction of these consumers.

Second, policymakers resist ranking or sorting IHEs, preferring to see all as “healthy” so residents and schools in remote and urban locations can access higher education programs and resources. The formula guiding annual legislative appropriations for public IHEs allows minimal consideration of program quality or enrollment levels; each year all IHEs receive the same incremental reduction or increase in funds. IHEs fiercely guard their autonomy and have successfully deflected past efforts by the SBE and the Michigan Legislature to collect information about their internal budget allocations and effectiveness across programs.

Within this dispersed governance context, professional views are reportedly highly valued and strongly defended as a means for mediating state and institutional interests. The MDE annually convenes voluntary planning committees and standard-setting groups and in rule setting seeks widespread input from education faculty, K–12 teachers, and other stakeholders. The legislature has turned to the Education Alliance, a K–16 consortium of Michigan’s education association leaders, to study issues on its behalf. The Presidents Council of Michigan’s 15 public IHE leaders and the Association of Independent Colleges and Universities of Michigan (AICUM) provide forums for identifying common challenges across institutions, although teacher education has not been a specific focus.

Teacher Preparation. In Michigan there are 32 approved teacher preparation programs in public and private colleges and universities across the state. Of the 8,451 teaching certificates issued by the MDE in 2003–2004, about 90 percent were prepared by state-approved programs. Michigan is generally considered an exporter of teachers to other states.

There is widespread disagreement in Michigan as to the adequacy of the current teacher supply. Some see a teacher shortage in certain content areas and geographic locations, and call for alternative routes to teaching. Others see a teacher distribution problem in which late hiring

cycles and poor incentives to work in certain communities cause prospective teachers to pursue out-of-state jobs or positions in other areas. At the secondary school level, state officials and IHE leaders anticipate a shortage of qualified teachers in math, science, technology, world languages, and English. Driving this potential new demand are policy proposals that would increase high school graduation course requirements. Urban and rural areas are expected to face considerable challenges in hiring teachers in these core subjects.

Tensions between institutional autonomy and weak state authority present a challenging context for collecting basic descriptive data about teacher preparation to inform state planning and policy formulation. Given the decentralized nature of the system, mapping the interactions and exchanges between teacher preparation programs and the K–12 public school system, and understanding the effects of state program policies and funding allocations, are difficult. At a basic level, Michigan state officials have limited information about district hiring needs and the immediate pipeline of teacher candidates currently enrolled in the state’s approved teacher preparation programs.

Michigan teacher preparation programs have faced considerable fiscal challenges in the last few years. Michigan policymakers have faced budget deficits of over \$3 billion. Required by law to balance the state budget annually, the governor has been forced to issue dramatic reductions in allocations to both public schools and universities. From the perspective of IHE leaders, recent reductions reflect a long-term trend in which Michigan’s IHEs must operate under “a permanent funding imbalance” as smaller proportions of their general funds draw upon public monies. Within this climate, IHEs face strong incentives to increase revenue through higher tuition, relaxed admission standards, and out-of-state student enrollment.

State officials and IHE leaders worry about the negative effects of these budget cuts on teacher preparation programs. Many see the market for

new teachers shrinking as budgets decline. Reductions in state support for districts have created an uncertain hiring climate for new teachers and sparked staff reductions in some areas. Since IHEs control budget allocations for teacher preparation programs, some programs are particularly vulnerable to fiscal pressures. Since teacher education programs often help generate additional revenue, many fear a “race to the bottom” in terms of program quality.

State Role in Teacher Preparation

Michigan officials describe their approach to ensuring teacher quality as one of “continuous improvement.” Through ongoing adjustments to the Revised School Code, existing policies and programs are refined over time. The SBE’s current policy framework emerged with the 2002 Ensuring Excellent Educators Task Force, a representative group charged with surveying the current state of teacher quality in Michigan in response to federal teacher quality mandates under No Child Left Behind (NCLB). Many task force recommendations extend and strengthen existing teacher quality policies and directly reflect the TNE principles. These recommendations include

- rigorous new accountability standards for teacher preparation programs,
- a public database to monitor the performance of teacher candidates,
- a standards-based induction period for teachers, and,
- new standards for professional development.

The SBE envisions a performance-oriented review of teacher preparation programs that parallels Education YES!, the accreditation system for K–12 public schools. The state intends to issue a report card for teacher preparation programs that includes a composite score of contributing factors and outcome

indicators, such as teacher candidate performance and student achievement.

