A New Series of Briefs

Dear Readers,

With no shortage of challenges facing Michigan today, our universities are poised to build on our long history of developing meaningful solutions through cutting-edge research. As an alliance of our state’s major research universities, the University Research Corridor (URC) has the data and expertise to identify and understand today’s shifting landscape and then use the power of our research to make a significant difference for the people of Michigan.

This new series of briefs we’ve published is designed to show — in many concrete ways — exactly how Michigan State University, the University of Michigan, and Wayne State University are helping to tackle the most persistent problems facing our state. In many cases, we work with partners across the state in schools, communities, government, and industry.

In this first brief, we focus on K-12 education. We offer examples of what our institutions are doing to discover the best ways to teach and learn, help our children, develop the quality teachers our state needs, and engage with the state and communities on programs with tangible outcomes.

One example is WSU’s Math Corps, developed 27 years ago to open lifetime opportunities to Detroit middle and high school students through expanding math knowledge and competency. The program’s successful outcomes have led to partnerships with universities in Ohio, New York, and Pennsylvania, as well as across Southeast Michigan and including U-M in Ann Arbor.

Another example is the Michigan Education Research Institute (MERI), a partnership between MSU, U-M, the Michigan Department of Education, and the Center for Educational Performance and Information. MERI gathers, manages and analyzes Michigan school data to develop sound educational practices and evidence-based policy decisions.

We hope these briefs are illuminating — showing precisely how the URC institutions have been and will continue to be at the forefront of research, practice, and policy. We are leaders in developing the talent needed to propel Michigan’s future, and in discovering the innovations that can ignite our economy. Our capabilities are immense, our expertise considerable, and our commitment to Michigan unshakeable.

Sincerely,

Samuel L. Stanley Jr.  
President  
Michigan State University

Mark S. Schlissel  
President  
University of Michigan

M. Roy Wilson  
President  
Wayne State University
The Role of URC Universities in K–12 Education

There are myriad proposals, options, and ideas being put forth by policymakers, educators, business leaders, universities, parents, special interest groups, and journalists about how the state can improve the quality of K–12 education. Within this swirl of activity and debate, it is paramount for the University Research Corridor (URC) universities—Michigan State University (MSU), the University of Michigan (U-M), and Wayne State University (WSU)—to help identify and analyze the education challenges facing our state and implement practical and effective solutions. To do that, we continuously ask: “What is our unique contribution? What skills and competencies do we have that will ensure our young people become active, engaged citizens doing meaningful and important work? How can we work with partners engaged in this space to help reposition Michigan’s education system to be among the top performing states in the nation?

When it comes to improving the quality of K–12 education in Michigan and enhancing the system through which it is delivered, we believe three of our most critical roles are:

1. Identifying, disseminating, and scaling what we know—through research and practice—works
2. Developing numerous pathways for all Michigan children to learn and succeed
3. Fostering passionate and prepared teachers and researchers

What follows are examples of the research studies, programs, outreach efforts, and partnerships that MSU, U-M, and WSU lead, seek out, and engage in every year in these three areas—all of which are helping our state rethink age-old approaches to teaching and learning.

This work is important because recent shifts in the global economy demand that schools today be more nimble, inventive, and resourceful. Students must be prepared for jobs within diverse industries—like healthcare, information technology, artificial intelligence, and financial and education services—that require widely varying skills and higher levels of education.

It is imperative, therefore, that we do our part to help the state’s education system plan and adapt to our new economic realities. We must reimagine and reshape our own programs for students and educators so they can help our state thrive. For more than 100 years, we have been at the forefront of exploring challenges to K–12 education, discovering new techniques to enhance teaching and learning, and responding to shifts in the economic landscape.
Michigan's universities have been training teachers for over 140 years.

In 1879, U-M created the first permanent professional chair devoted exclusively to the preparation of teachers. Wayne State followed closely behind in 1881, with its first class of 15 teachers. In 1902 MSU offered its first formal education course. Since then, our universities, the impact they make on our community and the number of students they serve has grown exponentially.

Improving Education Through Better Teacher Preparation

Based on the belief that great teachers are not born, they are taught, the U-M's TeachingWorks program is an excellent example of one of the ways URC universities are trying to reinvigorate Michigan’s education system.

After conducting considerable research on the best ways to help aspiring teachers improve their practice before ever stepping into a classroom, program creators developed a series of tailored professional learning opportunities focused on understanding, designing, and implementing practice-based teacher education; applied and refined the opportunities in the field through cooperative efforts with Montgomery County Public Schools in Maryland, Ypsilanti Community Schools, and Grand Rapids area schools in partnership with Grand Valley State University; and will spend the next year disseminating the teaching and learning strategies to school districts in Michigan and across the country.

