

2010 STATE OF MICHIGAN EDUCATIONAL TECHNOLOGY PLAN



# TEACHING FOR LEARNING IN A DIGITAL AGE

## 2010 STATE OF MICHIGAN EDUCATIONAL TECHNOLOGY PLAN



## 2010 STATE OF MICHIGAN EDUCATIONAL TECHNOLOGY PLAN

*"For many years, I have told students, 'Do not do what I do; rather, take whatever I have to offer and do with it what I could never imagine doing and then come back and tell me about it.' My hope is that our education systems will be shaken out of their complacency and will open teaching and learning to a future we cannot conceive."*

– Mark C. Taylor, Ph.D., Columbia University

### **Introduction**

The 2010 Educational Technology Plan includes the 2010-2012 goals and objectives of the Michigan State Board of Education and the Michigan Department of Education (MDE) related to increasing and improving learning options and outcomes for all Michigan PK-16 students through effective application of educational technology and data to inform instruction. The purpose of the Plan is to prepare ALL Michigan students to become productive citizens in a global society.

### **History**

In March 2006, The Michigan State Board of Education adopted an Educational Technology plan that was a culmination of extensive online and in-person discussions and planning. A substantial number of the goals and objectives in the 2006 Plan come directly from the National Educational Technology Plan published by the U.S. Department of Education in 2004 and elements called for in the U.S. Congress's 2001 authorization of the Elementary and Secondary Education Act (ESEA), also known as No Child Left Behind.

In 2007 the MDE formed the Educational Technology Advisory Group (ETAG) to assist in monitoring progress toward implementing the strategies and action steps outlined in the 2006 Plan. The 47 ETAG members represented a diverse set of educational stakeholders and partners from intermediate school districts (ISDs), schools, teachers, parents, and businesses. The 2006 Plan proved to be an invaluable guiding resource for the work undertaken by MDE and its collaborative partners.

The 2010 Plan has been updated with significant input from the ETAG. A list of ETAG members is provided as an addendum to the 2010 Plan.

### **Changes**

The most significant changes between the 2006 and 2010 Plans relate to the reorganizing and renaming of the 2006 goals to more clearly reflect the Michigan School Improvement Framework. This will assist MDE, Michigan's public school districts and academies, and other education stakeholders in aligning their work with improving student achievement and ensuring that school districts and academies have one unified school improvement plan.

## 2010 STATE OF MICHIGAN EDUCATIONAL TECHNOLOGY PLAN GOALS

The five goals of the 2010 Plan are:

1. **Teaching for Learning:** Michigan students will have meaningful technology-enabled learning opportunities, including assistive technologies and virtual learning opportunities that develop proficiencies as defined by the Partnership for 21<sup>st</sup> Century Skills (21stcenturyskills.org), required to become lifelong learners, including ethical, safe, and discerning behavior while using information and media technology.
2. **Leadership:** Michigan Department of Education (MDE) will continue to provide leadership for educational technology by expanding and developing transformative learning environments that increase student academic achievement.
3. **Professional Learning:** Michigan educators will have competencies in 21<sup>st</sup> Century Skills, especially information and media fluency, to enable the transformation of teaching and learning to improve student achievement.
4. **School and Community Relations:** Michigan school board members, parents, and community members will understand the impact educational technology, including virtual learning options and data have on informing and improving instruction. Schools, parents, and community members will be able to access and use school-level data to make meaningful decisions related to the education of all Michigan children.
5. **Data and Information Management:** Michigan educators will have access to data for effective classroom decision making and school improvement planning through an integrated local and statewide decision support system, and have access to professional learning opportunities to develop competencies in data-driven decision making.

## 2010 STATE OF MICHIGAN EDUCATIONAL TECHNOLOGY PLAN

### GOAL 1: TEACHING FOR LEARNING

#### **GOAL 1: TEACHING FOR LEARNING**

Every Michigan student will have meaningful technology-enabled learning opportunities, including assistive technologies and virtual learning opportunities, that develop proficiencies in the full range of 21<sup>st</sup> Century Skills, as defined by the Partnership for 21<sup>st</sup> Century Skills (21stcenturyskills.org), required to become lifelong learners, including ethical, safe, and discerning behavior while using information and media technology.