A major focus of recent teacher policies has been stronger connections with new K–12 policies. “We want to streamline the system,” explained one state administrator, “so that many initiatives carry the same message about student learning.” The emerging accountability system for K–12 schools and refinements to its core components—the *Michigan Curriculum Framework and the Michigan Grade Level Content Expectations*—have guided revisions in two important state policy domains affecting teacher quality: teacher certification and program approval standards for teacher preparation.

Teacher Certification Policies. Michigan takes great pride in its current teacher certification system, one “built by Michigan, for Michigan.” Many consider the system robust in its testing and subject major requirements and point to the strong sense of ownership felt by state officials, university faculty, and K–12 educators.

Teacher certification policies have undergone only minor changes in the last five years. Michigan has a two-stage teacher licensure system, which includes (1) Provisional Certification (three-year, renewable up to three times) and (2) Professional Certification (five-year, renewable).

To receive a Provisional Certification, teacher candidates must (1) complete a bachelor’s degree from an accredited teacher preparation program, (2) complete a minimum of five weeks of classroom teaching and observation, and (3) pass the Michigan Test for Teacher Certification (MTTC), which includes a basic skills test designed to assess reading, mathematics, and writing, and a subject-area test for a “specialty-area” endorsement. New requirements include coursework in reading/literacy to identify and address reading disorders across subject areas and completion of CPR and First Aid training.

For Professional Certification, teachers must complete appropriate coursework (18 semester hours in a planned course of study or an approved master’s or higher degree) and three years of successful teaching experience within the subject area and grade level of the Provisional Certification.

Program Accreditation. Currently, the SBE provides IHEs with choice among three program approval processes through the National Council for Accreditation of Teacher Education (NCATE), the Teacher Education Accreditation Council (TEAC), and the state’s program review process. Both state officials and IHE faculty see “strong similarities” across the different accreditation pathways. “Whichever path an institution chooses,” explained one administrator, “all teacher education programs need to show that they are looking at evidence and outcomes from multiple sources, and to demonstrate that their program can produce quality teachers.” More than half of Michigan’s teacher preparation programs have chosen professional accreditation through NCATE or TEAC for 2005–2012.

Since 2000, the MDE has engaged teacher education leaders in an ongoing conversation about how best to shift from a process-driven to a results-oriented accreditation system for teacher preparation that includes public reporting. As a first step towards measuring outcomes, all IHEs must provide evidence of a process for assessing candidate progress towards each of the seven *Michigan Entry-Level Standards*. These standards describe the general knowledge and skills, interest and attitudes, and other attributes expected of all beginning teachers, regardless of subject area. IHEs must also demonstrate internal routines for using candidate performance data for program improvement purposes.

Progress in designing the next phase of state review and approval, in which IHEs must provide evidence of teacher quality, moves forward in fits and starts. There is interest in using the entry-level standards as a framework

for reporting IHE performance. Work is under way to identify appropriate indicators for each standard to guide public reporting. The outcome-based “quality indicators or accountability factors” for preparation programs originally scheduled for implementation in 2005–2010 have been deferred by the SBE until agreement on key outcomes can be reached with IHEs.

Other Policies Supporting Teacher Quality.

Michigan policymakers have required districts to provide a mentor for each beginning teacher during the first three years of teaching since 1993. To strengthen the first year of induction, policymakers recently increased, from five to 15, the required number of professional development days that districts must provide to beginning teachers. Local districts are responsible for funding and designing their own induction programs. Recently, state officials have provided districts guidance and training resources to strengthen local programs. In 2003, the SBE adopted *Teacher Induction and Mentoring Standards* to provide districts common guidance for designing their programs. Through a \$2.1 million federal Teacher Quality Enhancement Grant in 2004, the MDE, in partnership with select Michigan universities and professional educator and administrator associations, is providing districts and schools with web-based professional development modules for beginning teachers and mentors.

Overall, the state vision for a performance-oriented system of teacher preparation and recent policy revisions are supportive of the TNE initiative. However, most initiatives are still not fully conceptualized or implemented, hampered by the technical issues of the work, as well as by the political challenges of promoting reform in a dispersed governance context.

Developing a Culture of Evidence

TNE institutions are expected to develop a culture of evidence in their teacher education programs. High-quality statewide data systems are needed to help institutions track their teacher

graduates and determine their effectiveness through the achievement of their students. State leadership is needed to create the conditions and incentives that encourage a culture of evidence both at the individual preparation program level and within the teacher education community.

