MICHIGAN™ VIRTUAL

LEAD.
COLLABORATE.
BUILD.

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About Michigan Virtual

Michigan Virtual University®, commonly known as *Michigan Virtual*™, is a nonprofit 501(c)(3) organization whose mission is to advance both learning and teaching through research, practice, and partnerships. Its vision is that every person can use digital learning to reach their full potential.

Michigan Virtual works to fulfill that mission through a multi-pronged approach to virtual learning. Since 2000, *Michigan Virtual* has provided over half a million online enrollments to high school and middle school students. *Michigan Virtual* is not a full-time virtual program nor a cyber school where students take 100% of their courses online. Rather public school, non-public school, and homeschool students typically enroll in only one or two *Michigan Virtual* courses as part of or in addition to their normal coursework, usually to resolve a scheduling conflict or to gain access to a course not offered face-to-face in their school.

Michigan Virtual also has a long history of providing professional learning services to Michigan districts through both innovative online courses and face-to-face offerings. *Michigan Virtual* partners with more than 90% of Michigan districts to provide educator training, develops and implements blended learning models, and identifies and enacts effective practices in technology integration. Through this role, *Michigan Virtual* is a statewide leader in providing educators with the required professional learning hours necessary for renewal of their teaching certificates.

Another prong is the *Michigan Virtual Learning Research Institute*® (*MVLRI*®). Formed in 2012, the Institute expands Michigan's capacity to support new learning models, engages in active research to inform new policies in online and blended learning, and strengthens the state's infrastructures for sharing effective practices. It is a nationally recognized thought leader in online and blended learning and has begun offering consulting services to schools in these areas. In 2023, *Michigan Virtual* also announced the opening of an Artificial Intelligence (AI) Lab to expand the leadership role of the Institute to include investigating the instructional, policy, ethical, and legal aspects connected to the use of AI in public schools.

The organization has three strategic goals. The first is to improve outcomes for Michigan learners by leading research, development, deployment, and dissemination of innovative and effective practices. The second is to increase access to high-quality learning opportunities and resources. The final goal is to establish *Michigan Virtual* as a thought leader and the preferred statewide learning partner for Michigan schools and educators. By increasing access and serving as a trusted learning partner, *Michigan Virtual* helps catalyze the systemic changes required to positively impact student achievement. More information about the strategic plan is available on our website.[1]

This *Annual Report* provides highlights of *Michigan Virtual*'s student learning, professional learning, and research activities for the 2022-23 fiscal year.

Student Learning

Student Online Learning in Michigan

Before detailing the impact of the *Michigan Virtual*'s student learning efforts, it may be valuable to provide a comprehensive statewide snapshot of virtual learning for K-12 students. Based on data published in *Michigan's K-12 Virtual Learning Effectiveness Report 2021-22*,[2] we know that:

- 666 Michigan public school districts reported at least one virtual enrollment.
- Of the 1,914 schools with virtual enrollments, over half had 100 or more virtual enrollments.
- Over 208,000 Michigan K-12 students took at least one virtual course in 2021-22, totaling more than 1.4M virtual enrollments.
- Schools are disproportionately enrolling students in poverty into online courses. On average, schools also tend to enroll students who are struggling academically in their face-to-face courses or for a subject in which a student has failed rather than for advanced coursework or for a subject in which the student is proficient.
- The overall pass rate for virtual courses was 69%, down five percentage points from the prior year. Fifty-six percent of the virtual learners—117,588 students—passed every virtual course they took. The pass rate is low because of cases where students are being provided with large numbers of virtual courses without passing any of them. Restricting the number of virtual courses a student can take to one or two at a time until the student demonstrates successful completion might dramatically improve the statewide pass rate.
- Some schools are clearly more effective in using virtual learning than others. Twenty-three percent of schools with virtual learning had virtual pass rates of 90% to 100%.

From a policy perspective, there are two main drivers of virtual learning in Michigan schools. The first is that Michigan students are required to have an online learning experience[3] to graduate from high school. This requirement was adopted in 2006 as part of the Michigan Merit Curriculum (MMC) and was intended to prepare K-12 students for the digital world they will encounter in higher education, their future workplaces, and their personal lives. Schools were provided with flexibility in how they could fulfill the online learning requirement—in part due to the vast difference in technology access and readiness of schools in 2006. The options included:

- Take an online course.
- Complete a meaningful online experience of at least 20 hours.
- Complete the meaningful online experience of at least 20 hours incorporated into the required courses of the MMC.

While Michigan was the first state in the country with such a requirement, several other states have since followed suit. Some of these states have adopted more stringent requirements than Michigan, requiring students to take an online course rather than have a 20-hour minimum experience.

The second policy driver has been Section 21f the State School Aid Act.[4] Since 2013, Michigan public schools have been required to honor parent or student requests for enrollment in up to two online courses per academic term or more if parents, students, and school leadership agree that more than two are in the best interest of the child. Eligible courses for enrollment include those published in the

student's school district's catalog of board-approved courses or from those in a statewide catalog of virtual courses.[5]

Michigan Virtual Student Learning Fast Facts for 2022-23

- Almost 19,000 students benefited from taking an online course through *Michigan Virtual*.
- Over 35,000 student enrollments were delivered to students.
- On average, students take less than two virtual courses with *Michigan Virtual* during a school year.
- About 55% of Michigan LEA Districts used *Michigan Virtual* for student courses.
- Students enrolled in 286 different online courses out of 303 course titles offered.
- *Michigan Virtual* had 14,818 students who took one or two teacher-led virtual courses. This group of students had a pass rate of 78%. There were 2,345 students who took three or more teacher-led virtual courses, and their pass rate was 67%. The overall pass rate for *Michigan Virtual* teacher-led courses was 74%.
- *Michigan Virtual* also served over 700 students through its Collaborative product where schools had access to *Michigan Virtual*'s online curriculum, assessments, and learning management system. A local teacher instructs the course and may use some or parts of the online content and blend it with other online and offline resources and assessments. For that reason, *Michigan Virtual* does not calculate a course completion rate for these enrollments.
- *Michigan Virtual* maintained its accreditation with Cognia.

Students

A total of 18,898 unique students took online courses with *Michigan Virtual* in 2022-23. This includes 17,163 students in teacher-led courses, 717 students in Collaborative Partner sections, 1,122 students in external EdReady courses, and 42 students in enrichment courses. There were 146 students enrolled in both *Michigan Virtual* teacher-led and Collaborative Partner sections. Students enrolled in external EdReady courses offered in local districts were not included as schools enroll directly with EdReady rather than through the *Michigan Virtual* systems. Note that some students may use more than one product line and therefore the sum of the student counts by product line is greater than the unique count of students listed in this first sentence of this paragraph.

Enrollments

During the 2022-23 school year, *Michigan Virtual* supported 35,272 student enrollments. This included:

- 32,889 MV teacher-led Plus, Advanced Placement®, and Essentials enrollments.
- 1,155 external EdReady enrollments.
- 1,077 Collaborative enrollments in online courses taught by local district teachers.
- 68 NetAcademy enrollments.
- 41 dual enrollments through St. Clair Community College.
- 42 enrichment enrollments

On average, students using *Michigan Virtual* teacher-led courses took 1.9 courses, and Collaborative Partner students averaged 1.5 courses. Excluding external EdReady enrollments, the overall average number of courses taken by students was 1.9.

Districts

Student enrollments during the 2022-23 school year came from 361 Michigan districts including 296 local education agency districts (LEA districts), 26 public school academy districts (PSA districts), two intermediate school districts (ISDs), and 37 nonpublic schools. As a point of comparison, based on data available in November 2023 through the Center for Educational Performance and Information's (CEPI) Educational Entity Master website,[6] a search for districts that were open-active and actively educating students yielded 56 ISDs, 537 open-active LEA districts, 285 PSA districts. There were also 684 open-active nonpublic schools. Using these counts as estimates for the 2022-23 school year, *Michigan Virtual* served approximately 4% of the ISDs, 55% of the LEA districts, 9% of the PSA districts, and 5% of the nonpublic schools with student courses. A list of Michigan districts served in 2022-23 is included in Appendix A, Figure 1.

Michigan schools accounted for 33,337 enrollments within its Student Learning Portal, with the number of enrollments from a school ranging from a single enrollment to 1,849 enrollments. For *Michigan Virtual* teacher-led course enrollments, Michigan schools accounted for 32,998 enrollments with an average number of enrollments per school of 89. In addition to serving Michigan schools, *Michigan Virtual* generated 28 enrollments from eight non-Michigan schools. *Michigan Virtual* also had 1,839 enrollments from Michigan and non-Michigan parents or guardians directly enrolling their children in online courses. Students in 72 of Michigan's 83 counties were supported with online learning opportunities through *Michigan Virtual*. For a map of locations where students and schools were served, see Figure 2 of Appendix A.

Courses

Students enrolled in 286 different online courses with *Michigan Virtual*. These online courses included titles offered during the fall, spring, and summer. The list included core academic courses specifically aligned with the MMC, AP courses, credit recovery courses, cybersecurity and networking courses through NetAcademy Cyber Training Institute, dual enrollment courses through St. Clair County Community College, summer enrichment courses and EdReady external courses. These online courses included those developed by *Michigan Virtual* as well as courses and content licensed from nationally recognized providers. Most courses (84%) were offered at the high school level, though 49 online courses were specifically available for elementary/middle school students, including six summer enrichment courses and 5 external EdReady courses. The full listing of the online courses used by Michigan districts and students during 2022-23 is available in Appendix A, Figure 3.

Pass Rates

Michigan Virtual had a 74% course pass rate for the year in its teacher-led courses, five percentage points higher than the statewide virtual pass rate for the prior year.[7] In calculating the pass rate for teacher-led courses, which include Plus, AP, Essentials, NetAcademy, and Dual Enrollment. Of the 32,998 attempted *Michigan Virtual* teacher-led enrollments, 31,324 were from students who finished or remained enrolled in the course through the last day for a 95% completion rate. In terms of course success, 24,406 of the 32,998 enrollments earned 60% or more of the total course points for an overall pass rate of 74%.

The *Michigan Virtual* pass rate varied significantly according to the number of virtual courses taken. Historically, *Michigan Virtual* has been used as a supplemental online course provider where students

who enrolled only took one or two courses. In 2022-23, Michigan Virtual served almost 15,000 students who took one or two teacher-led virtual courses. Those students had a pass rate of 78%.

Michigan Virtual has continued to see some schools reach out for assistance with far greater numbers of enrollments per student. This school year, *Michigan Virtual* served 2,345 students who took three or more teacher-led virtual courses, and their pass rate was 67%.

Table 1 below shows how student pass rates varied based on subject area and number of courses taken.

Table 1. *Michigan Virtual* Student Pass Rates by Subject Area and Number of Courses Taken

Subject Area	Students Taking One or Two Courses	Students Taking Three or More	Overall
English Language and Literature	73%	59%	65%
Life and Physical Sciences	69%	63%	66%
Mathematics	76%	63%	70%
Social Sciences and History	84%	71%	79%
All Subject Areas	**78%**	**67%**	**74%**

Appendix A, Figure 4, shows the *Michigan Virtual* pass rate for each subject area. A full list of the 2022-23 *Michigan Virtual* student pass rates by course title is also provided in Figure 3 of Appendix A. Pass rates also varied by district. Of the 295 Michigan LEA districts that enrolled students in *Michigan Virtual* teacher-led courses, 93 districts (32%) had a district-wide pass rate of 90% to 100%. An additional 90 districts (31%) had a pass rate of 80% to 90%. Thus, over 60% of LEA districts had a pass rate of 80% or greater when using *Michigan Virtual* teacher-led courses. There were 38 districts that had pass rates of less than 60%. Of those, 25 had double digit enrollments. Twelve of those 38 districts had pass rates of less than 10%, and six districts had a single enrollment. Figure 5 of Appendix A includes a chart displaying the distribution of district pass rates.

Current Initiatives

Michigan Virtual provides ongoing professional development for a growing number of internal and external teachers. Our full-time instructors are delivering a series of live webinar sessions during the 2022-23 school year to continue to build and align teaching practices across a diverse group of educators. Topics include supplementing learning with additional resources, differentiation, planning efficiencies, using communication strategies, self-assessing your teaching with a classroom walkthrough, stakeholder views in the LMS, handling challenging situations, employing tools for feedback, using data in our systems, student engagement, discussion board practices, and goal setting.

As an organization serving students across the state, *Michigan Virtual* is focused on providing student success supports. The Student Learning Services team has been working to ensure we can better serve students with Individualized Education Programs (IEPs) and 504 plans. We have invested in improvements to our program to collect necessary documents and record appropriate updates on accommodations. This process was developed to provide more clarity of support between the local school and *Michigan Virtual*.

Michigan Virtual developed new versions of several long-standing high school course offerings, introducing them in the 2022-23 school year, including Anatomy and Physiology, AP Physics C: Mechanics, British Literature - English 11-12, Composition, Social Media, Spanish 1, and Study Skills.

Michigan Virtual also partnered with three other course content providers to expand course offerings for middle school and high school students. New middle school titles included Learning in a Digital World: Digital Citizenship, Middle School Digital Art and Design, and Middle School Health. Further new additions to the high school catalog included Careers in Criminal Justice: Finding Your Specialty, Creative Writing: Unlocking the Core of Your Imagination, and Reading Strategies: Fields of Reading.

As part of *Michigan Virtual*'s efforts to continuously improve and assure online course quality, 13 courses were reviewed and certified by Quality Matters, an independent, third-party nonprofit organization, for conformance to national standards of online course quality.

Michigan Virtual is also presently engaged in an ongoing, multi-year endeavor to examine the methods of assessment and reporting of student performance within our high school Algebra 1 course offering with an aim to redesign the course employing a competency-based education (CBE) delivery model to promote student mastery of important benchmarks of learning in this foundational mathematics course.

Professional Learning

Professional Learning in Michigan

Professional learning fosters ongoing growth, enhances pedagogical practices, and facilitates the continuous refinement of instructional strategies. It enables educators to remain attuned to evolving educational practices, adapt to emerging technologies, and stay abreast of research findings. This year, we surveyed educators to identify what they wanted from professional learning. The following reflects responses from the survey, including follow-up interviews with some respondents:

- More than half of participants preferred some form of online asynchronous learning as their ideal learning experience.
- 77% preferred a subject matter expert or external facilitator for their learning.
- All educators interviewed shared a strong desire for more choice in professional leaning.