The program’s ultimate goal is to create a teacher preparation and support system that not only develops highly skilled new teachers, but also disrupts the inequities that prevent many students from obtaining a high-quality education.
Identifying, Disseminating, and Scaling What Works

URC institutions are routinely researching, developing, and analyzing new education methods to meet and exceed the needs of a global economy. That work includes identifying which instructional methods are most successful, understanding how best to apply them to meet students’ diverse learning styles, and ensuring they are scaled appropriately in schools across Michigan. Together, these efforts are not only making a tangible difference in Michigan’s education system but also in our state’s ability to grow and thrive.

All of our work starts with sound research. But perhaps more important than the research itself are our continued efforts to make it widely available to others. Our collaborative efforts to aggregate and mine relevant data, such as the Michigan Education Research Institute, a partnership between the Michigan Data Center at U-M and the Education Policy Innovation Collaborative at MSU, mean that valuable research does not sit on the shelves of a few institutions. Instead, it makes its way into the hands of those on the front lines who need it to improve how teachers teach and students learn.

Our URC universities are also helping to take what we know works and apply it in the field, scaling our most successful programs so that all Michigan schools can benefit. A prime example is in the area of literacy. We know that to lead successful lives inside and outside of the classroom, students need to develop early literacy. If a student isn’t reading proficiently by the end of third grade—and recent reports and rankings suggest that many Michigan students aren’t—they will face multiple barriers to reaching their full academic and social potential, including being more likely to drop out of high school and have lower long term earning potential.

In the face of this alarming reality, URC institutions have committed considerable time, energy, and resources to improving early literacy through a wide range of programs:

- To increase reading and writing proficiency, MSU and U-M professors helped write preschool and K–3 Literacy Essentials, outlining evidence-based teaching practices that should be used with every child, in every classroom, every day; they also are helping create free online training modules to ensure that all educators have access to them.
- U-M is rigorously studying the effects of a model that accelerates both science learning and reading comprehension among first and second graders, which is being employed in early elementary classrooms across the state.
- Through its High Five Literacy Program, WSU is training graduate students in unique tutoring techniques to assist students who are still struggling with reading and writing in middle school.

Across URC institutions there is a clear commitment to improving the state’s literacy outcomes, which is necessary to reverse current trends and ensure that every Michigan child has the skills they need to succeed in school and in life. These are just a few examples of how our universities are identifying, disseminating, and scaling what we know works to improve all aspects of education in Michigan.
Our Investment

$250 million
The amount that URC universities invested in K–12 education programs between 2013 and 2017

1,149
The number of research, service, outreach, and education projects funded with those dollars

Our Influence

Total URC projects by Michigan ISD

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Sharing Research: An Integral Part of Education Success

For years, the state of Michigan and many of its leading universities have been collecting and analyzing data on hundreds of different aspects of K–12 education. The question is: Are the data being used to positively impact the quality of education in the state? Because of collaboratives like the Michigan Education Research Institute (MERI), the answer is a resounding yes.

MERI is a unique partnership between government entities—including the Michigan Department of Education and the Center for Educational Performance and Information—and two of the state’s top research institutions—Michigan State University and the University of Michigan. Together, these partners are not only gathering data on what is happening in the state’s schools, but aggressively mining that data, adding to it, and sharing it with others in an effort to develop sound education practices and evidence-based policy decisions.

The goal of this collaboration is to bring together education leaders and policymakers from across the state and nation and provide them full access to the best thinking from each institution—as well as the best data—to address specific issues.
Most recently, the MERI partners have embarked on a comprehensive study, funded by the U.S. Department of Education's Institute of Education Sciences, to determine how Michigan's Read by Grade Three law impacts students and educators. Research partners will evaluate how the law is being implemented and whether or not it is positively impacting students and helping to improve literacy for K-3 students across the state.

Improving Urban Education

The Kaplan Center for Research on Urban Education in WSU’s College of Education is an excellent example of how the state’s major research universities are advancing, supporting, and applying research to improve wide-ranging aspects of K–12 education. This particular effort focuses on promoting equity, social justice, opportunity, and transformation in urban education, especially with disadvantaged populations in the metropolitan Detroit area.

The center, opened in summer 2019, intentionally pursues and scales up collaborative research, evaluation, technical assistance, and professional development projects that are designed to address teacher education, curriculum and instruction, educational policy and leadership, student learning and assessment, school climate, school-family-community relations in urban areas, and more.
Developing Pathways for All

Talent is everywhere. It does not discriminate by race, gender, ethnicity, socioeconomic status, physical ability, or zip code. URC institutions are fully committed to ensuring that we find and serve talent wherever it resides, contributing to the larger effort to ensure every student in Michigan the best possible chance to succeed. At every level of the education system, we are working hard to identify and remove barriers that prevent traditionally underserved populations from accessing the highest-quality education in order to help them harness their talents.