#### **Goal 1, Strategy 1:**

MDE, with the help of its partners, will align and integrate the Michigan Educational Technology Standards for Students (METS-S), 21<sup>st</sup> Century Skills, and Standards for the 21<sup>st</sup> Century Learner within the Michigan Curriculum Framework (MCF) benchmarks and the High School Content Expectations and Grade Level Content Expectations (HSCEs/GLCEs).

#### **Performance Indicator:**

The Michigan Curriculum Framework benchmarks and content expectations will contain essential elements of the METS-S, 21<sup>st</sup> Century Skills, and Standards for the 21<sup>st</sup> Century Learner so that separate standards are no longer necessary.

#### **Goal 1, Strategy 1, Action Steps:**

1. With assistance from the Educational Technology Advisory Group (ETAG), MDE will identify where the METS-S, 21<sup>st</sup> Century Skills, and Standards for the 21<sup>st</sup> Century Learner already intersect or should intersect with the Michigan Curriculum Framework and content expectations. Groups such as curriculum, special education, technology, media specialists, colleges and universities, students, and workforce development agencies will be consulted.
2. To the extent possible, MDE will work within any national academic or curricular standards consortium in which Michigan participates (e.g., mathematics, English Language Arts, etc.) to incorporate the National Educational Technology Standards for Students (NETS-S), 21<sup>st</sup> Century Skills, Standards for the 21<sup>st</sup> Century Learner where appropriate.

#### **Goal 1, Strategy 2:**

MDE will provide available and appropriate resources necessary to give all students access to effective technology-enabled learning environments, including assistive technologies, and increase opportunities for students to participate in project-based, challenge-based, and “real world” learning experiences, especially as these experiences relate to science, technology, engineering, and mathematics.

#### **Performance Indicator:**

All students will have anywhere, anytime access to effective technology solutions, including assistive technologies, throughout their learning day. These will include project-based, challenge-based, and “real world” learning experiences, especially as these experiences relate to science, technology, engineering, and mathematics content areas.

## 2010 STATE OF MICHIGAN EDUCATIONAL TECHNOLOGY PLAN

### GOAL 1: TEACHING FOR LEARNING

#### **Goal 1, Strategy 2, Action Steps:**

1. MDE will continue to identify strategies, participate in, and sponsor programs that increase student and educator access to educational technology, such as Michigan eLibrary, including assistive technologies, during and after the school day and outside the academic year.
2. MDE, with its partners, will work to integrate project-based, challenge-based learning, and "real world" experiences into traditional academic classroom settings, especially those that focus on integrating science, technology, engineering, and mathematics.

#### **Goal 1, Strategy 3:**

Building on Michigan's online learning high school graduation requirement, MDE will promote and support the expectation that every Michigan student, especially at-risk students and students with special needs, will be provided the opportunity to learn in environments best suited for his or her learning style.

#### **Performance Indicator 1:**

Every Michigan student will complete one credit-earning course or learning experience that incorporates online learning into instructional delivery as part of his or her successful completion of the Michigan Merit Curriculum's (MMC) high school graduation requirements.

#### **Performance Indicator 2:**

Every student will have access to virtual learning environments best suited to his or her individual learning needs.

#### **Goal 1, Strategy 3, Action Steps:**

1. MDE will establish pupil accounting rules and policies that allow for and govern virtual learning programs in all Michigan schools in place of the current two "self scheduled course" maximum. Attention will be focused on demonstrated student success, especially "at-risk" students.
2. MDE will continue to support "seat time" waiver programs for districts seeking to change their model of instruction to assist students in meeting the Michigan Merit Curriculum. Attention will be focused on demonstrated student success, especially "at-risk" students.
3. MDE and its partners will promote increasing the online learning graduation requirement from a "twenty hour online learning experience" to one full credit-earning "online course," or "blended instruction" that includes a significant portion of online learning through an update to the State of Michigan Online Learning Guidelines.
4. MDE and its partners will actively promote and support schools in integrating online learning experiences into all curricular areas and continue to coordinate, support, and sponsor state, national, and global online learning opportunities.