More information about these survey results can be found on the *Michigan Virtual* website.[8]

Addressing the need for professional learning for educators through policy is crucial due to rapid changes in technology and societal demands. Key barriers include outdated learning models, the lack of flexible professional development opportunities, limited access and awareness of available programs, and the financial burden of such training. Additionally, the integration of Artificial Intelligence in education demands new training. While professional learning is important, its impact on practitioners often is dampened due to the inability to find time for continuous learning and reflection.

Districts may be well served by promoting innovative learning models and providing flexible, accessible professional development opportunities. Districts should also ensure their educators are trained to effectively use AI tools in their teaching. Teachers would also benefit from additional release time to put what they have learned into practice.

Barriers and Opportunities for Professional Learning

Michigan Virtual has identified six barriers and three opportunities to encourage the adoption of virtual learning in the public education system.

Barriers

1. Updating models of professional learning within districts

The lessons drawn from COVID underscore the imperative for flexibility in education. While more and more educators are benefiting from online professional learning, a disproportional amount of professional learning comes through sit and get, face-to-face offerings. Through surveying almost 300 educators statewide, including follow-up interviews with some respondents, they want:

- Flexibility: Our findings highlight educators' yearning for diverse learning experiences across a spectrum of subjects. The apparent paradox within our survey, where "lecture" emerged as both the most popular and least favored method, underscores the necessity of embedding flexibility into the content, delivery, and venues of professional learning.
- Choice: Resoundingly, every educator interviewed emphasized the importance of choice. Some expressed a desire for more options within their current workplaces, while others cited the effectiveness of professional learning experiences that granted them autonomy in choosing what and how to learn. Empowering educators with the ability to make decisions about their own professional development is crucial.
- Voice: Educators signaled a resounding desire for a meaningful voice in shaping their professional learning landscape. Educators not only wish to be heard but also aspire to contribute to decisions regarding their professional development. As one educator eloquently stated, "You need to listen to educators. They know what they need."

The speed and uniformity with which districts are updating their professional learning models to ones that embracing flexibility, choice, and the authentic voices of educators, and that pave the way for a more responsive and empowering professional learning environment remains uneven.

2. Lack of flexible learning opportunities for education-related personnel

Over the past year, *Michigan Virtual* forged a partnership with MiRegistry – an organization that supports professionals who run day-care centers, after-school programs, and early childhood programs – to deliver online professional learning to meet state-level certification requirements. This collaboration has empowered close to 40,000 MiRegistry users with an alternative way to renew their licensure through online learning options. We suspect that there are additional, adjacent communities that serve K-12 student populations or the K-12 system that are not leveraging the power of online learning to offer high-quality professional learning at scale, with fidelity, cost-effectively, and with the flexibility that people need. While we raise this as a barrier, we also see this as an opportunity which we speak more to below.

3. Lack of access & awareness to quality professional learning

As mentioned above, many educators seek flexible learning options for themselves, which can provide flexibility, choice, and voice. However, many educators are restricted from accessing quality professional learning resources for a multitude of reasons:

- Lack of district-level promotion regarding flexible learning options.
- Lack of financial resources to support time away from the classroom for professional learning.
  - When financial resources are available, a shortage of substitutes can also be a hinderance.

- Lack of time allotted to spend in deep professional learning to change instructional practices.
    - Many professional learning experiences required by educators for recertification are completed on the educators' own time outside of the regular school day.

4. Rising costs associated with quality professional learning

The cessation of Government Emergency Education Relief (GEER) grants and Elementary and Secondary School Emergency Relief (ESSER) funds will have a significant impact on professional development for educators. These funding sources, instrumental during the pandemic, provided crucial financial support for a range of educational initiatives, including professional learning programs. With the discontinuation of these funding mechanisms, schools and educational institutions may face substantial challenges in sustaining the momentum gained in educator professional development. The potential reduction or elimination of these funds could lead to a decrease in available resources for training programs, diminished opportunities for educators to engage in continuous learning, and a possible reversion to pre-pandemic levels of professional development support.

5. Artificial Intelligence

The emergence of sophisticated and continuously evolving AI platforms, such as ChatGPT and MagicSchool, are seen by many as a potential threat to traditional education. The threats, both real and perceived, are already shaping face-to-face instruction as well as online instruction. Educators' attitudes and aptitudes with these emerging technologies are likely to have significant impact on students' opportunities for the foreseeable future.

6. Additional time dedicated to continuous improvement and reflection of practice

Continuous reflection and continuous improvement are pivotal in the professional development of educators but are often hindered by several notable barriers. First, time constraints significantly impede educators' ability to engage in deep reflection and to implement new strategies, as the demands of their existing schedules leave little room for such activities. Second, resource limitations, including a lack of access to comprehensive professional development programs and educational tools, can restrict educators' capacity to enhance their teaching practices. Lastly, isolation presents a substantial challenge; educators who lack a collaborative network or professional community may miss out on critical opportunities for shared learning and insights, which are essential for effective reflection and improvement.

Opportunities

1. Artificial Intelligence

As mentioned above, the rapid growth and change in artificial intelligence is accompanied by a corresponding critical need for targeted professional learning on the technical intricacies of AI tools and their pedagogical and ethical implications. From educators, administrators, school board members, and anyone making decisions for or using AI with students, empowering professionals with up-to-date trainings, resources, and information will be essential to help them navigate landmines and gain the maximum benefits of these transformational technologies.

2. Expand flexible professional learning models across diverse sectors

The demand for flexible learning experiences is not exclusive to educators; it resonates across various industries. The success witnessed with MiRegistry underscores a broader desire for professional growth options that extends to other professional communities that serve K-12 student populations or the K-12 system. Introducing adaptable professional learning opportunities to employees in diverse sectors unlocks the potential for widespread growth and development within our existing Michigan workforce. By acknowledging and catering to the diverse needs of professionals in various fields, we can create a more inclusive and dynamic professional development landscape, contributing to the overall advancement and adaptability of Michigan's workforce.

3. Advocate for and invest in professional learning communities (PLCs)

The COVID era exemplified the critical role of collaborative networks of educators navigating the challenges of remote and hybrid learning. Recognizing this need in Michigan's educational landscape, *Michigan Virtual* has actively supported successful Professional Learning Communities (PLCs). Examples include the "Keep Michigan Learning" Facebook group and the Future of Learning Council. By funding and promoting such PLCs, we not only address immediate challenges but also foster a culture of continuous learning and collaboration among educators. Investing in these communities amplifies the exchange of best practices, innovative ideas, and collective problem-solving, ultimately contributing to the resilience and adaptability of Michigan's educational ecosystem. Additionally, creating flexible opportunities for PLCS, allowing educators options in terms of modality, time commitment, location, participation level, etc., enhances the inclusivity and effectiveness of these collaborative networks.

Conclusion

Michigan Virtual is well-positioned to capitalize on the growing interest in online professional learning. By tailoring our offerings to accommodate both asynchronous and synchronous preferences, we aim to empower educators across Michigan to continually enhance their skills and practices, ultimately benefiting the students they serve. As we navigate the opportunities and barriers presented by the digital landscape, our commitment to fostering effective and accessible professional learning remains our highest priority.

Michigan Virtual Professional Learning Fast Facts for 2022-23

- More than 95,000 adult learners took one or more professional learning courses through *Michigan Virtual*.
- These learners produced over 255,000 professional enrollments, the equivalent of nearly 500,000 professional learning hours.
- From these hours, *Michigan Virtual* processed over 270,000 State Continuing Credit Hours (SCECHs) in MOECS.
- Educators were affiliated with 100% of the state's ISDs, 99% of the LEA districts, 100% of the PSA districts, and 78% of the nonpublic schools.
- *Michigan Virtual* partnered with over a dozen organizations to offer professional learning opportunities that aligned to their member's training needs.
- *Michigan Virtual* received over 119,000 responses to an end of course survey with 96% of respondents being highly satisfied with their experience.

Learners

Michigan Virtual served more than 95,000 professional learners through its professional learning portal. Users of the portal are asked to declare what professional roles they serve in, though this is not a required field. Users may select more than one role. Learners from this year self-identified as:

- Administrator: 6,876
- Mentor: 976
- School Counselor: 1,576
- Support Staff: 17,757
- Teacher: 48,120
- Other: 20,947
- Not Declared: 5,773

Districts

Professional learners represented all 56 Michigan ISDs. Ninety-nine percent of Michigan local education agencies (LEA) districts had learners. One hundred percent of Public School Academy (PSA) districts were served. There were 534 nonpublic schools that had learners take at least one online professional learning course which represents 78% of the nonpublic schools in the state.

Eight LEA districts and 16 nonpublic Schools used *Michigan Virtual*'s Group Registration and Enrollment program (GRE). Through this service, districts pay a low cost to register staff into courses of their choosing. Along with enrollment services, districts receive reports on staff progress. GRE can be personalized to meet educators' needs and allows for professional development flexibility.

Courses

Michigan Virtual's professional learning portal yielded professional learning enrollments in 340 different course titles. More than 86,800 enrollments came from courses developed through a partnership with the Michigan Department of Education. Over 55,000 enrollments stemmed from compliance courses educators took to maintain their teaching certificates or perform their job functions. Around 25,700 enrollments were provided in Essential Instructional Practices in Early Literacy K-3, Prekindergarten, and School and Center-wide courses. Over 27,000 enrollments came from courses covering Social-Emotional Learning. Just under 11,000 enrollments occurred in courses addressing blended and online teaching and learning. Finally, *Michigan Virtual* provided over 2,000 enrollments in counseling courses related to college preparation and selection, as well as advising on military options.

Michigan Virtual also served as one, if not the, largest provider of SCECH processors. During the year, over 124,000 enrollments were completed in SCECH courses for a total of around 429,000 hours. Not all learners need their SCECHs processed, so the total number of SCECH hours processed in MOECS by *Michigan Virtual* was over 270,000.

Professional Learning Activities and Coursework

Michigan Virtual remains deeply attuned to the evolving challenges in education and stands committed to providing robust support through comprehensive professional learning initiatives. Within our professional learning platform, educators have access to an extensive catalog of over 300 online and hybrid courses,

enabling them to discover tailored solutions that meet their specific needs or professional challenges. Our rigorous approach involves collaboration with subject matter experts, both local and nationwide, ensuring that the content offered is research-driven and accurate.

This past year, *Michigan Virtual* designed, developed, and deployed the following courses in response to the professional learning needs in Michigan:

- Abbott Elementary TV Series Study
- Build Trust Through Positive Interactions - Apply Your Skills
- ChatGPT for Educators: An Introduction
- Creating Check-Ins to Support Students - Skills Application
- Elementary Career Awareness eResources in MEL
- Health & Safety for Licensed Child Care Providers, A-C, Transportation
- Introduction to Early Childhood Standards of Quality for B-K
- Introduction to Esports
- Landing the Job: Applications and Interviews for Educators
- Mindful Practices series (3 courses)
- Online Teaching and Learning Series
- Secondary Career Preparation eResources in MeL
- Special Populations & Assessments (teacher, administrator, paraprofessional)
- Ted Lasso TV Series Study
- Universal Design for Learning series & Application (6 courses)

Michigan Virtual offers courses and workshops on timely topics such as Artificial Intelligence (AI) and how it impacts teaching and learning. Along with AI, we focus on best practices in online teaching, which looks very different from traditional face to face instruction. We created and released eight micro-credential courses aligned to the NSQ standards**.** These courses covered a variety of topics that educators teaching in an online environment could benefit from.

To streamline professional learning for districts, we provide Group Registration and Enrollment (GRE) services, helping districts efficiently offer professional development. Through this service, school leaders identify specific online courses for their staff to complete. The *Michigan Virtual* team handles account creation, enrollments, PIC verification, weekly completion reports, and flexible scheduling. In addition to the features mentioned, this service allows organizations and staff flexibility of when and where they complete their learning.

As we build, buy, or broker coursework, we are mindful of the National Quality Standards for Online Courses[9] and apply the relevant standards whenever possible.

Below are standards adapted from the National Standards for Quality Online Courses that *Michigan Virtual* utilizes when building content or adding vendor courses to our professional learning platform:

- The overall design of the course is made clear to the learner at the beginning of the course. The course materials include support services essential to learner and instructor success. Course instructions articulate or link to relevant information and services.
- The online course provides learners with various content options that promote their mastery of content and are aligned with state or national content standards.

- The online course incorporates instructional materials, activities, resources, and assessments that are aligned to standards, engage all learners, and support the achievement of academic goals.
- A variety of assessment strategies are used throughout the course geared toward learning and engagement and learners are provided with feedback on their progress.
- The course design reflects a commitment to accessibility so that all learners can access all content and activities and to usability so that all learners can easily navigate and interact with all course components. Online course materials, activities, and assessments are designed to ensure that all learners have access to the same information and are able to engage in the same interactions and within the same time frame. The course, developed with universal design principles in mind, addresses Section 504 of the Rehabilitation Act of 1973 and Title II of the Americans with Disabilities Act (ADA) by following (Web Content Accessibility Guidelines) WCAG 2.0 AA standards. This does not guarantee or imply that particular country/federal/state/local accessibility regulations are met. Please consult with an accessibility specialist to ensure that all required accessibility regulations are met.

We strive to provide professional learning opportunities based on the latest educational research. We frequently use external subject matter experts who help identify best practices and guide our instructional design team as they build online modules. Michigan educators who access our professional development services routinely offer satisfaction ratings above 90%. As part of our continuous improvement process, we actively seek user feedback to make revisions, learn about areas of concern, and gather suggestions for additional offerings.

If learners have feedback about the content or design of our courses, we encourage them to share it with using our ticketing system.[10] When filing a ticket, a user can denote that it is for professional learning and then select that there is an issue with the PLP course content. The user can select from sub-options that include, among others, Content Bias, Content Error, and Content Design Issue. Tickets flagged with these indicators will be reviewed by our Director of Customer Care and our Senior Director of Professional Learning. This information on the online course standards as well as how to file a complaint about course content and detailed steps for review and resolution are also included on the *Michigan Virtual* website.[11]

Here are just a few pieces of feedback from our satisfied users:

- "Keep up the amazing work. Best PD I have attended. Thank you!"
- "I truly can't justify just one thing, the whole training is wonderful, it either refreshed what I already knew or it taught me a lot. Thank you for all the time and effort put into this training for us to learn, greatly appreciated."
- "Engaging and filled with so many valuable resources. Not just a click-to-complete module at all. For a FREE course I was very glad to have the content truly be applicable to my needs."
- "This course was not only informative, but the information was incredibly well-organized. I am thankful for learning that was easily accessible, well thought-out, relative to my current classroom setting and students, and free!"