In Michigan, state officials and IHE leaders recognize the need to balance institutional autonomy with public accountability and, more generally, to better understand how teacher preparation contributes to student learning. State policies regarding the approval of teacher certification programs and the public reporting of performance outcomes for individual IHEs reflect important efforts to encourage evidence-based practices within Michigan’s teacher education community. In stimulating a demand for data about teacher, student, and program performance, state leadership is also needed to improve the quality and accessibility of data resources available to IHEs.

Encouraging Evidence-Based Practice.

The role of data in the assessment of teachers and programs has become more prominent in Michigan. This dialogue is driven by federal accountability mandates, which have created pressure on state officials and IHEs to collect evidence of teacher performance and student learning and to make this evidence visible for both policymaker and stakeholder consideration. According to one state administrator, federal Title II and NCLB requirements have “held people’s feet to the fire in ways not felt before.” IHEs are facing pressure “to connect the dots” by providing evidence that their graduates are highly qualified through K–12 student achievement.

Program accreditation, particularly through national professional bodies such as NCATE and TEAC, provides state officials one mechanism for encouraging evidence-based practices. Public reporting of teacher preparation program features and related outcomes present another policy lever.

Through a form of negotiated rulemaking over the past few years, the MDE has led an ongoing dialogue with IHE deans to identify a set of common performance indicators for assessing the strength of teacher preparation programs. These indicators would reflect the progress of IHE graduates in meeting *Michigan Entry-Level Standards*. For both parties, these conversations have been forced at times. In 2004, the MDE took a first step towards defining a broad public accountability indicator by publishing each IHE's passing rate on the MTTC subject tests. To ensure fair attribution, the MDE reported results for teacher candidates who had completed at least 90 percent of their program's required coursework. In 2005, the MDE expanded reporting on the web to include three years of MTTC pass rates by content area for each institution. Test scores alone are hardly a sufficient indicator, yet the public availability of this information is considered an important change in Michigan. A number of district and school administrators have shared with MDE administrators their expectation to access these scores and others annually.

Other initiatives contributing to the cultivation of a culture of evidence include recent efforts by MDE administrators to generate meaningful program data for individual IHEs. In 2005, the MDE sponsored and piloted a survey of those teacher candidates who had completed their student teaching to learn their perceived readiness in terms of the entry-level standards and to teach their chosen content area. The survey also focused on teacher perceptions of the value added of their teacher preparation programs, specifically content preparation, pedagogy coursework, and student teaching experiences. Under discussion is a parallel survey of supervising teachers who oversee candidates during their field experience. These survey data will inform state planning and provide specific summaries to IHEs for program improvement purposes. State officials are interested in considering student outcome data but are uncertain of the possibilities for valid and responsible measurement.

In moving to a performance focus, IHE officials worry about the potential for state intrusion, weakened institutional autonomy, and misuse of performance data. Even so, many also recognize the need for minimal gatekeeping by the MDE given high variation in program quality across the state. Many IHEs are concerned about the growing presence of out-of-state teacher preparation programs—extension schools and virtual universities—seeking program approval from the MDE. The interest of nontraditional agencies in developing their own certification programs, such as Michigan community colleges and intermediary school districts, is also contributing to IHE openness to performance-oriented accreditation.

Whether driven by regulatory requirements, professional standards, or market pressures, a few IHE and state administrators believe a performance-based system would ultimately strengthen Michigan's larger teacher preparation community. Some speculate that IHEs would face strong incentives to offer more customized programs that build on their institutional strengths. In turn, IHEs would then develop specialized expertise that would ensure quality programs and foster stronger professional ties within the IHE community.

A voluntary shift in the distribution of IHE programs would enhance quality and would potentially discourage program duplication across institutions, which both state officials and faculty consider high. Within this context, IHEs would pursue voluntary partnerships within the higher education community that leverage complementary strengths. MSU has such a partnership with Kalamazoo College.

Building High-Quality State Data Systems.

State policies play a critical role in creating conditions that foster evidence-based practice, and in providing IHEs with meaningful data that contribute to program improvement. These policies include data collection, management, and archival practices regarding teacher and student information at the state and local level. Information currently collected by the state, however, may not reflect data that IHEs need for

program improvement purposes. Also, IHEs need help tracking their graduates within the state, and they need access to reliable longitudinal data that include background and performance data for teacher graduates and their K–12 students.