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### GOAL 1: TEACHING FOR LEARNING

#### **Goal 1, Strategy 4:**

MDE and its partners will disseminate, sponsor, and promote the sharing of research-based, technology-enabled models of instruction and curricular resources that effectively improve student learning.

#### **Performance Indicator:**

All students will have the opportunity to access effective technology-enabled learning environments that offer increased opportunities for academic success.

#### **Goal 1, Strategy 4, Action Steps:**

1. MDE will continue to identify, sponsor, and promote programs that share best practices in technology-enabled teaching, models of instruction, and virtual learning environments that improve student learning. These programs will incorporate the principles of Universal Design for Learning (UDL).
2. MDE will provide leadership in evaluating effective technology-based teaching and learning practices, giving specific attention to virtual learning and seat time waiver programs, by establishing rigorous evaluation and research regimen.
3. MDE will work with ETAG, Michigan's colleges and universities, through the Consortium of Outstanding Achievement in Teaching with Technology (COATT), and other partners to research and explore a variety of delivery systems, including e-learning, virtual schools, simulations, and action games to determine effective strategies for individualizing learning.
4. Working with its partners, MDE will explore opportunities to employ technology-based, assessment driven models of instruction that focus on helping students demonstrate proficiency against state standards and benchmarks, as an option for course or credit-completion models.
5. MDE, along with its partners and schools, will participate in continued research of technology-enabled models of instruction to identify those that hold the most promise for improving student learning.

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### GOAL 2: LEADERSHIP

#### **GOAL 2: LEADERSHIP**

Michigan Department of Education (MDE) will continue to provide leadership for educational technology by expanding and developing technology-enabled learning environments that increase student academic achievement.

**Goal 2, Strategy 1:** Strengthen and coordinate leadership for educational technology at the regional, state, and national levels.

#### **Performance Indicator:**

MDE will maintain the Educational Technology Advisory Group (ETAG) and the State Director of Educational Technology position.

#### **Goal 2, Strategy 1, Action Steps:**

1. MDE will maintain the State Director of Educational Technology position to provide educational technology leadership and ensure innovative uses of educational technology across MDE offices.
2. MDE will maintain ETAG, composed of representatives from regional and statewide organizations, higher education, and professional associations, to facilitate the coordination of technology initiatives and programs to benefit students and educators.
3. MDE will continue to partner with ETAG to guide and coordinate the implementation of this Plan, including its evolution and updating throughout its stated period.
4. MDE will continue to engage intermediate school districts (ISDs), Regional Educational Media Centers (REMCs), local education agencies (LEAs), public school academies (PSAs), and others in cooperative, coordinated, and collaborative activities that promote the use of data and educational technology as tools for improving teaching and learning.
5. MDE will continue to use educational technology within its own practice to enhance communication, coordination, and collaboration.
6. MDE will continue to participate in state and national agenda-setting opportunities, promoting the use of data and educational technology to improve teaching and learning.

#### **GOAL 2, Strategy 2:**

MDE will work with and support other lead agencies to increase broadband access for all educators and students as a requirement of anywhere, anytime learning.

#### **Performance Indicator 1:**

By 2015, every school district in Michigan will have a minimum of 1 Gigabyte per second (Gbps) connectivity to the Internet and every school building, library, and public school academy in Michigan will have a minimum of 100 Megabytes per second (Mbps) connectivity to the Internet.

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### GOAL 2: LEADERSHIP

#### **Performance Indicator 2:**

By 2015, every student will have multiple means of broadband access to anywhere, anytime learning outside of the traditional school building.

#### **Goal 2, Strategy 2, Action Steps:**

1. MDE will continue working with external partners and other state agencies to develop and implement a statewide plan for delivering 1 Gbps connectivity to every ISD and LEA and 100 Mbps to every school building, library and PSA by 2015.
2. MDE will work with external partners to articulate equivalent connectivity speeds measured by instructional computer/device within schools and libraries to ensure appropriate bandwidth for every educator and learner within a given learning environment.
3. MDE will continue to collaborate with its partners on methods of increasing distributed eRate funding to Michigan schools and libraries.
4. MDE will work with its partners and other government agencies to create partnerships with Internet service providers to provide students and educators either free or low cost broadband access to support anywhere, anytime learning activities.
5. MDE will engage the REMCs and ISDs in defining network safety and security protocols for local school networks to support districts in opening their networks for greater educational use while reducing the threats of legal challenges, security attacks, or loss of eRate funding.