Partnerships to Reach Educational Professionals

Michigan Virtual partners with institutions across the state and country to ensure our learners have access to the most current and relevant learning opportunities. These partnerships impact not only educators but also the students they serve. 2022-2023 partnerships are listed in alphabetical order:

- Blue Cross Blue Shield
- Future of Learning Council
- Michigan ASCD
- Michigan Assessment Consortium
- Michigan Association of College Admissions Counselors
- Michigan Association of Intermediate School Administrators
- Michigan Association of Secondary School Principals
- Michigan Association of Superintendents and Administrators
- Michigan Department of Education
- Michigan Elementary and Middle School Principals
- Michigan History Museum
- Michigan State Police
- Michigan State University
- US Army

A few of these partnerships are expanded upon below.

Future of Learning Council

Michigan Virtual's has continued its support of the Future of Learning Council,[12] which has expanded its membership to include 2 PSAs, 8 ISD/RESAs, and 48 districts from across Michigan since its establishment in October 2021. This ongoing support involves the organization and execution of monthly professional learning meetings, primarily conducted at the *Michigan Virtual* facility throughout the year. These sessions included crucial topics such as the creation of innovative education environments and designing innovative instructional frameworks, as well allocating time for districts to collaborate with their leadership teams in shaping the future of education. Guest presenters included:

- Virgil Hammonds, KnowledgeWorks
- Rebecca Middles, Getting Smart
- Dr. David Miyashiro, Cajon Valley Union School District
- Jason Berg, Farmington Area Public Schools, MN

In April, *Michigan Virtual* provided 45 FLC district leadership teams with the opportunity to travel to the ASU+GSV Summit through a grant program from the summit sponsors. This opportunity was seen by participants as an invaluable opportunity to connect, network, and learn about policy, investment, and thought leadership at a national level around the future of learning.

In May 2023, *Michigan Virtual* co-sponsored a "Future of Learning Summit" for 123 FLC members and non-members focused on new technologies such as AI and personalized competency-ed learning frameworks. The keynote for this event was Dr. Sabba Quidwai, CEO of Designing Schools. *Michigan Virtual* staff led several facilitated sessions.

MiRegistry

MiRegistry and *Michigan Virtual* partnered in the 2022-2023 school year to streamline the process of obtaining Continuing Education Units (CEUs) by allowing the transfer of completed course information from the Professional Learning Portal to MiRegistry. MDE also partnered with *Michigan Virtual* to develop and host online health and safety trainings. These offerings fulfill training requirements for both licensed and license-exempt providers.

Additionally, we have been working with the MiRegistry team to cultivate new ways of supporting this unique group of educators who are often inexperienced with online learning. We have implemented new designs within courses to provide a better user experience for those using mobile devices. We have also created several knowledge base articles to support navigation within our learning management system and implemented intelligence agents to better inform users of possible deadlines.

Blue Cross Blue Shield

Another partnership example is our collaboration with Blue Cross Blue Shield and the Elementary and Middle School Principals Association. *Michigan Virtual* remains a steadfast partner with these organizations to serve as a pivotal resource for the Step Up for Wellness grant. This partnership focuses on providing crucial professional development centered on suicide prevention in adolescents and social-emotional learning. This year, the program extended its support to 321 educators across 33 different schools, marking the highest outreach achieved since our involvement in 2021. The collaboration yielded notable outcomes:

- Fourteen schools reported tangible changes in their environment due to the resource, with four schools adapting their systems and two revising policies based on their implementation.
- A resounding 100% of participating schools emphasized the pivotal role of the *Michigan Virtual* staff's coaching support in facilitating their planning and implementation.
- A staggering 94% of respondents highlighted that the social-emotional learning (SEL) resources effectively engaged staff in policies, practices, and educational activities promoting personal growth.
- 100% of respondents advocating for the resource underscores its profound impact, as they wholeheartedly recommend it to other schools seeking similar support.

This collaboration has proven instrumental in not only imparting essential knowledge but also effecting tangible changes within participating schools, cementing its significance in promoting mental health awareness and fostering holistic growth among educators and students alike.

Michigan State Police and Michigan State University

Michigan Virtual also partnered with the Michigan State Police Office of School Safety and Michigan State University[13] to provide six courses in mental health and school safety. Courses offered in this series include:

- SRO1: Promoting a Safe and Supportive School Climate
- SRO2: Teaming and Collaborative Data-based Problem Solving
- SRO3: Early Identification of Mental Health Challenges
- SRO4: Mental Health Interventions and Care Coordination

- SRO5: Working with Diverse Populations
- SRO6: Self-Care and Wellness

These are just a handful of examples that demonstrate *Michigan Virtual*'s support and empower educators. *Michigan Virtual* continues to seek new collaborator partners to extend the reach of professional learning.

Looking to the Future

The future of professional learning for educators offers unprecedented flexibility and accessibility. Educators can engage in continuous development on their own terms, independent of time and place. As education evolves with new technology and improved pedagogical practices, it is our responsibility to provide support not only for implementing these innovations but also for effectively integrating them in ways that support all learners. To address some of the challenges facing education, we need to work together through meaningful partnerships that support all Michigan learners. Quality learning opportunities have a lasting impact on our collective future.

Research Institute

Section 98 of the State School Aid Act[14] also directs *Michigan Virtual* through its research institute, *MVLRI*, to address the following tasks to strengthen teaching and learning for K-12 education. Toward that end, *MVLRI* has responsibilities as summarized in the items below.

(A) Support and accelerate innovation in education through the following activities:

2(a)(i) Test, evaluate, and recommend as appropriate new technology-based instructional tools and resources.

Through September of 2023, *MVLRI* continued to explore and test the application of artificial intelligence and machine learning in developing and deploying instructional content and to share our findings. In Fall and Spring semesters, *Michigan Virtual* completed two expanded pilots of an AI system to help "nudge" students by identification of attitudinal states based on behavior recorded by LMS data (the second and third pilot in a three-part series). These pilots encompassed a test group of 3,079 and a control group of 3,313 in Fall semester and a test group of 4,513 students and a control group of 2,356 students in Spring of 2023. Results were analyzed on student completion data for Fall & Spring semesters to identify opportunities for further exploration of these types of machine learning AI systems. Outcomes around significant predictors of course success from both the Fall and Spring pilot were documented and shared at the MASA (Michigan Association of Superintendents & Administrators) Mid-winter Conference in January with district leaders, the February Digital Learning Annual Convention, where a prominent number of Michigan districts were in attendance, as well as at the annual ASU+GSV Summit in April where we sat down with Michigan school leaders and the organizers of the pilot to discuss the program.

MVLRI continues to support *Michigan Virtual*'s participation as a continuing member in 1EdTech's Statewide Programs Innovation Leadership Network (ILN) with a focus on virtual schools. *Michigan Virtual* explored the use of the Trusted Apps Certified Leader certification by sending one leader to pursue the certification.

Through a pilot of more advanced learning object repository (LOR) functionality in Spring 2023, documented later in this report, *MVLRI* explored mapping digital curriculum standards for the Michigan Merit Curriculum to lesson level objects. Several barriers in the conversion of standards to computer readable format and how those standards are linked to learning repository objects were identified and will continue to be explored in the work to create more robust digital learning ecosystems. A separate competency-based learning pilot was also launched in tandem which explore mapping Michigan standards to competency definitions directly in the *Michigan Virtual* LMS to create a competency-based Algebra 1 course for hosting in the *Michigan Virtual* catalog. Though the work was completed, the course did not launch in Fall of 2023 as intended to allow for further revisions.

Michigan Virtual continues to offer an expanding suite of experiences on STEAM-related topics for middle school aged students through direct enrollment by parents. These enrichment experiences are provided year-round, but with a focus on synchronous options during school breaks, such as the holiday break in 2022, as well as spring break at the end of March and early April 2023. Enrichment titles include:

- Roblox: Intro to Game Design
- Roblox Game Design and Coding Camp
- Website Development Camp
- 21st Century Home Economics
- Intro to Esports
- Content Creator

Throughout this past year a series of blog posts were published exploring the debut of generative AI tools in learning reflected in the launch of ChatGPT in November 2022. Use cases for generative AI tools were explored and then shared with stakeholders through six blog posts throughout the year as the technology's capabilities became increasingly more understood. They included:

- How Will Artificial Intelligence Change Education? Let's Ask an AI To Find Out…[15]
- DLC: ChatGPT and the Future of Digital Learning[16]
- AI In Education: What You Need to Know About This Game-Changing Technology[17]
- Designing For the Future With AI: Lessons Learned in Curriculum Development[18]
- AI's Growing Role in Education: Top 5 Predictions from Michigan School Leaders[19]
- DLC: How AI Tools are Impacting Digital Learning[20]

This work culminated in the release of the *District AI Integration Framework and Planning Guide*[21] in August of 2023 that provides education stakeholders a systematic look at the impacts of AI tools across their schools and districts. Along with the blog series, *Michigan Virtual* team members conducted over 25 presentations and webinars for schools and districts throughout the year on building awareness around AI tools impact on education.

As a contributing member of 1EdTech (formerly IMS Global), *Michigan Virtual* actively participated in both the Statewide Programs and the Learning Innovation networks. As part of that work *Michigan Virtual* team members contributed to the shaping of 1EdTech's data privacy standards, including the soon to be released AI data privacy guidelines for school districts. This work helps 1EdTech as a standard defining organization to significantly influence the interoperability and safety of educational technologies that facilitate seamless integration of diverse learning systems and tools that protect end users and schools.

Following the *Michigan Virtual* pilot of the Connect Hub tool to monitor, review and audit interactions with instructors during the 2022-23 school year, the leadership team determine that such a tool needed to be tied directly to our evaluation system. The value derived from the feedback loops, observations, communications along with data analysis would better serve a holistic view in a combined tool. As a result, the leadership team sought a review of teacher evaluation tools on the market that included a coaching feature to integrate into the 2023-24 school year. After hearing from multiple companies, *Michigan Virtual* contracted with another vendor to provide these tools moving forward.

Through 2023, *Michigan Virtual* ran a pilot partnership to migrate 10 full courses into a learning object repository (LOR) platform to test out the feasibility of migrating *Michigan Virtual* courses from our current learning management system (LMS) into an online software as a service LOR platform. Working with national and regional partners, *Michigan Virtual* tested the ability to deliver those courses into four of the most common K-12 LMS platforms. Given the limitations of the LOR content and assessment capabilities, the continued complexity of integration into various LMS, the project did not move to the next phase of the pilot which was to work directly with school districts to test integration. *Michigan Virtual* is currently reviewing the next steps to continue this work in this next fiscal year.

2(a)(ii) Research, design, and recommend virtual education delivery models for use by pupils and teachers that include age-appropriate multimedia instructional content.

MVLRI designed a study to examine how *Michigan Virtual* mentors navigate student learning interfaces, and their perceptions of various student support practices. By analyzing data sourced from *Michigan Virtual's* Student Learning Portal and an end-of-year survey sent out to mentors in May 2023, the study successfully identified key metrics, including average student workloads, effectiveness ratings of student support practices, and the frequency with which mentors used various student monitoring tools. The study's report is available on the *Michigan Virtual* website.[22]

Michigan Virtual continued to partner with Dr. Kerry Rice and Dr. Andy Hung for the 2022-2023 year. Drs. Rice and Hung were given updated LMS data from Brightspace with which to further refine their predictive model. Drs. Rice and Hung hope to continue conversations with stakeholders in efforts to increase the granularity of the data collected. Despite the challenges, they have been able to make some predictions based on a new predictive model in which data is chunked into three distinct stages of the semester by detecting course requirements through time-series segmentation at 5 weeks (S1), 12 weeks (S2), and end of semester (S3).

In conjunction with Dr. Saro Mohammed, *Michigan Virtual* designed and executed a study investigating synchronous K-12 online learning trends, effective practices, and lessons learned from online programs. Through in-depth conversations, commonalities were identified in design choices aimed at maximizing the benefits of synchronous learning while minimizing associated costs. The study identifies five interconnected areas—relationships, time, supports, infrastructure, and data—that significantly influence decision-making and design implementation in synchronous learning. Relationships emerged as a central consideration, emphasizing the value of intentional and planned relationship development facilitated by synchronous learning. The study also delves into the implications of synchronous learning on scheduling, support systems, technology infrastructure, and data-driven decision-making, shedding light on the multifaceted dynamics involved in synchronous virtual courses. The report[23] is available on the *Michigan Virtual* website.

States nationwide are making investments in Career and Technical Education (CTE), with some investments being made towards online CTE. *Michigan Virtual*, in partnership with programs providing online CTE, designed and executed a research study on this topic. The resulting report[24] provides an in-depth analysis of online CTE programs at the Idaho Digital Learning Alliance (IDLA), Launch Missouri, and Virtual Arkansas, discussing their program goals, development, assessment methods, curriculum design, instructional approaches, and alignment with industry standards. Furthermore, it highlights key considerations and strategies to enhance success in online CTE programs, including overcoming skepticism, addressing resource constraints, intentional course selection and design, fostering effective communication and collaboration, aligning program goals with state objectives, and involving industry stakeholders for real-world relevance. Ultimately, online CTE programs emerge as instrumental tools in providing flexible and accessible learning opportunities, preparing students for successful futures in the dynamic job market, and advancing the agenda of workforce development and education.

2(a)(iii) Research, develop, and recommend annually to the department criteria by which cyber schools and virtual course providers should be monitored and evaluated to ensure a quality education for their pupils.

As part of its work with the Virtual Learning Leadership Alliance, *Michigan Virtual* led the development of a formal, virtual learning program certification process that could be used by schools and districts within Michigan and across the nation. This process allows virtual schools or programs to assess the extent to which their programs measure up to the National Standards for Quality Online Learning Programs.[25] While the overall certification process and related forms, rubrics, and training materials were created, the pilot phase of this process is currently being conducted. Three pilot virtual schools have been identified and are participating in this certification review. The pilot is expected to conclude during winter 2024, with a formal report and recommendations for process improvement to be generated and presented to the Virtual Learning Leadership Alliance no later than March 2024.