In Michigan, student and teacher data are located in two separate state agencies, each with different data collection mandates. Since 2000, information warehousing has been split between the MDE and the Center for Educational Performance and Information (CEPI) located in the State Budget Office. As the responsible unit for the state’s accountability reports, the CEPI oversees the Michigan Education Information System (MEIS), which serves as the central electronic repository for data regarding teacher employment, K–12 students, and school conditions.

Teacher Data. One major challenge is updating and integrating teacher information collected and stored by the MDE and the CEPI. Currently teacher information is located in two separate databases:

- The MDE’s License 2000 database contains information about recent certifications and endorsements for those teachers prepared by Michigan IHEs. The data set does not include teachers’ MTTC scores or any endorsements earned after certification. The teacher licensure number serves as a personal identification number.
- The CEPI oversees the Employment Registry of Education Personnel, which collects 35 fields of information, such as the teacher’s grade level, courses taught, and school and district assignment. The course options are limited; for example, the data set does not specify particular science courses (e.g., biology or chemistry) or social studies courses at the secondary level. It also does not track multiple teaching assignments.

These databases can be linked, and together they present a rich foundation of information about teacher characteristics and performance for IHEs. The quality and type of data could be improved to support IHE interests in program improvement. Since these data were collected for different purposes, such as fiscal reporting and regulatory oversight, state officials may consider collaborating with IHE faculty in a systematic review of the strengths and weaknesses of the state’s teacher databases. Such a review would identify the current data fields that hold immediate value to IHEs, as well as any new variables that would help IHEs examine the efficacy of specific program features.

In the last few years, the state has taken steps to increase the usability and reliability of CEPI data sets, reviewing data fields for relevance and usability and data entry for accuracy. MDE staff have worked to better align data fields with current teacher policies and priorities, most recently the new professional development and induction standards. For example, districts now report the number of hours and types of professional development provided to teachers. To better track teacher mobility within districts, a “new teacher” field has been added. These new developments are considered promising by all, particularly given limited financial and personnel capacity across both agencies.

The quality and comprehensiveness of Michigan’s data systems also depend largely upon the will and capacity of districts to share local information. One issue centers on the limited authority of CEPI and MDE to create new data fields unless the variable can be located in the Revised School Code. In recent years, districts have openly resisted new information requests by invoking the 1978 Headlee Amendment, which allows local challenges to unfunded state mandates. To ensure timely reporting, state officials have recently used their authority under the State School Aid Act to impose financial penalties on districts that fail to meet deadlines. A second issue is the quality of district data reports, which are described as

uneven or “spotty,” a problem attributed to variations in local capacity and unfamiliarity with CEPI data fields. Although highly conscious of the work ahead to strengthen the data system, state officials and some IHE faculty report a growing confidence in the relevance and reliability of the state’s databases and their potential to become a resource for teacher preparation programs.

Student Performance Data. A second challenge turns on the availability of state-level performance data to IHEs. Teacher preparation programs are designing their own assessments to capture K–12 student learning, but these assessments have their limits. Many institutions are interested in using value-added approaches to examine the impact of their programs on K–12 student learning. These approaches require individual student data across multiple years. Student performance on state-level assessments represents an important resource for IHEs, and one of interest to policymakers. Furthermore, for IHEs whose graduates may be scattered across the state, state tests provide a common measure for capturing annual growth in individual student learning to assess their programs’ effectiveness.

Currently, student achievement data are archived in CEPI’s Student Testing and Achievement Repository. At this writing the data set includes student PSAT and ACT scores as well as performance on the Michigan Educational Assessment Program (MEAP), a criterion-referenced test administered in grades 4, 5, 7, 8, and 11 in English language arts, mathematics, science, and social studies.

New testing and data management policies are stimulating a redesign of the state assessment system that may provide IHEs with much stronger student impact data against which to assess their programs. First, the adoption of a unique student identifier code in 2002, located in CEPI’s Single Record Student Database, enables tracking of individual student performance over time. Second, policymakers have expanded the student assessment system to administer MEAP in grades 3 through 8, which would enable

value-added models, at least in English and mathematics. The expanded MEAP will be administered in 2005–2006. Federal NCLB mandates are considered a major catalyst behind these changes.