#### **GOAL 2, Strategy 3:**

Through the sharing of resources, MDE, the Library of Michigan, and its partners will provide statewide access to educational technology resources for the purpose of transforming teaching and learning.

#### **Performance Indicator:**

All educators and learners will have access to high quality online resources with professional development opportunities for integrating these resources into teaching and learning practices.

#### **Goal 2, Strategy 3, Action Steps:**

1. MDE and the Library of Michigan will continue to work with the Regional Educational Media Centers (REMC), Michigan Virtual University, and other partners to provide Michigan schools with universal access to high quality digital instructional content, such as Michigan Online Resources for Educators (MORE).
2. MDE, the Library of Michigan, and its partners, will develop model processes to assist school districts and libraries in systematically acquiring, integrating, and replacing educational technologies.

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### GOAL 2: LEADERSHIP

3. MDE will work with its partners to establish, promote, and support statewide utilization of videoconferencing, including Internet Protocol (IP)-based technology solutions, to increase synchronous anywhere, anytime learning.
4. Working with its partners, MDE will emphasize the importance of maintaining sufficient technical staff at the ISD and district level to support innovative educational opportunities in the classroom.

#### **GOAL 2, Strategy 4:**

MDE will continue to provide seed money for developing innovative, technology enhanced programs that improve student learning.

#### **Performance Indicator:**

MDE will have funded a collection of research and evidence based programs that demonstrate improved student learning using educational technology, including assistive technologies.

#### **Goal 2, Strategy 4, Action Steps:**

1. MDE will continue to fund statewide projects with available resources, such as a web portal that supports online curriculum, lesson materials, professional learning, and research.
2. MDE will award available grant funds for the development and dissemination of research and evidence based programs that demonstrate improved student learning using educational technology.
3. MDE will foster innovative projects aligned with this Plan by establishing partnerships with educators, university/college researchers, and corporate advocates of educational technology.
4. MDE will continue to support and encourage the use of cooperative purchasing programs for equipment, supplies, and services by LEAs and ISDs.

## 2010 STATE OF MICHIGAN EDUCATIONAL TECHNOLOGY PLAN

### GOAL 3: PROFESSIONAL LEARNING

#### **GOAL 3: PROFESSIONAL LEARNING**

Every Michigan educator will have competencies in 21<sup>st</sup> Century Skills, especially information and media technology, to enable the transformation of teaching and learning to improve student achievement.

##### **Goal 3, Strategy 1:**

MDE, with its partners, will continue to integrate the National Educational Technology Standards for Teachers and the National Educational Technology Standards for Administrators (NETS-T/A), 21<sup>st</sup> Century Skills, and the principles of Universal Design for Learning (UDL) into Michigan's educator licensure, certification, and endorsement programs. MDE will also work to incorporate critical elements of these into all MDE sponsored professional development activities.

##### **Performance Indicator 1:**

Michigan's Professional Standards for Teachers and the Program Standards for the Preparation of Central Office Administrators will contain critical elements of NETS-T/A, 21<sup>st</sup> Century Skills and the principles of Universal Design for Learning (UDL). Professional Development sponsored by MDE will provide teachers and administrators with the opportunity to develop and/or demonstrate proficiency, especially in the areas of information and media technology.

##### **Performance Indicator 2:**

By 2015, every certified Michigan educator will participate in the equivalent of five hours of professional development that contains critical elements of NETS-T/A, 21<sup>st</sup> Century Skills, and the Principles of Universal Design for Learning (UDL).

##### **Goal 3, Strategy 1, Action Steps:**

1. MDE will continue to ensure that 21<sup>st</sup> Century Skills, as they relate to information and media skills and UDL principles, remain a critical element in Michigan educator standards and the state's licensing and certification program.
2. Working with its partners, MDE will create and implement a skills assessment regarding technology competencies of educators based on the NETS-T/A and 21<sup>st</sup> Century Skills. This rubric-based assessment should measure the use of technology to deliver instruction, including assistive technology and principles of UDL, ensure educator information and media literacy, and determine the ability to individualize instruction for improving student achievement. MDE will continue to sponsor teacher and administrator professional development programs that incorporate critical elements of the NETS-T/A and 21<sup>st</sup> Century Skills.