With the development of the virtual learning program certification process completed, the *Michigan Virtual* consulting team revised the process and documentation necessary for providing free online program reviews to Michigan schools. This revised free online program review process, now closely aligned with the certification process, is scheduled to be promoted and shared statewide with Michigan schools through a formal marketing campaign in winter 2024.

Michigan Virtual continues to recommend that cyber and online providers use the *National Standards for Quality Online Learning*[26] for monitoring and evaluating quality.

2(a)(iv) Based on pupil completion and performance data reported to the department or the center from cyber schools and other virtual course providers operating in this state, analyze the effectiveness of virtual learning delivery models in preparing pupils to be college- and career-ready and publish a report that highlights enrollment totals, completion rates, and the overall impact on pupils. The Michigan Virtual Learning Research Institute shall submit the report to the house and senate appropriations subcommittees on school aid, the state budget director, the house and senate fiscal agencies, the department, districts, and intermediate districts not later than March 31 of each fiscal year for which funding is allocated under this section.

The annual *Michigan's K-12 Virtual Learning Effectiveness Report*[27] was published, and a transmittal letter and infographic were mailed to required stakeholders, including superintendents and high school and middle school principals. The report is important because it:

- Uses the data Michigan K-12 schools reported to the state as part of the 2021-22 MSDS collection.
- Covers students who take one virtual course all the way up to and including students who take 100% of their courses online.
- Represents all virtual options including home-grown and those contracted for with private businesses, colleges/universities, or non-profit providers.
- Includes over 80 data tables school leaders, researchers, and policy makers can use to benchmark virtual learning success.

Key findings from the report include:

- Over 208,000 K-12 students took virtual courses in 2021-22, accounting for over 1.4 million virtual course enrollments.
- Local Education Agencies (LEAs) provided 59% of all virtual enrollments with Public School Academies (PSAs) adding 40%.
- Fifty-six percent of enrollments came from students in high school grades.
- The pass rate for virtual courses was 69%.
- Fifty-six percent of virtual learners passed every virtual course they took. About one in six virtual learners, on the other hand, did not pass any of the virtual courses they took.
- About three-quarters of Michigan school districts reported having virtual enrollments.
- About 14% of all K-12 students in the state took a virtual course.

In addition to the report, *Michigan Virtual* posted an infographic[28] and a recorded presentation[29] on its website to spread the findings.

2(a)(v) Provide an extensive professional development program to at least 30,000 educational personnel, including teachers, school administrators, and school board members, that focuses on the effective integration of virtual learning into curricula and instruction. The Michigan Virtual Learning Research Institute is encouraged to work with the MiSTEM council described in section 99s to coordinate professional development of teachers in applicable fields. In addition, the Michigan Virtual Learning Research Institute and external stakeholders are encouraged to coordinate with the department for professional development in this state. Not later than December 1 of each year, the Michigan Virtual Learning Research Institute shall submit a report to the house and senate appropriations subcommittees on school aid, the state budget director, the house and senate fiscal agencies, and the department on the number of teachers, school administrators, and school board members who have received professional development services from the Michigan Virtual University. The report must also identify barriers and other opportunities to encourage the adoption of virtual learning in the public education system.

Details of *Michigan Virtual*'s professional learning activities are documented earlier in this report under the professional learning section.

2(a)(vi) Identify and share best practices for planning, implementing, and evaluating virtual and blended education delivery models with intermediate districts, districts, and public school academies to accelerate the adoption of innovative education delivery models statewide.

Michigan Virtual maintained its suite of six *Guides to Online Learning.*[30] These guides provide digital learning research, effective practices, and free resources for schools to enhance their programs. To ensure widespread awareness and accessibility, *Michigan Virtual* executes an annual promotional campaign consisting of a blend of blogs, insightful publications, engaging infographics, and social media outreach.

In collaboration with Dr. Jacqueline Zweig, *Michigan Virtual* conducted a study investigating early course pacing and online course outcomes in high free or reduced-price lunch (FRL) schools vs. others. Results from the study indicated that students in high FRL schools had lower grades, delayed access, and fewer assignments submitted. Early engagement indicators significantly influenced final grades, highlighting the need for timely interventions to promote equity in online education. The full research report, *The First Weeks in an Online Course: Differences Across Schools* was published in August of 2023.[31]

Michigan Virtual designed and executed a research study on the experiences of mentors and student with online learning.[32] Findings concluded that students' experiences in their online courses can be supported by mentors who build relationships with them, monitor their progress, and motivate them[33] Mentors often support multiple students, and the number of students assigned to them may vary depending on the building or district in which they are employed. Mentors working in school buildings located in towns had the highest student loads on average, and those working in city buildings had considerably less than all other locales. To ensure that mentors can navigate their roles effectively, school officials should pay attention to each mentors' respective workload.

Michigan Virtual conducted several research studies on student-centered learning (SCL) including publishing several reports to the *Michigan Virtual* website and providing recommendations to Michigan schools. Published in May 2023, the report *What Do We Mean When We Say Student-Centered Learning?*[34]

explored how student-centered learning (SCL), personalized learning, and competency-based education (CBE)—terms widely recognized in the field of K-12 education—were defined as well as what they looked like in practice to gain a deeper understanding of what we really mean when we say student-centered learning.

Published in July 2023, the report *Insights into the Effectiveness of Student-Centered Learning in K-12 Education*[35] examined the impact of SCL on K-12 student achievement. A literature review revealed limited studies on student achievement, showing modest gains. Factors like demographics and SCL elements were explored, emphasizing the need for further research, particularly with high-quality experimental designs.

In collaboration with the Future of Learning Council, *Michigan Virtual* wrote a series of briefs based on interviews with several member school districts and topics related to student-centered learning. The brief *Making Learning "Sticky" Through A Work- and Project-Based Program at Hamilton Community Schools*[36] (published in July 2023) describes how Hamilton Community Schools developed an innovative work-based learning program designed to introduce students (as early as 5th grade) to the skills required for future employment and to expose them to in-demand career and technical education (CTE) pathways as supplements or alternatives to four-year college degrees.

Also published in July 2023, *From Seat Time to Mastery: Competency-Based Education at Fraser Public Schools*[37] dove into how Michigan's Fraser Public Schools has implemented CBE using their Portrait of a Graduate and Strategic Plan as guiding principles.

Also published in September 2023, *Tailoring Learning for Teachers: The Power of Personalized Professional Development*[38] explored how through the strategic implementation of personalized professional learning, Plymouth-Canton Community Schools (P-CCS) has successfully transformed its approach to educator professional development.

Michigan Virtual was also active at state and national education conferences as a thought leader and partner to Michigan education groups. *Michigan Virtual* attended 23 conferences, partnering with 15 key education groups. During the 22-23 school year, staff presented 40 professional learning sessions to educators, school leaders, and board members. Our Executive Team had 11 public speaking opportunities at these conferences, introducing key speakers and our services to the conference participants. Presentation and outreach at these events included sharing our resources and experience with research-based online learning, artificial intelligence, school redesign, mental health awareness, and professional learning for educators.

(B) Provide leadership for this state's system of virtual learning education by doing the following activities:

2(b)(i) Develop and report policy recommendations to the governor and the legislature that accelerate the expansion of effective virtual learning in this state's schools.

In December 2022, *Michigan Virtual* submitted eight recommendations to address current virtual learning issues. They included:

- Convene Task Force to Study How Students Should Be Counted in Membership
- Increase Flexibility in Seat-Time Requirements

- Expand Access to Career & Technical Education (High School)
- Formalize District Virtual Learning Options for Parents and Students
- Require Virtual Learning Accountability and Transparency
- Create Alternative Teacher Pathways
- Grow Summer Learning Opportunities to Address Equity and Learning Loss
- Revise Reporting Field to Collect Credit Recovery Data

2(b)(ii) Provide a clearinghouse for research reports, academic studies, evaluations, and other information related to virtual learning.

Michigan Virtual continued to maintain the K-12 Online and Blended Clearinghouse for the 2022-23 year. *Michigan Virtual* maintained the existing clearinghouse website[39] and added 60 additional resources to the website throughout the fiscal year. Currently, the nationally recognized clearinghouse acts as an aggregator of K-12 online and blended research and key publications. To date, there are over 1,300 resources cataloged in the clearinghouse. On a quarterly basis, *Michigan Virtual* emailed a clearinghouse newsletter to the *MVLRI* mailing list.

- Winter 2022 Clearinghouse Newsletter (December)[40]
- Spring 2023 Clearinghouse Newsletter (March)[41]
- Summer 2023 Clearinghouse Newsletter (July)[42]
- Fall 2023 Clearinghouse Newsletter (September)[43]

2(b)(iii) Promote and distribute the most current instructional design standards and guidelines for virtual teaching.

Resources were included in the Clearinghouse[44] on instructional design guidelines and standards and tagged under the keywords "instructional design" and "standards", currently 87 resources are tagged.

Five new instructional design resources were added to the Clearinghouse. The five resources were:

- McDonald, J. K. (2023). The everydayness of instructional design and the pursuit of quality in online courses. *Online Learning, 27*(2), 137-169. https://doi.org/10.24059/olj.v27i2.3470

This article explores how instructional designers go about their daily work, including their routines and interactions with colleagues, and how these everyday aspects influence the quality of online course design. The study focuses on a team of instructional designers at a U.S. university, using Troubé's (2021) framework to understand the dimensions of everydayness in their work.

- Hall, J., Wang, Q. & Lei, J. (2023). Examination of the Presence + Experience Framework: Creating an Online Course for Pre-service Teachers Learning to Teach Online. *Journal of Technology and Teacher Education, 31*(1), 89-122. https://www.learntechlib.org/primary/p/221808/

This study looks at how well a 10-day online course prepares future teachers for virtual teaching. The focus is on equipping teacher candidates with skills for blended or fully online settings.

- Weible, J., Briskin, J. & Gregg, A. (2023). Examining Instructional Design Across Corporate, Higher Education, and K-12 Industries. In E. Langran, P. Christensen & J. Sanson (Eds.), *Proceedings of*

Society for Information Technology & Teacher Education International Conference (pp. 802-805). https://www.learntechlib.org/primary/p/221929/

This study explores instructional design, which involves creating learner-focused experiences with technology, pedagogy, and theory. Whether in K-12 education, higher education, or corporate settings, instructional designers connect learning, theory, and practice to develop products that suit the unique needs of each sector.

- Luterbach, K. (2023). Instructional Game Design and Prototyping. In E. Langran, P. Christensen & J. Sanson (Eds.), *Proceedings of Society for Information Technology & Teacher Education International Conference* (pp. 566-568). https://www.learntechlib.org/primary/p/221910/

Designing instructional games involves challenges in both the design and development phases. Instructional game designers can choose between a traditional design process, which may be time-consuming and costly, or a rapid prototyping process. This session discusses the tradeoffs associated with each method, helping teacher candidates and educational technology students make informed choices.

- Dirksen, J. (2023). Design for how people learn (Voices that matter). New Riders.

The second edition of *Design for How People Learn* provides practical insights on using principles of learning, memory, and attention to create effective educational materials. It includes updates on new research, techniques for using social media, and two new chapters on designing habits and evaluating learning.

Michigan Virtual had over 830 enrollments in its online courses aligned to the *National Standards for Quality Online Courses*.[45] Course titles included:

- Getting Started (focus on enhancing existing teaching practices for online and blended learning)
- Course Content & Design (focus on designing, developing, and deploying online and blended learning)
- Assessment (focus on measuring student progress in online and blended classrooms) and
- Meeting Needs (focus on meeting students' individual needs in online and blended classrooms).

These four courses also equip educators with the knowledge and skills necessary for effective online content creation for their students.

Additionally, we have created eight micro-credentials in best practices for facilitating online teaching and learning that we offer at a low cost to Michigan educators. We continue to encourage educators to explore the NSQ standards, which serve as valuable guidelines for assessing and lifting student progress within the online classroom environment.

Michigan Virtual has continued to offer other professional learning courses that support Michigan educators in learning and apply instructional design best practices. This year, a series of courses on Universal Design for Learning was added to the catalog including Intro to Universal Design for Learning: Action & Expression, Intro to Universal Design for Learning: Engagement, and Intro to Universal Design for Learning: Representation. Other instructional design-related courses included So You Want to Be an Instructional Designer?, Instructional Practices with Technology, and Blended Classroom Design.

Three presentation proposals focused on instructional design best practices were submitted to Michigan-based conferences this year.

- *Instructional Design in the K-12 Setting* was submitted to the MASA Fall Conference.
- *How to Build or Buy Quality Online Courses* was submitted to the MiCoOp Summer Conference.
- A Beginner's Guide to Generating Mathematics Content with AI was submitted to the MCTM Annual Conference.

Michigan Virtual has also actively contributed to the DLAC conference by presenting on various critical topics, including Academic Integrity in Online Classrooms, Shifting Expectations for Digital Learning Experiences, Nudging for Better Outcomes through AI Attitudinal Analysis in Online K-12 Courses, Digital Content Design and Development Roundtable, as well as Instructional Design in the K-12 Setting. These presentations underscore our commitment to advancing online education and supporting educators in their professional growth.

2(b)(iv) In collaboration with the department and interested colleges and universities in this state, support implementation and improvements related to effective virtual learning instruction.

Throughout the academic year, *Michigan Virtual* worked with the following universities to discuss implementation and improvements in effective virtual learning instruction through meetings, presentations, and requests for guidance:

- Central Michigan University
- Grand Valley State University
- Michigan State University
- University of Michigan
- Wayne State University

The 2023 edtech pitch competition and innovation bootcamp programs were launched in February 2023, and the submission window for the pitch competition occurred between March 20th and May 14th, 2023. *Michigan Virtual* partnered with the Burgess Institute at Michigan State University and Spartan Innovations at the MSU Research Foundation, as well as SBDC Michigan, to develop and host these programs. Students, faculty, and staff at other Universities across the state were eligible to participate.

Dr. Stefanie Marshall, from the University of Minnesota's College of Education and Human Development, and Dr. Matthew Koehler, from Michigan State University's College of Education, served on the 2022-23 Innovation Advisory Council and have both agreed to participate for a second two-year term. Dr. Rick Ferdig from Kent State University will be added in 2023-24 for a two-year term.