At the high school level, policymakers have adopted a new portfolio of assessments that aim to increase students’ readiness for college. In 2006–2007, the 11th-grade MEAP will be replaced by the new Michigan Merit Examination (MME), a portfolio of assessments that include the ACT, Work Keys, and Michigan-developed assessments in English, mathematics, social studies, and science. In the future, MDE will consider other types of high school assessments such as end-of-course exams, vocational assessments, or senior capstone projects.

Linking Data Systems. A third challenge is developing the capacity to link the teacher and student databases. CEPI data collection practices pose limitations for those Michigan IHEs interested in using value-added assessments to examine the relationship between program features and student learning. At this writing, IHEs seeking to link teacher and student performance data associated with the MEAP must work with individual districts to secure data. Tracking teachers is difficult as teacher names are associated with a class code, but class codes are warehoused at the district level and not collected by the state. Political hurdles remain as the idea of linking individual teachers to student test scores is met with much apprehension.

Facilitating IHE Access to Data. A final challenge comes with ensuring IHE access to state data. It is widely acknowledged that CEPI and MDE have limited capacity to conduct in-house analyses for IHEs. In 2003, the CEPI developed Data Access and Management Policies that established clear processes for authorizing three levels of restricted access to MEIS data. Teacher education programs’ access to state data, however, is not guaranteed. Given limited state resources, policymakers may need to adopt new procedures that expedite IHE

requests and facilitate long-term access, while providing for data security.

Effective Engagement of Arts and Sciences Faculties

Stronger collaborative relationships between A&S and teacher education faculties can help teacher education programs strengthen the content knowledge of their graduates. Michigan's policies offer institutions few supports or incentives to strengthen relationships across these distinct faculties. Certification requirements and program approval aim to strengthen teacher content knowledge through closer alignment with K–12 standards, but do not consider directly how collaboration between A&S and education faculties could be strengthened.

Ensuring Strong Teacher Content Knowledge. Many consider the state's certification requirements a strong mechanism for ensuring that Michigan teachers have adequate content knowledge before entering the classroom. Teacher candidates must complete a major and a minor in substantive fields to earn secondary- and elementary-level certifications, or three minors to earn an elementary-level certificate. In addition, teacher candidates are required to pass the subject-area assessment, the MTTC, for each specialty endorsement. For secondary-level certification, candidates must pass the MTTC subject-area test for each academic subject they wish to teach. For elementary certification, candidates intending to teach in K–5 classrooms must pass an Elementary Education Test, and for grades 6–8, candidates must pass the appropriate MTTC tests for the subjects they intend to teach. The MTTC subject test is aligned with Michigan's curriculum frameworks and is reviewed periodically by IHE content experts and K–12 teachers. There is a perception among some IHE faculty, however, that certain MTTC subject tests are easier to pass than others.

IHEs vary in terms of additional content-area requirements for teacher candidates to meet. For example, MSU expects its prospective secondary teachers to pass subject tests in both their major and minor areas. MSU graduates are then prepared to teach two high school subject areas. MSU elementary teachers are also expected to pass the MTTC subject test in one of their three minor areas as well as the state-designated Elementary Education Test.

Facilitating Collaboration with A&S Faculties. One mechanism for ensuring teacher content knowledge is through a strategic engagement of A&S faculties in teacher education. At best, Michigan state policies offer institutions indirect mechanisms for fostering collaboration between A&S and education faculties. Like many states, Michigan relies upon program approval standards to promote communication across these two faculties, largely focused on alignment between A&S coursework and the state's K–12 content standards.

State officials are well aware that for some IHEs the involvement of A&S faculties in program approval amounts to an impersonal paper exchange between A&S and teacher education departments. In rare cases it has provided a basis for ongoing collegial exchanges around teacher understanding of disciplinary knowledge and related pedagogical approaches. Such engagement has the potential to cultivate shared responsibility across these faculties for teacher learning. According to state officials and university faculty, the primary factors driving the level of engagement of A&S faculties in teacher preparation are institutional culture and IHE leadership priorities.

In 2002, the Michigan Association of Colleges for Teacher Education (MACTE) sponsored a meeting that included education deans, A&S deans, and university administrators to discuss the recommendations of the 2003 report, *Developing Knowledgeable Teachers: A Framework for Standards-Based Teacher Education Supported by Institutional*

Collaboration. Although the group identified a number of institutional barriers to collaboration among these faculties, namely tenure requirements, the low status of colleges of education within the larger university community, and small teacher preparation programs, the group was not able to develop a collective strategy for building institution-wide commitment for teacher preparation. One issue was resistance among IHE leadership to taking responsibility for bringing the two faculties together.