At the K–12 level, we are engaged in research, program development, and implementation to create pathways for all children, such as:

- **MSU’s Verses Project**, which offers students in Detroit opportunities to learn from the area’s leading professional musicians, recording artists, and engineers at no charge.
- **U-M’s Michigan College Advising Corps**, which places recent U-M graduates into underserved high schools in Michigan to work as full-time college advisers.
- **WSU’s College of Education Upward Bound program**, which helps first-generation, college-bound Detroit high school students prepare for college enrollment.
- **WSU’s Math Corps**, which offers opportunities for Detroit middle school and high school students through innovative math education.

At the university level, we are engaged in programs that bridge the challenges talented students face when moving from K–12 to postsecondary education, as well as retention programs that help vulnerable students stay in college through graduation. All of these efforts are ultimately helping fill Michigan’s talent pipeline so there are more well-trained future professionals available to work in our schools, businesses, and community organizations. For example:

- MSU is actively engaging in the University Innovation Alliance, which helps struggling college students succeed on campus. The alliance offers programs, fellowships, and research initiatives dedicated to supporting this mission.
- U-M is using its Michigan Engineering Zone (MEZ) in partnership with Detroit Public Schools Community District to encourage 370 high school students to explore their interest in working in the engineering and robotics industries. For ten years, the MEZ has extended its influence, and is now including middle school students.
- WSU is re-engaging students who left the university with debt and without a degree through its Warrior Way Back program, which allows returning students to reduce past-due balances with each successfully completed semester.

These programs—as well as many others currently underway—highlight the various ways in which URC institutions are helping the state tackle problems of inequity that exist for many student populations, from low-income and first-generation college students to those with physical and emotional challenges.
One way to improve the talent pool in Michigan is to increase the number of young people who have access to high-quality education. That is why U-M Ann Arbor—believing that a student’s economic background should not limit their college prospects—launched its innovative Go Blue Guarantee in 2018. This program offers free tuition to Michigan students who are admitted to the university, seeking their first bachelor’s degree, and come from families with less than $65,000 in income and $50,000 in assets.

Grounded in research, the Go Blue Guarantee was built on the High Achieving Involved Leaders (HAIL), a scholarship program that targeted high-achieving, low-income students, their parents and principals through personalized mailings encouraging them to apply to U-M Ann Arbor, promising four years of free tuition if admitted. The program and related research showed that confirmation of financial aid prior to the college application process influences price-sensitive students’ choices of where to apply for college. U-M Ann Arbor found that targeted students were more than twice as likely to apply to, be admitted to and enroll in the university.

In the first year of the Go Blue Guarantee, U-M Ann Arbor saw a 24 percent increase in admissions applications and a 6 percent increase in freshman enrollment from eligible students.
An Innovative Approach to Improving Educational Outcomes for All Michigan Children

MSU’s Education Policy Innovation Collaborative (EPIC) is a university-based research team, focused on answering state and local leaders’ most pressing education policy questions. It supports evidence-based policymaking in an effort to improve educational outcomes for all Michigan children. To do this, EPIC partners with the Michigan Department of Education and local school districts—particularly those in urban, rural, and historically disadvantaged communities—through four major research initiatives:

- The Partnership Model, which strives to improve outcomes among Michigan’s lowest performing schools by monitoring and evaluating school reforms to see what works best
- Choice and Mobility, which works with state and local partners to enhance school choice policies and guarantee that parents have access to the best information possible when making enrollment decisions
- Competency-Based Education, which pilots and evaluates the effectiveness of initiatives designed to shift schools away from traditional approaches to learning toward more individualized skill-building and subject mastery
- Teacher Quality, which gathers information on the factors that most influence teacher effectiveness so that state and local policymakers can use it to formulate data-driven teacher quality policies
Fostering Passionate and Prepared Educators and Researchers

When it comes to student performance, teachers are the single most important school factor contributing to student achievement. Fortunately, the schools and colleges of education at URC universities are widely recognized for their capacity to prepare future educators to be effective in their classrooms, schools, districts, and beyond.

In addition to turning out new, highly trained teachers, URC institutions offer programs for veteran teachers, providing them with numerous opportunities to update their skills and knowledge about modern teaching methods and continuing teacher education.

But our contributions do not stop there. URC institutions also conduct world-class research, exploring everything from how to prepare teachers and advance them in the field to how to develop innovative curricula for teaching and learning.