2(b)(v) Pursue public/private partnerships that include districts to study and implement competency-based technology-rich virtual learning models.

The first set of eight micro-credentials around "Esports Coaching" is available in partnership with the Michigan Association of Computer Users in Learning (MACUL). The "Starter Pack" includes:

- Esport Technology
- Esport leadership

- Program Sustainability
- Esport Competitions
- Funding Esport Programs
- Legal
- Operations
- Esports Advocacy

Grand Valley State University's K-12 Connect program also released their literacy tutoring micro-credentials for public use through the *Michigan Virtual* Professional Learning Portal in Fall 2022. New GVSU K-12 Connect micro-credentials were worked on over the past year in targeted content areas.

To continuously benefit efforts in supporting school districts with the latest research and understanding of best practices, *Michigan Virtual* maintains membership multiple national-level organizations that advocate for and support digital learning at the K-12 level, including:

- Aurora Institute – Personalized learning
- 1EdTech (formerly IMS Global) - Educational technology standards
- Digital Learning Collaborative – Online and virtual Learning
- NROC – High quality digital learning resources
- Quality Matters – High quality digital learning courses
- Virtual Learning Leadership Alliance – Statewide K-12 virtual programs

Michigan Virtual continued to provide support and resources to the Future of Learning Council which has grown to a membership of 58 LEAs, PSAs and ISD/RESAs from across Michigan since its launch in October 2021. This included planning and implementing monthly professional learning meetings, most held at the Michigan Virtual building throughout the year. Topics covered during these sessions explored creating innovative educational environments, designing innovative instructional frameworks, and providing time for districts to work with their leadership teams on envisioning the future of education. In April, *MVLRI* provided 45 FLC district leadership teams with the opportunity to travel to the ASU+GSV Summit through a grant program from the summit sponsors. This opportunity is seen by participants as an invaluable opportunity to connect, network, and learn about policy, investment, and thought leadership at a national level around the future of learning.

The following are quotes from the superintendents who participated in the ASU+GSV 2023 Summit:

- "Having attended this conference the past two years, I can say that technology is moving at blinding speed and that most of the players in the that tech space are represented at the Summit. I like to be proactive, not reactionary, and this event keeps me well informed of the trends and changes that are coming to education."
- "The Future of Learning Council and its participation in the ASU + GSV Summit is game-changing for all educational leaders. We know that education is in need of transformation. This platform provides a space to envision what that might look like. With a team of connected educators from Michigan, I believe we turn that vision into a reality."
- "I am so thankful that the opportunity to attend the ASU-GSV was shared with me. I brought a team of people from my district and we came home excited, enthused, and ready to tackle challenges we didn't even know existed. Without the help of [Michigan Virtual], our team would not have been able to experience this opportunity. Thank you [Michigan Virtual] and FLC."

- "MVLRI's effort to assist districts in their preparations for 'future (now)' learning is invaluable. The continuation of MVLRI to work with school districts and state legislation is vitality important not only for the sustainability of public education, but the future of our students."
- "Attending the ASU+GSV Summit was the best professional development I have experienced in my 25+ year career as an educator! It was incredible to have the opportunity to literally be in the room with the world's biggest leaders, thinkers, doers, entrepreneurs, creaters, etc. I was able to learn about and see some of the new technologies that are being created to support my students and me. After returning home from the Summit, I have continued to explore the ideas presented in San Diego and have shared my experiences there with anyone who will listen."
- "In the rapidly evolving education landscape, Michigan Virtual's proactive approach to engaging school superintendents and district leaders at the ASU+GSV Summit in San Diego has proven to be an invaluable opportunity for cultivating synergy and fostering innovation. By connecting these key stakeholders, the Summit has facilitated robust discussions and encouraged new perspectives on the future of learning, paving the way for progressive educational strategies and outcomes in Michigan and beyond."

In May 2023, *Michigan Virtual* co-sponsored a "Future of Learning Summit" for 123 FLC members and non-members focused on new technologies such as AI and personalized competency-ed learning frameworks.

The following list is the 2022-23 list of participating LEAs, PSAs, and ISD/RESAs in the Future of Learning Council.

- Adrian Public Schools
- Alcona Community Schools
- Anchor Bay School District
- Bay City Public Schools
- Berrien RESA
- Berrien Springs Public Schools
- Bloomfield Hills Schools
- Calumet/Laurium/Keweenaw Public Schools
- Chelsea School District
- Concord Community Schools
- Dexter Community Schools
- Chelsea School District
- Concord Community Schools
- Dexter Community Schools
- Elkton-Pigeon-Bay Port Laker Schools
- Farmington Public Schools
- Farwell Area Schools
- FlexTech High Schools
- Frankenmuth School District
- Fraser Public Schools
- Gibraltar Schools
- Godfrey-Lee Public Schools
- Grand Ledge Public Schools
- Grosse Ile Township Schools
- Hancock Public Schools
- Hillman Community Schools
- Holly Public Schools
- Ingham ISD
- Jenison Public Schools
- Kenowa Hills Public Schools
- Kentwood Public Schools
- Lincoln Consolidated Schools
- Macomb ISD/UDL-IRN
- Maple Valley Schools
- Milan Area Schools
- Muskegon ISD
- Muskegon Public Schools
- Newaygo County RESA
- Oakland Schools
- Okemos Public Schools
- Orchard View Schools
- Ottawa Area ISD
- Owosso Public Schools
- Perry Public Schools
- Plymouth Canton Community Schools

- Port Huron Area School District
- Portland Public Schools
- Potterville Public Schools
- Redford Union Schools
- Relevant Academy
- Saginaw ISD
- Saline Area Schools

- Traverse City Area Public Schools
- Washtenaw ISD
- West Bloomfield School District
- Yale Public Schools
- Ypsilanti Community Schools
- Wyoming Public Schools

To better support Michigan's K-12 districts around the adoption of AI, *Michigan Virtual* launched two communities of practice focused on AI and Learning. Both groups met monthly, with one group meeting five times to learn and discuss issues related to AI's impact on learning in general, and the other group meeting three times to focus on district leadership in light of the advancements and access to AI. Participating districts were:

- Chelsea School District
- Dexter Community Schools
- Farmington Public Schools
- Gibraltar School District
- Grosse-Ile Township Schools
- Holly Area Schools
- Ingham ISD
- Kentwood Public Schools
- Milan Area Schools
- Ottawa Area ISD
- Portage Public Schools
- Saline Area Schools

The 2023 edtech pitch competition and innovation bootcamp programs were launched in February 2023. The mission of the Michigan EdTech Innovation Pitch Contest & Bootcamp is to encourage and support innovative thinking by those in Michigan's education ecosystem, helping them develop and share business ideas that have the potential to advance learning and teaching using existing technology or the development of new technology. The pitch contest and related supports were focused on helping innovative educators refine and build on their idea for a business that can improve learning and teaching through existing or new technologies. The Bootcamp is designed to help participants further explore and develop a business model around their business idea while also introducing them to resources and supports that are available to entrepreneurs and innovators in Michigan and strategies for integrating lessons in innovation and entrepreneurship in their schools and classrooms. *Michigan Virtual* partnered with the Michigan State University Research Foundation, SBDC Michigan, and the Burgess Institute at Michigan State University to bring best-in-class innovation and entrepreneurial support to participants in these programs.

Michigan Virtual continued to work with several national-level organizations to provide opportunities for Michigan school districts to gain access to cutting-edge learning technologies in a safe and responsible manner through pilots and communities of practice. These include two national educational technology investment firms and several cutting-edge companies leveraging AI to personalize learning.

- Global Silicon Valley – A multi-stage venture capital firm focused on the $7+ trillion global education and workforce skills sector.
- LearnLaunch - Investors in diverse change makers building impactful and scalable edtech companies serving grades K through 12, higher education and workforce training.
- Discourse Analytics – AI systems to leverage existing organizational data to curate a unique understanding, engagement, and activation of its learners to drive improved learning outcomes.
- Khan Academy – A nonprofit providing a free, world-class education for anyone, anywhere.
- Thinkist – A public benefits company that takes a systems-wide approach to peer tutoring for schools and districts that want to provide accessible academic support.

Michigan Virtual has also been pursuing the 1EdTech Trusted Apps Certified Leader certification for *Michigan Virtual* technology leaders to understand the value of the process in hopes of being able to recommend adoption of the program throughout Michigan districts.

From private business, Thomas Arnett, Senior Education Research Fellow at the Christensen Institute, and Lucie Howell, Chief Learning Officer at The Henry Ford, have both agreed to renew a two-year term on the Innovation Advisory Council.

Finally, *Michigan Virtual* continued to offer 40 competency-based online courses to districts through the professional learning portal to enable educators to explore competency-based learning in a professional learning context.

2(b)(vi) Create a statewide network of school-based mentors serving as liaisons between pupils, virtual instructors, parents, and school staff, as provided by the department or the center, and provide mentors with research-based training and technical assistance designed to help more pupils be successful virtual learners.

Michigan Virtual has an established Mentor Advisory Committee that provides a valuable feedback loop and establishment of best practices to share out among the many mentors we serve. In addition, the *Michigan Virtual* Mentor Manager serves to provide training, technical assistance, and additional support to mentors across the state. As part of this service, a monthly publication is provided to all mentors opting in that is focused on best-practices derived from research and our mentor advisory members.

Michigan Virtual also hosted an annual mentor conference in the late fall to bring members together for shared learning. An additional second conference has been added to encourage mentors from programs aside from our own to participate.

2(b)(vii) Convene focus groups and conduct annual surveys of teachers, administrators, pupils, parents, and others to identify barriers and opportunities related to virtual learning.

In the spring of 2023, *Michigan Virtual* conducted a pair of student focus groups. Efforts to organize more such gatherings were met with challenges, as schools grappled with limited staff and various other pressures, making it tough to arrange student gatherings. Twenty students in total were engaged in these groups. Among the schools' contributing participants was one from an urban area on the state's west side, which was just beginning to adopt supplemental online learning. The other was a suburban district also on the west side, already experienced with an established online supplemental learning program.

Surveys completed at the conclusion of courses offer crucial insights into the experiences of students and professionals, highlighting ways to fulfill their learning needs more effectively. *Michigan Virtual* presented all enrollees in student and professional courses with a voluntary web-based survey at the conclusion of each course, focusing on aspects of their online course experience. From October 1, 2022, to September 30, 2023, the survey for students garnered 13,787 responses, and the one for professional learners attracted 119,345 responses. Regarding overall satisfaction, 88% of the students and 96% of professionals indicated they were highly satisfied with their online course experience with *Michigan Virtual*.

Our mentors are also an important source of information and ideas for improvement. As such we provided a survey to all mentors at the end of the fall semester (January 2023) and at the end of the spring semester (May 2023). The fall semester survey received 57 responses and another 77 responses were received after the spring semester. The feedback was focused on our courses, instructors, and systems and was used to make programmatic adjustments that improve both the mentor and the student experience. We also convened our Mentor Advisory Board on October 11, 2023, and again on April 20, 2023. Both sessions were well attended.

2(b)(viii) Produce an annual consumer awareness report for schools and parents about effective virtual education providers and education delivery models, performance data, cost structures, and research trends.

The Consumer Awareness Report was updated in fall 2022 and spring 2023 to reflect changes in providers, delivery models, performance data, cost structures, and research trends. Additionally, data on areas such as school districts that put courses in the catalog, distribution of courses by ISD, PSA, LEA, and the *Michigan Virtual School*, and disaggregation by key variables such as who is providing the content or the instructor, were updated in the fall and in the spring to reflect the changes in those two enrollment windows.

2(b)(ix) Provide an internet-based platform that educators can use to create student-centric learning tools and resources for sharing in the state's open educational resource repository and facilitate a user network that assists educators in using the content creation platform and state repository for open educational resources. As part of this initiative, the Michigan Virtual University shall work collaboratively with districts and intermediate districts to establish a plan to make available virtual resources that align to Michigan's K-12 curriculum standards for use by students, educators, and parents.

Michigan Virtual continues to provide leadership to Michigan's GoOpen initiative. This initiative aims to provide educators with training to use open educational resources. *Michigan Virtual* has contributed a dedicated staff member to participate in GoOpen strategy meetings. We also updated our current OER course for educators and are working on a sequel to that introductory course.

Along with partnering to provide professional learning in open educational resources, *Michigan Virtual* continues to cover the cost of maintenance for the #GoOpen Hub. The Michigan #GOOpen hub serves as a platform for educators to find and share Open Educational Resources, which provides educators with materials that can be adapted and built upon to create customized learning materials. This hub allows for an exchange of resources as well as offering options to connect with educators around the state.

Additionally, the #GoOpen Hub provides the Open Author tool to help educators publish their own materials that can then be submitted and used by other educators around the state.

Throughout the 22-23 school year, *Michigan Virtual* maintained the original LOR (Learning Object Repository) that has been a platform for educators to create open education resources (OERs) and share them through platforms such as Michigan #GoOpen. Throughout that time, we also evaluated the technology that the LOR was based on and concluded that it has become end-of-life and required a substantial amount of upkeep to continue to be offered in the same capacity. Due to these findings, *Michigan Virtual* made the decision to sunset the LOR platform and put forth a plan during the summer of 2023 to provide communication to users and partners who were still using the platform regarding sunsetting of the platform and options for future platforms.

As mentioned previously, in the 2022-23 academic year *Michigan Virtual* ran a pilot to migrate 10 full courses into a learning object repository (LOR) platform to test out the feasibility of migrating *Michigan Virtual* courses from our current learning management system (LMS) into an online software as a service LOR platform. Working with national and regional partners *Michigan Virtual* tested the ability to deliver those courses into four of the most common K-12 LMS platforms. Given the limitations of the LOR content and assessment capabilities, the continued complexity of integration into various LMS, the project did not move to the next phase of the pilot which was to work directly with school districts to test integration. Learning from this effort, we believe we can apply some of the learning about interoperability that working with internal and external partners through this next academic year, we'll be able design and develop, and provide training on, a next generation platform for our learners to create open educational resources that are interoperable with the large majority of LMS systems.