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### GOAL 3: PROFESSIONAL LEARNING

3. MDE, with its partners, will create and implement a needs assessment regarding science, technology, engineering, and mathematics teaching and learning. MDE will continue to seek opportunities to sponsor teacher professional development programs that incorporate critical elements of the science, technology, engineering, and mathematics teaching and learning.
4. The state director of educational technology will work with the MDE Office of Professional Preparation and with teacher preparation institutions to develop models for effective implementation of the NETS-T/A, and 21st Century Skills in teacher and administrator preparation programs, including methods to evaluate the technology integration skills, including the use of assistive technologies.
5. MDE will explore requiring the State's teacher preparation institutions to integrate online learning into their programs in a meaningful way to prepare pre-service teaching graduates to integrate online learning into their classroom instruction.
6. MDE will explore requiring the State's teacher preparation institutions to integrate the use of data analysis to inform instruction into their programs in a meaningful way.
7. MDE will explore ways of requiring the state's teacher preparation institutions to ensure that all graduates understand how to incorporate Universal Design for Learning (UDL) strategies into their teaching practice to meet the learning needs of all students.

#### **Goal 3, Strategy 2:**

MDE, with its partners, will provide and promote professional learning opportunities for educators that leverage educational technology tools to give educators experiences using such tools in their own professional learning.

#### **Performance Indicator:**

Professional learning opportunities sponsored by MDE will leverage educational technologies in the delivery of instruction so that educators have the opportunity to experience technology-enabled learning in developing their own practice.

#### **Goal 3, Strategy 2, Action Steps:**

1. All MDE sponsored professional development will be required to use the appropriate educational technologies, including assistive technologies, in the delivery of instruction.
2. MDE will make available to educators an electronic system for tracking Continuing Education Units (CEUs) and "Individualized Professional Growth Plan" that includes activities in educational technology integration.

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### GOAL 3: PROFESSIONAL LEARNING

3. MDE will publish guidance for satisfying Michigan's five hours of online professional development requirement that includes definitions of sound online professional development practice, including critical elements of NETS-T/A, 21<sup>st</sup> Century Skills, and the Principles of Universal Design for Learning (UDL).
4. MDE, along with its partners and schools, will participate in continued research of technology-enabled models of professional development to identify those that hold the most promise for effectively improving teaching and learning.
5. MDE will continue to collaborate with statewide groups to develop and sustain ongoing professional development that incorporates technology curriculum integration, principles of UDL, and data-informed, differentiated instruction.
6. MDE will continue to implement policies that foster the expansion of online professional learning opportunities for all educators and support personnel through online portals such as Michigan Online Resources for Educators (MORE) and Michigan LearnPort.

#### **Goal 3, Strategy 3:**

MDE will continue to provide professional learning activities for MDE staff relating to technology integration, UDL principles, the effective use of data, and the use of technology to improve personal professional practice.

#### **Performance Indicator:**

All MDE staff will have access to educational technologies to improve their practice and will have the option of attending professional learning activities related to the impact of data and educational technology on student achievement, the principles of UDL, and how technology can increase their professional productivity.

#### **Goal 3, Strategy 3, Action Steps:**

1. MDE will continue to work with its partners to provide access to frequent learning opportunities for all MDE staff related to data to inform instruction, educational technology integration, the principles of UDL, and other technology related topics.

## 2010 STATE OF MICHIGAN EDUCATIONAL TECHNOLOGY PLAN

### GOAL 4: SCHOOL AND COMMUNITY RELATIONS

#### **GOAL 4: SCHOOL AND COMMUNITY RELATIONS**

Michigan school board members, parents, and community members will understand the impact of educational technology, including virtual learning options, and the impact of data to inform and improve instruction. Schools, parents, and community members will be able to access and use school-level data to make meaningful decisions related to the education of all Michigan children.

#### **Goal 4, Strategy 1:**

MDE will seek opportunities to communicate to schools, parents, communities, and state and federal policymakers the benefits and cautions related to educational technology, including virtual learning.