While URC institutions have done and continue to do an excellent job preparing and supporting educators, Michigan is facing some formidable challenges on the educator front: Fewer people are entering the profession, turnover is increasing, and professional development is struggling to keep pace with rapidly changing curricula and teaching methods.

Recognizing these challenges, our URC institutions are taking important and diverse measures to address them.

- The U-M School of Education is launching a Teaching School in Detroit, which includes a three-year residency program for novice teachers and other professional supports inspired by the medical education model.
- MSU’s Supporting Early-career Teachers of Science through Urban Partnerships program is providing on-the-ground resources in local communities to ensure that upcoming and early teachers stay abreast of evolving teaching and learning techniques.
- WSU’s Collaborative Opportunities for Reaching Excellence in Mathematics is providing special education teachers in Detroit Public Schools and Hazel Park Schools with practical ongoing support and training for vulnerable students.

These are just a few of the ways URC universities are actively preparing and growing passionate, highly qualified education professionals.
In 2017, our URC universities graduated 615 students with bachelor’s degrees in education, adding talented, well-trained teachers to Michigan’s and the nation’s schools.

Another 1,107 students received advanced degrees in education, including 949 master’s degrees and 158 doctoral degrees.

Our URC universities graduated 1,722 total education degrees in 2017, making a positive impact on Michigan schools and schools around the country.

TeachDETROIT: A Unique Approach to Expanding the Teacher Pipeline

TeachDETROIT at WSU is a prime example of how URC institutions are finding innovative ways to tackle the current teacher shortage in Michigan, particularly in urban districts. This teacher residency program allows students to earn their elementary teaching certificate in just 15 months, while learning inside classrooms from masterful mentor teachers from day one. By engaging in clinical practice at the same time they are doing coursework, students in this program are able to instantly put what they learn into practice, which helps them get a much better feel early on for how students learn and interact in the school setting. They also get to see firsthand how skilled teachers design, execute, and modify their lessons and teaching strategies to serve students, many of whom have unique learning needs and challenging out-of-school circumstances.

What is particularly compelling about TeachDETROIT is that up-and-coming teachers also have numerous opportunities to engage directly with Detroit families and other important community members in the education process. This ensures that teachers are not only building their knowledge and practice base, but also forming critical relationships with others who are instrumental to student success.
MATE: A Novel Method for Teaching Teachers

In 2015, MSU’s Department of Teacher Education launched its Mentors as Teacher Educators (MATE) program. The goal of the program is twofold: to help veteran classroom teachers in Lansing, Grand Rapids, and Detroit learn how to be better mentors for their student interns and to give interns a richer, yearlong immersive learning experience.

Based on the premise that not all excellent classroom teachers know how to prepare and mentor their teachers in training, MATE provides professional development opportunities that includes facilitated conversations among veteran teachers and principals. This creates an environment where they can learn together about mentoring best practices—including observing and debriefing, analyzing student work, and co-planning. As one doctoral student explains, “So often professional development is teachers talking at teachers, whereas MATE models teachers talking with teachers.”

This innovative effort to develop both veteran teachers and teachers in training is an excellent example of one of the ways URC universities are rethinking long-standing approaches to teaching and learning.
Conclusion: Leading the Way

URC institutions have helped thousands of students, families, schools, and communities reach their education goals and compete on national and global scales. They also have led and engaged in numerous partnerships with the public, state and local governments, and the private sector to make a tangible difference in Michigan’s education system. By examining areas of research, practice, policy, and implementation, our faculty and staff make meaningful advances in improving educational outcomes for all students. These contributions are critically important today as Michigan’s K–12 system faces serious challenges. The URC’s commitment to outreach, engagement, and collaboration with partners at all levels is key to helping Michigan answer vital education questions and make decisions based on sound research and expert counsel.

Launch Michigan: A Model of Collaboration

Michigan has a number of efforts currently underway to advance the state’s education system. These efforts serve as roadmaps for bringing diverse groups of invested stakeholders together to make significant education improvements. One example is Launch Michigan. Established in 2018, this unprecedented and statewide partnership brought together business, education, labor, philanthropy, and civic leaders, as well as parents, to develop a set of shared strategies for supporting and improving pre-K–12 education in an effort to increase talent and, ultimately, boost Michigan’s economy.

Recognizing that it could not address all of the state’s educational challenges at once, Launch Michigan opted to focus first on four key areas: teacher support, literacy, finance, and accountability. These are areas in which the three URC universities have research expertise to contribute, as well as a vested interest in supporting positive outcomes. Thus, an important structure for cooperative efforts in Michigan is already in place; now, the state needs to continue leveraging that structure to ensure real and lasting change.