2(b)(x) Create and maintain a public statewide catalog of virtual learning courses being offered by all public schools and community colleges in this state. The Michigan Virtual Learning Research Institute shall identify and develop a list of nationally recognized best practices for virtual learning and use this list to support reviews of virtual course vendors, courses, and instructional practices. The Michigan Virtual Learning Research Institute shall also provide a mechanism for intermediate districts to use the identified best practices to review content offered by constituent districts. The Michigan Virtual Learning Research Institute shall review the virtual course offerings of the Michigan Virtual University, and make the results from these reviews available to the public as part of the statewide catalog. The Michigan Virtual Learning Research Institute shall ensure that the statewide catalog is made available to the public on the Michigan Virtual University website and shall allow the ability to link it to each district's website as provided for in section 21f. The statewide catalog must also contain all of the following:
(A) The number of enrollments in each virtual course in the immediately preceding school year.
(B) The number of enrollments that earned 60% or more of the total course points for each virtual course in the immediately preceding school year.
(C) The pass rate for each virtual course.

Michigan Virtual continues to use internal and external resources to update and maintain functionality of the Michigan Online Course Catalog.[46] *Michigan Virtual* staff members solicit and act on user feedback to ensure an efficient and accessible user experience and to support current course catalog needs. Several new districts, third-party vendors and new admins in existing districts were given training and support

with adding their district-only online courses. *Michigan Virtual* also sent out the performance data communication request and uploaded received results to the statewide catalog.

Michigan Virtual offers four professional learning opportunities to help schools understand ways in which they could develop high-quality online courses for students. These courses, aligned to the National Standards for Quality Online Courses, are offered at no cost to educators.[47] Course titles include:

- Getting Started (focus on enhancing existing teaching practices for online and blended learning)
- Course Content & Design (focus on designing, developing, and deploying online and blended learning)
- Assessment (focus on measuring student progress in online and blended classrooms) and
- Meeting Needs (focus on meeting students' individual needs in online and blended classrooms)

In 2022-23, there were over 830 enrollments in these courses.

Michigan Virtual submitted a total of 18 courses to Quality Matters for review. Courses submitted for certification included Algebra 2, Anatomy & Physiology, AP Physics 1, AP Physics 2, AP U.S. Government and Politics, British Literature, Criminology, Exploring a World of Language, Forensic Science, Mobile App Design with MIT App Inventor, Social Media, Spanish I, Study Skills, Video Game Design with Java, and World Literature. Additionally, French 1, German 1 and Mathematics in the Workplace were submitted for recertification. Fifteen of the submitted courses have received certification, while the remaining three are currently in the review process.

Michigan Virtual has continued to maintain its Section 21f resources[48] on its website.

2(b)(xi) Support registration, payment services, and transcript functionality for the statewide catalog and train key stakeholders on how to use new features.

As part of its ongoing support of the statewide catalog, *Michigan Virtual* maintains knowledge base articles specific to Michigan's Online Course Catalog, including information for guardians, students, and counselors who want to search the catalog for online courses, instructions for enrolling via the catalog, and companies, districts, or other qualified parties who want to list their online courses in the catalog. Knowledge base articles are routinely audited and updated on an as-needed basis or when new functionality within the system is developed. All knowledge base articles can be accessed through the *Michigan Virtual* website.[49] *Michigan Virtual*'s Customer Care Center is also available on business days from 7:30am - 5:00pm ET to answer calls and respond to online support ticket submissions.

2(b)(xii) Collaborate with key stakeholders to examine district level accountability and teacher effectiveness issues related to virtual learning under section 21f and make findings and recommendations publicly available.

Michigan Virtual continued to use a modified version of the Danielson Rubric for evaluations of its roughly 275 full and part-time teachers. Through this process, teachers were provided both the rubric and more personalized narrative feedback to guide their continued growth and improvement. As an organization focused on a growth mindset, *Michigan Virtual* also conducts individual conversations with each teacher to talk through practical suggestions, professional development recommendations, additional guidance, and answer any questions they may have. Throughout the year, course "walk-through" reviews were conducted by department leads and instructional coaches to further develop instructor capacity and

feedback loops. The results of these evaluations are submitted through the CEPI REP process twice annually.

Michigan Virtual continues to recommend that schools use the National Standards for Quality Online Teaching[50] when training and evaluating virtual instructors. Additionally, as many Michigan schools yse the Danielson Model Rubric for teacher evaluation, the Virtual Learning Leadership Alliance, Quality Matters, and *Michigan Virtual* published a crosswalk document between the Danielson rubric and the National Standards for Quality (NSQ) in Online Teaching.[51]

2(b)(xiii) Provide a report on the activities of the Michigan Virtual Learning Research Institute.

The "Research Institute" section of this report provides the required reporting for *MVLRI*.

Appendix A - Michigan Virtual Student Enrollment Data

Figure 1. 2022-23 Districts Served by Michigan Virtual with Student Online Courses

LEA Districts (55%):

Adrian Public Schools
Airport Community Schools
Alba Public Schools
Algonac Community School
    District
Allegan Public Schools
Allen Park Public Schools
Allendale Public Schools
Alma Public Schools
Almont Community Schools
Anchor Bay School District
Ann Arbor Public Schools
Armada Area Schools
Athens Area Schools
Avondale School District
Bad Axe Public Schools
Bangor Public Schools (Van
    Buren)
Bath Community Schools
Battle Creek Public Schools
Bay City School District
Beal City Public Schools
Beaverton Schools
Belding Area School District
Bellaire Public Schools
Bellevue Community Schools
Bentley Community School
    District
Benton Harbor Area Schools
Berkley School District
Berrien Springs Public Schools
Big Bay De Noc School District
Birch Run Area Schools
Birmingham Public Schools
Bloomfield Hills Schools
Boyne City Public Schools
Brandon School District in the
    Counties of Oakland
Brandywine Community Schools
Breitung Township School
    District

Bridgman Public Schools
Brighton Area Schools
Brimley Area Schools
Brown City Community Schools
Bullock Creek School District
Byron Area Schools
Byron Center Public Schools
Cadillac Area Public Schools
Caledonia Community Schools
Carman-Ainsworth Community
    Schools
Caro Community Schools
Cass City Public Schools
Cedar Springs Public Schools
Charlevoix Public Schools
Charlotte Public Schools
Chassell Township School
    District
Cheboygan Area Schools
Chelsea School District
Chesaning Union Schools
Chippewa Hills School District
Chippewa Valley Schools
Clare Public Schools
Clarenceville School District
Clawson Public Schools
Clinton Community Schools
Clio Area School District
Coloma Community Schools
Comstock Public Schools
Concord Community Schools
Constantine Public School
    District
Coopersville Area Public School
    District
Dearborn City School District
Delton Kellogg Schools
DeWitt Public Schools
Dexter Community School
    District
Dundee Community Schools

Durand Area Schools
East China School District
East Grand Rapids Public
    Schools
East Jordan Public Schools
East Lansing School District
Eastpointe Community Schools
Eaton Rapids Public Schools
Edwardsburg Public Schools
Elk Rapids Schools
Engadine Consolidated Schools
Escanaba Area Public Schools
Farmington Public School District
Fennville Public Schools
Fenton Area Public Schools
Ferndale Public Schools
Forest Area Community Schools
Forest Hills Public Schools
Fowler Public Schools
Fowlerville Community Schools
Frankenmuth School District
Frankfort-Elberta Area Schools
Freeland Community School
    District
Fremont Public School District
Fruitport Community Schools
Fulton Schools
Galesburg-Augusta Community
    Schools
Gaylord Community Schools
Gibraltar School District
Gladstone Area Schools
Gladwin Community Schools
Glen Lake Community Schools
Gobles Public School District
Goodrich Area Schools
Grand Haven Area Public
    Schools
Grand Ledge Public Schools
Grandville Public Schools
Grass Lake Community Schools

Grosse Ile Township Schools
Grosse Pointe Public Schools
Gull Lake Community Schools
Hamilton Community Schools
Harbor Springs School District
Hart Public School District
Hartford Public Schools
Hartland Consolidated Schools
Haslett Public Schools
Hastings Area School District
Holland City School District
Holly Area School District
Holt Public Schools
Houghton-Portage Township
  School District
Howell Public Schools
Hudson Area Schools
Hudsonville Public School
  District
Huron School District
Huron Valley Schools
Ida Public School District
Ionia Public Schools
Iron Mountain Public Schools
Ishpeming Public School District
  No. 1
Ithaca Public Schools
Jackson Public Schools
Jenison Public Schools
Johannesburg-Lewiston Area
  Schools
Kalamazoo Public Schools
Kaleva Norman Dickson School
  District
Kearsley Community School
  District
Kelloggsville Public Schools
Kenowa Hills Public Schools
Kent City Community Schools
Kentwood Public Schools
L'Anse Area Schools
L'Anse Creuse Public Schools
Laingsburg Community Schools
Lake Fenton Community Schools
Lake Linden-Hubbell School
  District

Lake Shore Public Schools
  (Macomb)
Lakeshore School District
  (Berrien)
Lakeview Public Schools
  (Macomb)
Lakeview Sch. District (Calhoun)
Lakewood Public Schools
Lamphere Public Schools
Lansing Public School District
Lawton Community School
  District
Leland Public School District
Les Cheneaux Community
  Schools
Leslie Public Schools
Lincoln Consolidated School
  District
Linden Community Schools
Livonia Public Schools School
  District
Ludington Area School District
Mackinac Island Public Schools
Mackinaw City Public Schools
Madison School District
  (Lenawee)
Manchester Community Schools
Manistee Area Public Schools
Manistique Area Schools
Marion Public Schools
Marlette Community Schools
Marquette Area Public Schools
Marshall Public Schools
Marysville Public Schools
Mason County Central Schools
Mason Public Schools (Ingham)
Mattawan Consolidated School
Memphis Community Schools
Mesick Consolidated Schools
Michigan Center School District
Midland Public Schools
Milan Area Schools
Millington Community Schools
Monroe Public Schools
Montabella Community Schools
Montague Area Public Schools

Morrice Area Schools
Muskegon, Public Schools of the
  City of
Napoleon Community Schools
Negaunee Public Schools
Niles Community Schools
North Branch Area Schools
North Central Area Schools
North Dickinson County Schools
North Muskegon Public Schools
Northport Public School District
Northview Public Schools
Northville Public Schools
Novi Community School District
Oakridge Public Schools
Okemos Public Schools
Olivet Community Schools
Onaway Area Schools
Onekama Consolidated Schools
Oscoda Area Schools
Otsego Public Schools
Ovid-Elsie Area Schools
Owosso Public Schools
Oxford Community Schools
Parchment School District
Paw Paw Public School District
Peck Community School District
Pennfield Schools
Perry Public Schools
Pewamo-Westphalia Community
  Schools
Pickford Public Schools
Pinckney Community Schools
Plainwell Community Schools
Plymouth-Canton Community
  Schools
Port Huron Area School District
Portage Public Schools
Portland Public Schools
Potterville Public Schools
Public Schools of Petoskey
Quincy Community Schools
Redford Union Schools, District
  No. 1
Reed City Area Public Schools
Reese Public Schools

Reeths-Puffer Schools
Republic-Michigamme Schools
Richmond Community Schools
Riverview Community School District
Rochester Community School District
Rockford Public Schools
Romeo Community Schools
Roscommon Area Public Schools
Royal Oak Schools
Rudyard Area Schools
Saginaw, School District of the City of
Saline Area Schools
Sand Creek Community Schools
Sandusky Community School District
Saranac Community Schools
Saugatuck Public Schools
Sault Ste. Marie Area Schools
Shepherd Public Schools
South Haven Public Schools
South Lake Schools
South Lyon Community Schools
South Redford School District
Southfield Public School District

Southgate Community School District
Sparta Area Schools
Spring Lake Public Schools
St. Ignace Area Schools
St. Joseph Public Schools
St. Louis Public Schools
Standish-Sterling Community Schools
Stockbridge Community Schools
Sturgis Public Schools
Summerfield Schools
Superior Central School District
Swan Valley School District
Swartz Creek Community Schools
Tahquamenon Area Schools
Tawas Area Schools
Tecumseh Public Schools
Thornapple Kellogg School District
Three Rivers Community Schools
Traverse City Area Public Schools
Trenton Public Schools
Ubly Community Schools
Union City Community Schools
Unionville-Sebewaing Area S.D.

Utica Community Schools
Van Buren Public Schools
Vicksburg Community Schools
Walled Lake Consolidated Schools
Warren Woods Public Schools
Watervliet School District
Waverly Community Schools
Wayland Union Schools
Wayne-Westland Community School District
Webberville Community Schools
West Bloomfield School District
West Branch-Rose City Area Schools
West Iron County Public Schools
West Ottawa Public School District
Western School District
Westwood Community Schools
Whitehall District Schools
Whitmore Lake Public School District
Williamston Community Schools
Yale Public Schools
Ypsilanti Community Schools
Zeeland Public Schools

PSA Districts (9%):

Arbor Preparatory High School
Black River Public School
Blue Water Middle College
Canton Preparatory High School
Charlevoix Montessori Academy for the Arts
Charyl Stockwell Academy
Concord Academy - Boyne
Concord Academy - Petoskey
Countryside Academy

DeTour Arts and Technology Academy
Excel Charter Academy
Flextech High School Shepherd
Grand River Preparatory High School
Great Lakes Learning Academy
iCademy Global
Kensington Woods Schools
Kingsbury Country Day School
LifeTech Academy

Livingston Classical Academy
New School High
Ojibwe Charter School
Pansophia Academy
Waterford Montessori Academy
Wellspring Preparatory High School
West Michigan Aviation Academy
West Village Academy

Nonpublic Schools (5%):