#### **Performance Indicator:**

Michigan educators, parents, policymakers, and communities will understand the benefits of integrating educational technology in the curriculum, including virtual learning options.

#### **Goal 4, Strategy 1, Action Steps:**

1. MDE will develop a communication plan to provide opportunities and information to schools, parents, and other members of the community to demonstrate the importance of incorporating the METS-S and 21<sup>st</sup> Century Skills into a school's curricular offering.
2. Once pupil accounting rules exist to provide 100 percent virtual learning options, MDE will work with its partners to develop and disseminate information to schools, parents, and communities on the benefits, cautions, and availability of cyber education in Michigan.
3. MDE and its partners will identify online learning resources that demonstrate promise, align to Michigan's curriculum standards, and will have a positive impact on student learning. Once identified, MDE and its partners will disseminate the findings to schools, parents, and communities.
4. MDE, with its partners, will continue to develop advocacy strategies that involve schools, parents, and communities at the state and federal level to promote the use of data and education technology to improve student achievement.
5. MDE and the Center for Educational Performance and Information (CEPI) will work with their partners to provide a single website to access appropriate data reports for teachers, administrators, parents, community members, and education researchers.

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### GOAL 4: SCHOOL AND COMMUNITY RELATIONS

6. MDE, CEPI, and its partners will work with Michigan's teacher preparation institutions to establish and fund education research collaboratives for the purpose of identifying and disseminating emerging and exemplary practices in pre-service teacher education. MDE and CEPI will streamline data access for education researchers partnering with the state and Michigan schools on shared research objectives.
7. MDE and CEPI will collaborate with districts and educational associations to develop and implement processes to "build a culture of quality data" at the local level, that includes processes to ensure the accuracy, timeliness, security, and utility of educational data.

## 2010 STATE OF MICHIGAN EDUCATIONAL TECHNOLOGY PLAN

### GOAL 5: DATA AND INFORMATION MANAGEMENT

#### **GOAL 5: DATA AND INFORMATION MANAGEMENT**

Every Michigan educator will have access to data for effective classroom decision making and school improvement planning through an integrated local and statewide decision support system, and have access to professional learning opportunities to develop competencies in data-driven decision making.

##### **Goal 5, Strategy 1:**

Simplify the process of data collection for compliance, reporting, and decision support from the classroom, building, district, and regional levels to the state.

##### **Performance Indicator:**

MDE, CEPI, ISD, and district staff members will be able to log on to secure online systems to efficiently and effectively submit and retrieve data used in state and federal reporting through easy-to-use environments.

##### **Goal 5, Strategy 1, Action Steps:**

1. MDE and CEPI will continue to work with local school districts, ISDs, and other state agencies to identify and remove duplicative data collections and pre-populate data collections for which data already exists.
2. MDE and CEPI will continue to work with local school districts and state agencies to integrate multiple data source systems into the Michigan Student Data System (MSDS) and align data collection calendars to streamline the data collection process.
3. MDE and CEPI will continue to collaborate with ISDs to ensure system interoperability by creating common formats of data elements shared at the federal, state, and district levels.
4. MDE, along with its partners and schools, will participate in continued research of data-driven models and methods of instruction to identify those that hold the most promise for effectively improving student learning.

##### **Goal 5, Strategy 2:**

Continue to build a pre-kindergarten to post-secondary Longitudinal Data System (LDS) by identifying, connecting, and combining educational data elements in meaningful ways across various sources (e.g., personnel, financial, crime and safety, schools/facilities, and student data, including assessment information and results). This data system will be structured longitudinally so that policymakers, administrators, educators, and other stakeholders have the information they need to increase efficiency and improve student academic achievement.

## 2010 STATE OF MICHIGAN EDUCATIONAL TECHNOLOGY PLAN

### GOAL 5: DATA AND INFORMATION MANAGEMENT

#### **Performance Indicator:**

Through a collaboration of state agencies, MDE and CEPI will implement a comprehensive educational data management and decision support system that will meet federal and state reporting requirements and timelines, while providing MDE, districts, ISDs, and education researchers with access to high quality, longitudinal data to inform policy and practice.