Given Michigan IHEs' constitutional autonomy, fostering a professional commitment among IHE leaders to teacher education may hold the greatest potential for ensuring teacher content knowledge. The Michigan Presidents Council and AICUM might provide strong forums for IHE leaders to explore strategies for fostering a collaborative relationship between A&S and education faculties.

MSU is finding success with a number of institution-level strategies, some of which leverage state policies, to strengthen the contributions of A&S faculties to teacher education. The TNE initiative is situated in the university president's office with leadership from coprincipal investigators in the College of Education and the College of Natural Science. The importance of teacher education and of cross-college communication and partnership is both visible and emphasized by university leadership.

Cultivating shared responsibility across faculties takes time, and MSU faculty report a number of formal and informal strategies that are contributing to a joint ownership of teacher education. One emphasizes that colleges and individual departments depend upon teacher candidate enrollment for survival. At MSU, prospective teachers comprise a large percentage of enrollment in science, mathematics, and English undergraduate courses, which has provided education faculty a high degree of leverage when reaching out to A&S department chairs. Since faculty full-time equivalencies are

influenced by course enrollment, explained one education faculty member, "[A&S faculties] wouldn't have classes without the education school."

Another strategy includes the codevelopment of internal standards for teacher knowledge. The MSU TKSs were designed by subject-matter teams of teacher education faculty and members of the colleges of A&S, as well as K-12 educators, and focused on areas of mathematics, science, literacy and English, and social studies. As "living" and jointly produced documents, the TKSs create a common reference point for faculties, one that provides a foundation for cross-college dialogue, for guiding teacher candidates, and for course design. Still another institutional strategy centers on the review of candidates' MTTC scores by both education and A&S faculties. The state's recent publication of pass rates by institution has provided added leverage to bring A&S teachers into the conversation around the adequacy of teacher content knowledge. These institutional strategies help highlight the invisible interdependencies across these faculties.

Conceptualizing Teaching as a Clinical Practice

Another focus of TNE is an increased emphasis on teaching as a clinical practice profession. University faculty should be actively guiding teacher candidates in clinical settings, e.g., schools and classrooms, directly honing candidate skills in assessing student needs and designing effective curriculum and pedagogy. Institutions with a strong conception of teaching as a clinical practice should develop residency or induction programs to take responsibility for the performance of beginning teachers.

Encouraging Teaching as a Clinical Skill.

Michigan's field experience requirements encourage a focus on teaching as a clinical practice profession. To receive provisional certification, candidates must complete at least five weeks (six semester hours) of supervised

teaching. State program approval standards require field experiences to be relevant, with classroom placements that reflect the school level and specialty area for which the candidate seeks certification. Student teaching must also take place in accredited K–12 schools that are meeting state academic performance standards (e.g., MEAP). The nature and intensity of candidate and faculty exchanges during the field experience are left to the teacher preparation program to determine, offering much latitude to IHEs in designing the field experience phase.

Efforts to increase the minimal student teaching period from five to 10 weeks have failed amidst concerns that additional requirements would raise barriers to entering the profession due to extended program time and increased student costs. The MSU postbaccalaureate program is widely known for its program standards that go well beyond minimal state requirements. Since 1996, MSU graduates have completed a full-year internship (30 weeks, 900 hours) that is “staged to provide gradually increasing scope, intensity, and responsibility under the supervision of an on-site classroom teacher and a field instructor.” MSU requires its teacher candidates to pass the MTTC subject test before beginning the internship. Classroom-based experiences are emphasized throughout the traditional coursework phase at MSU as teacher candidates engage in a number of “pre-internship field experiences” (about 175 hours). These preteaching experiences aim to help candidates “build connections between theory/research and the practical situations that teachers face.” Although MSU’s extensive classroom experiences are much admired within the state, MSU leaders report considerable political pressure to drop the one-year internship requirement.

Michigan’s program approval standards encourage IHEs to routinely use data from their candidates’ field experience for program improvement, asking IHEs to link program inputs with teacher and student outcomes and with program improvement decisions. IHEs are encouraged to collect data regarding candidate

perceptions of their preparation and classroom performance, as well as student outcomes. Included are candidate perceptions of the role of content-area faculty in providing guidance in the field. Review criteria recommended by the state focus on classroom modeling of effective instructional methods by faculty. Other review criteria focus on assurances that teacher candidates have opportunities to work with children in their content areas prior to student teaching. To evaluate candidates’ evolving pedagogical practice throughout the field experience, IHEs are expected to use the *Michigan Entry-Level Standards* to design appropriate assessment tools.