Academy of Sacred Heart
Cabrini High School
Calvin Christian High School

Cardinal Mooney Catholic School
Detroit Catholic Central High School

Detroit Christian Schools of Excellence
Divine Child High School
Emerson School

Eton Academy

Everest Academy

Farber Hebrew Day School - Yeshivat Akiva

Genesee Academy

Grand Rapids Christian High School

Hackett Catholic Prep

Holland Christian High School

Huda Upper School

Interlochen Arts Academy

Lansing Catholic Central High School

Lansing Christian School

Muskegon Catholic Central

Notre Dame Preparatory School

Oakland Christian School

Plymouth Christian Academy

Providence Christian School

Regina High School

Shrine Catholic High School and Academy

South Christian High School

Southfield Christian School

St. Francis High School

St. Gerard School

St. Mary Catholic School-Sault Sainte Marie

St. Mary School-Lake Leelanau

Traverse City Christian School

Trinity Lutheran School

Unity Christian High School

Valley Lutheran High School

Zeeland Christian School

Figure 2. 2022-23 Michigan Virtual ISD, LEA, PSA District and Nonpublic Schools with Student Enrollments
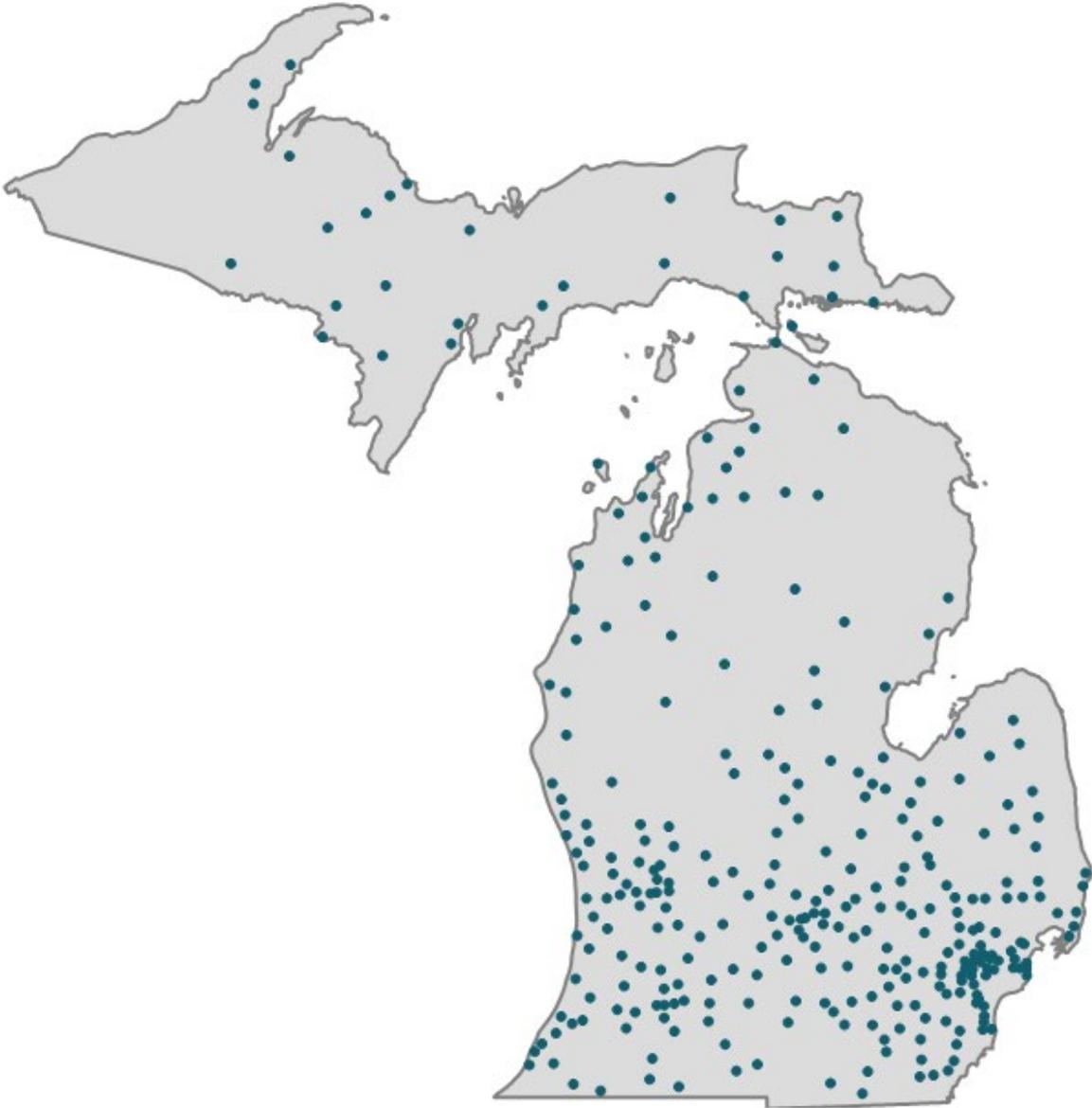
Figure 3. 2022-23 Michigan Virtual Student Courses Offered with Performance Data

NCES Subject Area	Course Name	Enroll Count	Pass Rate
Business and Marketing	Accounting A	187	88%
Business and Marketing	Accounting B	74	89%
Business and Marketing	BUS 153: Introduction to Business Law	<10	NA
Business and Marketing	Business Ethics	287	90%
Business and Marketing	Entrepreneurship	279	75%
Business and Marketing	Hospitality and Tourism: Traveling the Globe	134	72%
Business and Marketing	Sports and Entertainment Marketing	365	90%
Communications and Audio/Visual Technology	Journalism (Introduction)	86	85%
Computer and Information Sciences	Advanced Programming: Mobile Apps and Game Design	23	70%
Computer and Information Sciences	Advanced Web Design: JavaScript	18	100%
Computer and Information Sciences	AP Computer Science A (Sem 1)	140	91%
Computer and Information Sciences	AP Computer Science A (Sem 2)	120	88%
Computer and Information Sciences	AP Computer Science Principles (Sem 1)	87	89%
Computer and Information Sciences	AP Computer Science Principles (Sem 2)	80	90%
Computer and Information Sciences	Basic Web Design: HTML & CSS	92	70%
Computer and Information Sciences	CCNA 1: Introduction to Networking	16	81%
Computer and Information Sciences	CCNA 2: Routing and Switching Essentials	<10	NA
Computer and Information Sciences	CCNA 3: Enterprise Networking, Security and Automation	<10	NA
Computer and Information Sciences	CIS 115: Microcomputer Applications	<10	NA
Computer and Information Sciences	Computer Basics (Google Suite)	218	39%
Computer and Information Sciences	Digital Information Technology	52	77%
Computer and Information Sciences	Foundations of Programming A	109	94%
Computer and Information Sciences	Foundations of Programming B	55	87%
Computer and Information Sciences	Introduction to Artificial Intelligence	48	85%
Computer and Information Sciences	Java Programming A	70	79%
Computer and Information Sciences	Java Programming B	23	91%
Computer and Information Sciences	JavaScript Game Design	45	84%
Computer and Information Sciences	Learning in a Digital World: Digital Citizenship	29	41%
Computer and Information Sciences	Linux Essentials	15	87%
Computer and Information Sciences	Linux Operating System 1	<10	NA
Computer and Information Sciences	Linux Operating System 2	<10	NA

NCES Subject Area	Course Name	Enroll Count	Pass Rate
Computer and Information Sciences	Networking and Cybersecurity Essentials	28	75%
Computer and Information Sciences	Social Media	315	74%
English Language and Literature	American Literature A - English 11-12	266	74%
English Language and Literature	American Literature B - English 11-12	206	73%
English Language and Literature	AP English Language and Composition (Sem 1)	68	88%
English Language and Literature	AP English Language and Composition (Sem 2)	64	92%
English Language and Literature	AP English Literature and Composition (Sem 1)	61	87%
English Language and Literature	AP English Literature and Composition (Sem 2)	57	79%
English Language and Literature	British Literature A - English 11-12	183	68%
English Language and Literature	British Literature B - English 11-12	142	75%
English Language and Literature	Composition	68	79%
English Language and Literature	Creative Writing: Unleashing the Core of Your Imagination	54	78%
English Language and Literature	English 10A	117	61%
English Language and Literature	English 10B	125	62%
English Language and Literature	English 9A	134	53%
English Language and Literature	English 9B	107	56%
English Language and Literature	Essentials H.S. English 1A	130	39%
English Language and Literature	Essentials H.S. English 1B	106	34%
English Language and Literature	Essentials H.S. English 2A	87	31%
English Language and Literature	Essentials H.S. English 2B	64	73%
English Language and Literature	Essentials H.S. English 3A	82	37%
English Language and Literature	Essentials H.S. English 3B	81	64%
English Language and Literature	Essentials H.S. English 4A	90	54%
English Language and Literature	Essentials H.S. English 4B	50	68%
English Language and Literature	Language Arts A (6th Grade)	<10	NA
English Language and Literature	Language Arts A (7th Grade)	<10	NA
English Language and Literature	Language Arts A (8th Grade)	26	42%
English Language and Literature	Language Arts B (6th Grade)	19	26%
English Language and Literature	Language Arts B (7th Grade)	21	24%
English Language and Literature	Language Arts B (8th Grade)	46	39%
English Language and Literature	Mythology and Folklore: Legendary Tales	285	81%
English Language and Literature	Reading Strategies: Fields of Reading A	<10	NA
English Language and Literature	Reading Strategies: Fields of Reading B	<10	NA

NCES Subject Area	Course Name	Enroll Count	Pass Rate
English Language and Literature	World Literature	43	100%
Fine and Performing Arts	AP Art History (Sem 1)	36	78%
Fine and Performing Arts	AP Art History (Sem 2)	23	96%
Fine and Performing Arts	ART 120: Art Appreciation	<10	NA
Fine and Performing Arts	Digital Photography	164	76%
Fine and Performing Arts	Film Studies: American Film Survey	251	86%
Fine and Performing Arts	Guitar 1A	91	79%
Fine and Performing Arts	Guitar 1B	20	75%
Fine and Performing Arts	Guitar 2A	<10	NA
Fine and Performing Arts	Guitar 2B	<10	NA
Fine and Performing Arts	Middle School Digital Art and Design	53	38%
Fine and Performing Arts	Music Appreciation Odyssey	110	75%
Fine and Performing Arts	Piano 1A	41	83%
Fine and Performing Arts	Piano 1B	15	93%
Fine and Performing Arts	Visual Art Comprehension I	164	63%
Health Care Sciences	HE 101: Math Related to Drug Administration	<10	NA
Human Services	Employability Skills: Personal and Career Readiness	318	72%
Human Services	Future Proud Michigan Educator	34	74%
Life and Physical Sciences	Anatomy and Physiology A	215	83%
Life and Physical Sciences	Anatomy and Physiology B	137	88%
Life and Physical Sciences	AP Biology (Sem 1)	87	87%
Life and Physical Sciences	AP Biology (Sem 2)	71	93%
Life and Physical Sciences	AP Chemistry (Sem 1)	43	47%
Life and Physical Sciences	AP Chemistry (Sem 2)	19	79%
Life and Physical Sciences	AP Environmental Science (Sem 1)	117	93%
Life and Physical Sciences	AP Environmental Science (Sem 2)	102	97%
Life and Physical Sciences	AP Physics 1 (Sem 1)	72	75%
Life and Physical Sciences	AP Physics 1 (Sem 2)	58	67%
Life and Physical Sciences	AP Physics 2 (Sem 1)	11	45%
Life and Physical Sciences	AP Physics 2 (Sem 2)	<10	NA
Life and Physical Sciences	AP Physics C (Sem 1)	50	74%
Life and Physical Sciences	AP Physics C (Sem 2)	40	88%
Life and Physical Sciences	Astronomy	222	82%
Life and Physical Sciences	BIO 101: Essentials of Biology	<10	NA
Life and Physical Sciences	Bioethics	135	92%
Life and Physical Sciences	Biology A	209	49%
Life and Physical Sciences	Biology B	191	55%

NCES Subject Area	Course Name	Enroll Count	Pass Rate
Life and Physical Sciences	Chemistry A	384	41%
Life and Physical Sciences	Chemistry B	325	48%
Life and Physical Sciences	Earth Science A	177	52%
Life and Physical Sciences	Earth Science B	109	69%
Life and Physical Sciences	Environmental Science A	221	31%
Life and Physical Sciences	Environmental Science B	160	32%
Life and Physical Sciences	Essentials Biology A	110	45%
Life and Physical Sciences	Essentials Biology B	73	60%
Life and Physical Sciences	Essentials Chemistry A	97	54%
Life and Physical Sciences	Essentials Chemistry B	109	62%
Life and Physical Sciences	GEO 101: Earth Science	<10	NA
Life and Physical Sciences	Medical Terminology	534	91%
Life and Physical Sciences	Oceanography A	184	77%
Life and Physical Sciences	Oceanography B	57	86%
Life and Physical Sciences	Physical Science A	139	24%
Life and Physical Sciences	Physical Science B	38	79%
Life and Physical Sciences	Physics A	131	79%
Life and Physical Sciences	Physics B	129	81%
Life and Physical Sciences	Science A (6th Grade)	<10	NA
Life and Physical Sciences	Science A (7th Grade)	<10	NA
Life and Physical Sciences	Science A (8th Grade)	30	53%
Life and Physical Sciences	Science B (6th Grade)	18	17%
Life and Physical Sciences	Science B (7th Grade)	22	27%
Life and Physical Sciences	Science B (8th Grade)	50	38%
Life and Physical Sciences	Veterinary Science: The Care of Animals	234	94%
Mathematics	Algebra 1A	209	69%
Mathematics	Algebra 1B	210	67%
Mathematics	Algebra 2A	280	73%
Mathematics	Algebra 2B	271	72%
Mathematics	AP Calculus AB (Sem 1)	46	93%
Mathematics	AP Calculus AB (Sem 2)	42	81%
Mathematics	AP Calculus BC (Sem 1)	48	85%
Mathematics	AP Calculus BC (Sem 2)	42	88%
Mathematics	AP Statistics (Sem 1)	79	89%
Mathematics	AP Statistics (Sem 2)	72	92%
Mathematics	Calculus A	33	73%
Mathematics	Calculus B	14	79%
Mathematics	Essentials Algebra 1A	168	38%