#### **Goal 5, Strategy 2, Actions Steps:**

1. MDE and CEPI, in collaboration with ISDs, will continue to fund and seek additional funding for state longitudinal data systems that will provide primary decision support functionality for districts and ISDs.
2. MDE and CEPI, in collaboration with ISDs, will continue to ensure that longitudinal and vertical integration between the state and local decision support systems is implemented by ISDs and districts.
3. MDE and CEPI will revise existing Registry of Educational Personnel (REP) data system to support the collection and reporting of the status of highly-qualified teachers in Michigan's classrooms. The revised REP will provide districts, policymakers, and education researchers with data to inform teacher policy and practice, including measuring teacher supply and demand, which requires extending Unique Identification Codes (UICs) to teachers and pre-service teacher candidates.
4. MDE and CEPI will continue working with state agencies, community colleges and higher education institutions, and local districts to extend UICs for students and educational personnel across educational data systems, including pre-kindergarten through post-secondary, and use these identification codes to track data longitudinally.
5. MDE will explore requiring the State's higher education institutions with approved teacher preparation programs, to integrate the PK-12 UIC into their student record systems for the purpose of improving data collection on post-secondary success and the preparation of pre-service teachers.
6. MDE will explore requiring the State's community colleges to integrate the PK-12 UIC into their student record system for the purpose improving data collection on post-secondary success and Michigan's career and technical education programs.

## 2010 STATE OF MICHIGAN EDUCATIONAL TECHNOLOGY PLAN

### GOAL 5: DATA AND INFORMATION MANAGEMENT

#### **Goal 5, Strategy 3:**

MDE and CEPI will continue to develop means of timely return of "connected" data to all education stakeholders, as well as supporting and sponsoring professional learning opportunities to help them understand how to use the data to improve student achievement.

#### **Performance Indicator:**

Educators and stakeholders will have access to high quality, timely data and use that data effectively for classroom decision-making and the allocation of resources across schools/facilities, districts, Michigan, etc., for the purpose of improving teaching and learning.

#### **Goal 5, Strategy 3, Action Steps:**

1. MDE and CEPI will sponsor regional data initiatives to increase the number of local districts and educators who have access to and use data to inform their practice and improve student achievement. These regional data initiatives will provide educators, particularly classroom teachers, with connections between data, tools, and professional learning opportunities for differentiated and individualized instruction.
2. MDE and CEPI will seek opportunities to leverage the regional data initiatives for streamlining state and federal reporting, linking regional initiatives into the state's Longitudinal Data System, and disseminating state-collected data back to the district and classroom.
3. MDE and CEPI will work collaboratively with ISDs, REMCs, and other education associations to develop and provide professional learning opportunities for Michigan educators and MDE staff on how to use data effectively for classroom decision making.

## 2010 STATE OF MICHIGAN EDUCATIONAL TECHNOLOGY PLAN

### EDUCATIONAL TECHNOLOGY ADVISORY GROUP MEMBERS Appendix 1

*Roger Ashley*, Executive Director, Michigan Association of Media in Education (MAME)

*Thomas Bell*, Higher Education Consultant, MDE Office of Professional Preparation Services

*Louis Burgess*, Supervisor, MDE Office of Grants Coordination and School Support

*Mary Ann Chartrand*, Director, MDE Office of Grants Coordination and School Support

*Ricki Chowning*, Executive Director, Regional Educational Media Centers Association of Michigan (REMCAM)

*Nancy Davis*, Consultant, Michigan Association of Supervision and Curriculum Development (MASCD)

*Patrick Dickson*, Professor, Michigan State University

*Jeff Diedrich*, Director, Michigan's Integrated Technology Supports

*Jamey Fitzpatrick*, President, Michigan Virtual University

*Kevin Galbraith, Sr.*, Executive Director of Technology, Wayne-Westland Community Schools

*Leisa Gallagher*, Consultant, MDE Office of Special Education and Early Intervention Services

*Glenn Gorton*, Client Service Director, Michigan Department of Information Technology

*Cheryl Hall*, Consultant, MDE Office of Early Childhood Education and Family Services

*Robert Harris*, Professional Development and Human Rights Consultant, Michigan Education Association (MEA)