The Michigan framework for teacher candidates’ field experience appears supportive of a TNE focus on developing a clinical practice approach to teacher preparation, particularly one grounded in evidence. State guidance for field experiences encourages classroom-based observation and instruction by faculty and encourages the importance of ongoing data collection during the field experience to refine candidate decisions and practices and facilitate program improvement. IHEs are also required to provide general evidence of “collaborative efforts in content areas with K–12 schools,” leaving schools and IHEs to negotiate the nature of the agreement. IHEs are free to develop a research and evaluation plan of their own design. Michigan’s program approval and specialty-area standards guiding teacher candidates’ field experience are relatively broad and not prescriptive, leaving much room for IHEs to design a clinical practice phase as they wish.

Supports for Teacher Induction. TNE challenges IHEs to take responsibility for the performance of their graduates by developing two-year induction programs that support their transition into the classroom. In Michigan, state policies supporting teacher induction do not include a clear vision for IHE involvement. Even so, state officials believe that as IHEs begin to address the evidence standards of NCATE and TEAC, they will begin to reach out to their graduates to demonstrate that their programs

produce high-quality teachers. This would lead IHEs to sustain a connection with their graduates into the classroom and to provide supports.

With the establishment of the New Teacher Induction/Teacher Mentoring Program in 1993, Michigan policymakers have signaled the importance of induction as a strategy for strengthening the teaching force and improving retention. Currently, districts are required to assign a mentor to beginning teachers during the first three years of teaching and to provide specialized professional training.

There is a strong sense among state officials that Michigan districts would welcome IHE involvement in teacher induction. With no dedicated state funding, local induction programs have long been vulnerable to fluctuations in district budget shortfalls and in hiring cycles, as well as to the shifting administrative priorities and central office capacity. Variation in the quality of local induction programs is considered high, yet the state has little descriptive information about local induction programs, such as program features, enrollment levels, teacher satisfaction, mentor teacher selection, or types of professional development beginning teachers receive. The state enforcement has been minimal to date, although the recent identification of “high-priority schools” by the governor has provided new state authority to conduct “desk audits” to ensure a program is in place.

To facilitate continuous, cost-effective support, IHEs must locate their graduates within the state and identify clusters of graduates accessible to university faculty. Efforts by IHEs to survey recent graduates have proven ineffective over the years. To support this work, the MDE developed specialized reports in the summer of 2005 that provide institutions with the school assignments of all graduates recommended for Michigan certification in the last three years. The MDE intends to update institution reports annually.

Although the decentralized nature of induction poses challenges, there are a number of state

policies and program features that could facilitate IHEs’ efforts to extend their support of graduates into the first few years of teaching. First, the state requires 15 professional development days of all beginning teachers during their first year, days that are based on an individualized professional development plan. In working with districts and beginning teachers, IHEs might consider how to leverage these requirements to support their graduates.

Second, new *State Professional Development Standards* deemphasize one-shot workshops and conferences in favor of the extended, job-embedded learning opportunities more conducive to the clinical learning model advocated by TNE. Job-embedded professional development would also enable mentor teachers to make progress on certification renewal. It would also help their graduates refine their instructional practice and ability to assess and diagnose student learning needs in ways that are closely related to the immediate challenges of teaching in a particular school.

Third, since Michigan law allows for university faculty to serve as mentors, IHEs have one immediate avenue for potentially integrating their own induction programs with existing district programs. This may prove attractive to districts, as veteran teachers are reluctant to serve as collaborating teachers or mentors because their time and resources are already stretched thin by fiscal and accountability pressures. Many state officials, stakeholder representatives and IHE administrators are optimistic that districts would welcome IHEs as a resource for designing and/or delivering part of their local induction programs.

For IHEs, extending responsibility for graduates requires additional resources. Given the sensitivity to increased tuition costs for prospective teachers, IHEs face strong pressure not to shift the burden of induction onto beginning teachers. Since districts are responsible for induction, one possibility would be for IHEs to share costs with districts by developing supports that could be integrated into

their existing programs. The other option is that districts outsource their induction programs so that IHEs support all new teachers in a district, not just their own graduates. MSU is pursuing this option in Lansing, providing new teacher workshops and mentor institutes for the entire district. One additional benefit is that a close functional relationship with districts through induction might facilitate IHE access to student data so that student outcomes can be factored into program improvement.