*Thomas Howell*, Director, Center for Educational Performance and Information (CEPI), Michigan Department of Management and Budget (DMB)

*Kyle Hughes*, Teacher (FIRST Robotics), Clarkston Schools - OSMTech Academy

*David Judd*, Senior Business Project Manager, MDE Office of Educational Assessment and Accountability

*Allyson Knox*, Academic Program Manager, Microsoft Partners in Learning

*Debbie Kopkau*, Director of Operations, Michigan Institute for Educational Management/Michigan School Business Officials (MIEM/MSBO)

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*Sam LoPresto*, Consultant, Michigan Association of School Administrators/Michigan Association of Intermediate School Administrators (MASA/MAISA)

*Kevin R. MacRitchie*, Executive on Loan to Education, CISCO Systems

*Margaret Madigan*, Assistant Director, MDE Office of Field Services

*Sheryl Mase*, Director, Statewide Services, Library of Michigan

*Diane McMillan*, Associate Director, Michigan Association of Secondary School Principals (MASSP)

*Mike Oswalt*, President, Regional Educational Media Centers (REMC)

*Michael Porter*, Chief Technology Officer, Traverse Bay Area Intermediate School District

*Matinga Raggatz*, Teacher, Grand Ledge High School

*Michelle Ribant*, Director of General Education, Eastern Upper Peninsula Intermediate School District

*Michael Rice*, Technology Director, Kent Intermediate School District

*David Schulte*, Associate Superintendent, Shiawassee Regional Education Service District

*David Seitz*, Manager, Strategic Initiatives, Apple, Inc.

*Ron Sniderman*, Executive Director, Instructional Media & Technology Services, Wayne Regional Education Service Agency

*Patricia Talbott*, Higher Education Consultant, MDE Office of Career and Technical Education

*Sally Vaughn*, Deputy Superintendent/Chief Academic Officer, Michigan Department of Education (MDE)

*Mike Wahl*, (former) Executive Director, Michigan Community College Association (MCCA)

*Ric Wiltse*, Executive Director, Michigan Association for Computer Users in Learning (MACUL)

*Bill Witt*, Consultant, MDE Office of Education Improvement and Innovation

## 2010 STATE OF MICHIGAN EDUCATIONAL TECHNOLOGY PLAN

### **MDE Office of Education Improvement and Innovation Review Team**

*MaryAlice Galloway*, Director

*Catherine McClain*, Director's Secretary

*Bruce Umpstead*, State Director, Educational Technology and Data Coordination

*Barb Fardell*, Manager, Educational Technology

*Ron Faulds*, Consultant, Technology Standards and Planning

*Jeannene Hurley*, State eRate Coordinator

*Dwight Sinila*, Consultant, Grants Technical Assistance and Compliance

*Wanda Shunk*, Technician, Grants and Technology Plans Technical Assistance

*Peggy Severns*, Unit Secretary

*Jan Vogel*, Consultant, Data Coordination

*Karen Hairston*, Consultant, Michigan LearnPort Liaison

2010 STATE OF MICHIGAN EDUCATIONAL TECHNOLOGY PLAN  
**GLOSSARY OF TERMS**  
**Appendix 2**

CEPI	Center for Educational Performance and Information
CEU	Continuing Education Unit
ETAG	Educational Technology Advisory Group
GLCE	Grade Level Content Expectations
HSCE	High School Content Expectations
ISD	Intermediate School District
LEA	Local Education Agency
MACUL	Michigan Association for Computer Users in Learning
MCF	Michigan Curriculum Framework
MDE	Michigan Department of Education
MEL.org	Michigan eLibrary
METS-S	Michigan Educational Technology Standards for Students
MORE	Michigan Online Resources for Educators
MSIF/SIF	(Michigan) School Improvement Framework
MVU	Michigan Virtual University
NCLB	No Child Left Behind
NETS-A	National Educational Technology Standards for Administrators
NETS-T	National Educational Technology Standards for Teachers
REMC	Regional Educational Media Center
REMCAM	Regional Educational Media Center Association of Michigan
RESA	Regional Educational Service Agency
STEM	Science, Technology, Engineering, and Mathematics
UDL	Universal Design for Learning
USDE	United States Department of Education