Although limited, Michigan's state induction policies and administrative initiatives offer some opportunities and resources to help IHEs support their graduates' transition to the classroom.

Towards Supporting, Spreading, and Sustaining TNE Reforms in Michigan

To further strengthen and deepen the move towards a performance-oriented system of teacher preparation, a number of issues require the attention of Michigan policymakers, state officials, IHE leaders, and stakeholder groups responsible for ensuring teacher quality in the state.

Addressing IHE Access to Appropriate Data.

In considering program approval standards for teacher preparation and the information needs of policymakers, prospective teachers, and district and school administrators, state officials have emphasized that evidence of teacher mastery and student learning in both the design of teacher preparation programs and classroom-based practice is fundamental. As anticipated, these policies have created a demand across IHE faculties for outcome data regarding student learning and for information about teacher characteristics, performance, and practices, as well as the conditions of teaching. The availability and adequacy of such data to Michigan's IHEs, however, could be improved. Clearly, state data collection policies and archival practices are influencing how IHEs approach program improvement. In considering this issue,

- What is the fit between data available from state and district agencies and the emerging research questions and study designs that IHEs hope to pursue?
- How can state data collection and archival practices be redesigned with the understanding that IHEs are valuable consumers of these data?
- How can the state, IHEs, and local school districts collaborate to develop a comprehensive data system in support of teacher and student learning?

Expanding the Role of A&S Faculties in Teacher Education to Strengthen the Quality of Teacher Content Knowledge. Michigan's certification requirements and program approval process are important policies for ensuring teacher content knowledge and alignment between candidate subject-area coursework and the K–12 *Michigan Curriculum Framework*. These policies recognize that courses outside the education school influence this content. However, a broader role for A&S faculties in teacher preparation could be more fully conceptualized and articulated by state leaders and, most crucially, by Michigan's higher education community. Perhaps most important, IHE leadership is needed to ensure that the involvement of A&S faculties in teacher education is valued and rewarded. In considering this issue,

- How can IHE leadership promote stronger collaboration across education and A&S faculties and encourage a sense of shared responsibility for teacher quality?
- What adjustments may be needed in the IHE incentive system, such as faculty load, tenure requirements, and the university and college mission, to support this strategic collaboration?

Encouraging a Role for IHEs in the Induction of Beginning Teachers. Michigan policymakers and state officials recognize the importance of supporting beginning teachers' first years in the classroom. Districts are ultimately responsible for the quality of induction; however, the state has provided some support through induction standards to guide local program design and through web-based new teacher and mentor training. It is widely acknowledged that the induction of beginning teachers across the state is highly variable and could be strengthened. IHEs appear uniquely positioned to provide a valuable contribution to supporting teachers in this transition to the classroom. However, the role IHEs might play needs to be explored with full consideration to IHE capacity and complementary with existing district programs. In considering this issue,

- What are the roles IHEs see for themselves in supporting their graduates as they begin teaching?
- How can the state promote coordination between IHEs' efforts to support their graduates and existing district induction programs?
- What new resources are needed to support IHEs' expansion of their responsibilities to include their graduates' transition to teaching?

Resources for Additional Information

Teachers for a New Era (TNE)
www.teachersforanewera.org

TNE at Michigan State University
<http://tne.msu.edu/default.htm>

The Education Policy Center at MSU
<http://www.epc.msu.edu>

Michigan Department of Education
<http://www.michigan.gov/mde>

The Center for Educational Performance and Information
<http://www.michigan.gov/cepi>

About CPRE

The Consortium for Policy Research in Education (CPRE) studies alternative approaches to education reform in order to determine how state and local policies can promote student learning. Currently, CPRE's work is focusing on accountability policies, efforts to build capacity at various levels within the education system, methods of allocating resources and compensating teachers, instructional improvement, finance, and student and teacher standards. The results of this research are shared with policymakers, educators, and other interested individuals and organizations in order to promote improvements in policy design and implementation.

CPRE unites five of the nation's leading research institutions: The University of Pennsylvania, Harvard University, Stanford University, the University of Michigan, and the University of Wisconsin-Madison.

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