NCES Subject Area	Course Name	Enroll Count	Pass Rate
Mathematics	Essentials Algebra 1B	123	42%
Mathematics	Essentials Algebra 2A	110	63%
Mathematics	Essentials Algebra 2B	86	74%
Mathematics	Essentials Geometry A	119	43%
Mathematics	Essentials Geometry B	154	62%
Mathematics	Geometry A	290	78%
Mathematics	Geometry B	273	71%
Mathematics	Mathematics A (6th Grade)	<10	NA
Mathematics	Mathematics A (7th Grade)	52	8%
Mathematics	Mathematics A (8th Grade Pre-Algebra)	53	17%
Mathematics	Mathematics B (6th Grade)	22	27%
Mathematics	Mathematics B (7th Grade)	23	26%
Mathematics	Mathematics B (8th Grade Pre-Algebra)	42	26%
Mathematics	Mathematics in the Workplace	306	82%
Mathematics	Mathematics of Baseball	65	91%
Mathematics	Mathematics of Personal Finance	504	80%
Mathematics	MTH 104: Foundations of Math	<10	NA
Mathematics	MTH 113: Pre-Calculus	<10	NA
Mathematics	MTH 120: Introduction to Statistics	<10	NA
Mathematics	PreCalculus A: Algebra Review & Trigonometry	194	81%
Mathematics	PreCalculus B: Functions & Graphical Analysis	155	86%
Mathematics	Probability and Statistics	129	83%
Miscellaneous	Career Planning	515	80%
Miscellaneous	Careers - Find Your Future	292	74%
Miscellaneous	Study Skills	532	86%
Physical, Health, and Safety Education	Health Education	729	75%
Physical, Health, and Safety Education	Health Education (Abstinence Only)	144	90%
Physical, Health, and Safety Education	Middle School Health	50	42%
Physical, Health, and Safety Education	Personal Fitness	663	82%
Public, Protective, and Government Service	CJ 101: Introduction to Criminal Justice	<10	NA
Public, Protective, and Government Service	Forensic Science	301	72%
Religious Education and Theology	World Religions: Exploring Diversity	55	87%

| NCES Subject Area	Course Name	Enroll Count	Pass Rate
Social Sciences and History	African American History	59	68%
Social Sciences and History	Anthropology I: Uncovering Human Mysteries	110	78%
Social Sciences and History	AP Human Geography (Sem 1)	54	94%
Social Sciences and History	AP Human Geography (Sem 2)	46	93%
Social Sciences and History	AP Macroeconomics	199	93%
Social Sciences and History	AP Microeconomics	182	92%
Social Sciences and History	AP Psychology (Sem 1)	305	89%
Social Sciences and History	AP Psychology (Sem 2)	267	92%
Social Sciences and History	AP U.S. Government and Politics	131	78%
Social Sciences and History	AP U.S. History (Sem 1)	71	85%
Social Sciences and History	AP U.S. History (Sem 2)	62	94%
Social Sciences and History	AP World History: Modern (Sem 1)	73	73%
Social Sciences and History	AP World History: Modern (Sem 2)	50	92%
Social Sciences and History	Archaeology: Detectives of the Past	44	89%
Social Sciences and History	Careers in Criminal Justice: Finding Your Specialty	40	78%
Social Sciences and History	Character Education	64	33%
Social Sciences and History	Civics	623	87%
Social Sciences and History	Criminology	541	86%
Social Sciences and History	Economics	534	86%
Social Sciences and History	Economics of Personal Finance	113	83%
Social Sciences and History	Essentials Economics	73	45%
Social Sciences and History	Essentials U.S. Government	90	51%
Social Sciences and History	Essentials U.S. History A	127	42%
Social Sciences and History	Essentials U.S. History B	74	58%
Social Sciences and History	Essentials World History A	98	48%
Social Sciences and History	Essentials World History B	71	61%
Social Sciences and History	HIS 150: History of the United States, 1877 to Present	<10	NA
Social Sciences and History	Leadership Skills Growth and Development	64	70%
Social Sciences and History	Leadership Skills Growth and Development A (Grades 6-8)	99	26%
Social Sciences and History	Leadership Skills Growth and Development B (Grades 6-8)	32	41%
Social Sciences and History	Middle School U.S. History A	31	39%
Social Sciences and History	Middle School U.S. History B	52	31%
Social Sciences and History	Middle School World History A	14	50%
Social Sciences and History	Middle School World History B	35	37%

NCES Subject Area	Course Name	Enroll Count	Pass Rate
Social Sciences and History	Native American History	54	81%
Social Sciences and History	Philosophy: The Big Picture	77	88%
Social Sciences and History	PS 101: Introduction to Political Science	<10	NA
Social Sciences and History	PSY 180: Introduction to Psychology	12	NA
Social Sciences and History	PSY 220: Life Span Developmental Psychology	<10	NA
Social Sciences and History	PSY 230: Psychology of Effective Leadership and Supervision	<10	NA
Social Sciences and History	PSY 260: Abnormal Psychology	<10	NA
Social Sciences and History	Psychology	287	83%
Social Sciences and History	SOC 101: Principles of Sociology	<10	NA
Social Sciences and History	Sociology I: Introduction to Sociology	169	84%
Social Sciences and History	Sociology II: Social Problems	31	97%
Social Sciences and History	U.S. History and Geography A	242	72%
Social Sciences and History	U.S. History and Geography B	260	66%
Social Sciences and History	World History and Geography A	266	84%
Social Sciences and History	World History and Geography B	276	91%
World Languages	American Sign Language 1A	1,295	74%
World Languages	American Sign Language 1B	824	84%
World Languages	American Sign Language 2A	422	89%
World Languages	American Sign Language 2B	384	87%
World Languages	AP Chinese (Sem 1)	34	79%
World Languages	AP Chinese (Sem 2)	27	81%
World Languages	AP French (Sem 1)	<10	NA
World Languages	AP French (Sem 2)	<10	NA
World Languages	AP Spanish (Sem 1)	50	62%
World Languages	AP Spanish (Sem 2)	31	90%
World Languages	Chinese 1A	47	81%
World Languages	Chinese 1B	28	93%
World Languages	Chinese 2A	37	92%
World Languages	Chinese 2B	30	97%
World Languages	Chinese 3A	24	92%
World Languages	Chinese 3B	20	95%
World Languages	Chinese 4A	20	100%
World Languages	Chinese 4B	20	100%
World Languages	French 1A	216	73%
World Languages	French 1A (Grades 6-8)	<10	NA
World Languages	French 1B	154	75%

NCES Subject Area	Course Name	Enroll Count	Pass Rate
World Languages	French 1B (Grades 6-8)	<10	NA
World Languages	French 2A	170	83%
World Languages	French 2B	145	92%
World Languages	French 3A	41	61%
World Languages	French 3B	28	82%
World Languages	German 1A	224	70%
World Languages	German 1A (Grades 6-8)	<10	NA
World Languages	German 1B	169	74%
World Languages	German 1B (Grades 6-8)	<10	NA
World Languages	German 2A	106	86%
World Languages	German 2B	102	81%
World Languages	Japanese 1A	254	72%
World Languages	Japanese 1B	151	84%
World Languages	Japanese 2A	88	90%
World Languages	Japanese 2B	74	93%
World Languages	Latin 1A	36	83%
World Languages	Latin 1B	31	87%
World Languages	Latin 2A	19	89%
World Languages	Latin 2B	20	95%
World Languages	Spanish 1A	447	44%
World Languages	Spanish 1A (Grades 6-8)	33	58%
World Languages	Spanish 1B	268	66%
World Languages	Spanish 1B (Grades 6-8)	27	44%
World Languages	Spanish 2A	377	71%
World Languages	Spanish 2A (Grades 6-8)	<10	NA
World Languages	Spanish 2B	256	78%
World Languages	Spanish 2B (Grades 6-8)	<10	NA
World Languages	Spanish 3A	137	68%
World Languages	Spanish 3B	84	92%
World Languages	Spanish 4A	63	73%
World Languages	Spanish 4B	35	91%

Figure 4. 2022-23 Michigan Virtual Student Performance Data by NCES Subject Area, excludes Dual Enrollment Courses

NCES Subject Area	Attempted Count	Withdrawn	Completed/ Failed	Michigan Virtual Pass Rate	Statewide 21-22 Pass Rate[52]
Business and Marketing	1,326	2%	13%	84%	70%
Communications and Audio/Visual Technology	86	0%	15%	85%	60%
Computer and Information Sciences	1,592	5%	19%	76%	75%
English Language and Literature	2,807	7%	28%	65%	65%
Fine and Performing Arts	978	6%	18%	76%	79%
Human Services	352	8%	20%	72%	71%
Life and Physical Sciences	5,129	5%	29%	66%	66%
Mathematics	4,221	7%	22%	70%	63%
Miscellaneous	1,339	4%	14%	81%	79%
Physical, Health, and Safety Education	1,586	4%	18%	78%	74%
Public, Protective, and Government Service	301	2%	26%	72%	75%
Religious Education and Theology	55	2%	11%	87%	80%
Social Sciences and History	6,090	5%	17%	79%	66%
World Languages	7,095	4%	19%	77%	59%

Figure 5. 2022-23 Michigan Virtual Teacher-Led Student Performance Data by LEA District
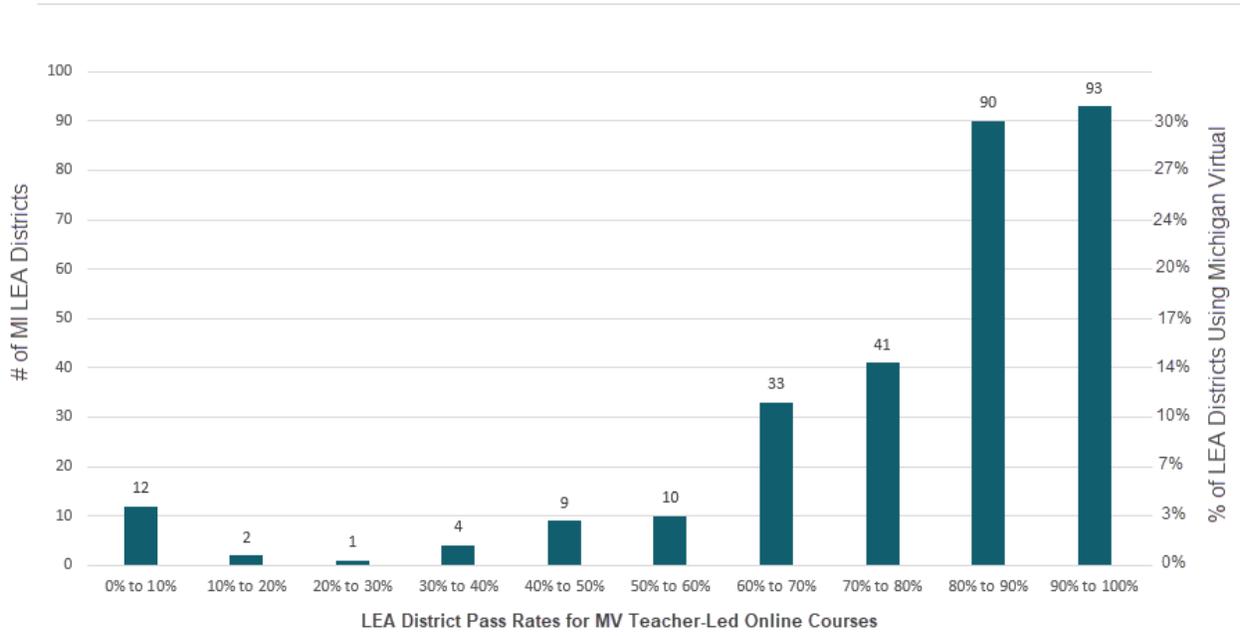
Appendix B - Michigan Virtual Professional Enrollment Data

Figure 6. 2022-23 Michigan Virtual Professional Learning Courses

Course Name	Enroll Count
#GoOpen: Open Educational Resources in Michigan	4,430
5D+ Indicators of High-Quality Instruction	20
5D/D+ Assessment for Student Learning	25
5D/D+ Classroom Environment & Culture	51
5D/D+ Curriculum & Pedagogy	16
5D/D+ Professional Collaboration & Communication	11
5D/D+ Purpose	12
5D/D+ Student Engagement	80
A to Z Grant Writing	39
Abbott Elementary TV Series Study	48
Achieving Success with Difficult People	71
Adolescent Suicide Prevention: Best Practices – A Team Approach	2,370
Adolescent Suicide Prevention: Information for the General Public	525
Adolescent Suicide Prevention: Intervention & School Policies	1,876
Adolescent Suicide Prevention: Peer to Peer Support	1,375
Advanced Grant Proposal Writing	<10
Advanced Microsoft Excel 2019/Office 365	<10
Anti-Racism and Social Justice Teaching and Leadership	1,301
Anti-Racist Trauma-Informed Practice in Pre K-12 Education	3,475
Applied Behavior Analysis in Schools	2,920
Assessments in the Blended Classroom	19
Basic First Aid	1,651
Beginning Conversational French	<10
Being a Reflective Teacher	96
Being a Reflective Teacher During a Pandemic	180
Blended Classroom Design	33
Blockchain Fundamentals	<10
Bloodborne Pathogens	14,217
Build Trust Through Positive Interactions - Apply Your Skills	157
Building Teams That Work	28
Career Counseling: Building a Resume	203
Certificate in Healing Environments for Body, Mind, and Spirit	22
Certificate in Integrative Behavioral Health	<10
Certificate in Meditation	<10
Certificate in Mindful Relationships	422
Certificate in Mindfulness	<10

Course Name	Enroll Count
Certificate in Nutrition, Chronic Disease, and Health Promotion	29
Certificate in Stress Management	29
Changing Minds to Address Poverty - Achievement Mindset	3,887
Changing Minds to Address Poverty - Engagement Mindset	3,087
Changing Minds to Address Poverty - Enrichment Mindset	2,615
Changing Minds to Address Poverty - Mindsets Matter (Introduction)	2,814
Changing Minds to Address Poverty - Positivity Mindset	2,855
Changing Minds to Address Poverty - Relational Mindset	2,482
Changing Minds to Address Poverty in the Classroom	30
Changing Minds to Address Poverty in the Classroom - Graduation Mindset	2,089
Changing Minds to Address Poverty in the Classroom - Rich Classroom Climate Mindset	2,378
ChatGPT for Educators: An Introduction	246
College Counseling: Building a College List	421
College Counseling: Developing College Counseling Curriculum	98
College Counseling: Effective Meetings with Juniors	111
College Counseling: Relationships with Admissions Officers	84
College Counseling: Start Early with 9-10 Graders	124
College Counseling: Start Early with 9-10th Graders	14
College Counseling: The College Selection Process	97
College Counseling: Writing Effective Counselor Letters	100
Conflict Resolution Strategies	453
Conversational Japanese	<10
Coronavirus (COVID-19) Prevention in the Workplace	314
Coronavirus Prevention Course	107
Counseling for College Prep	28
CPR Refresher	781
Creating a Classroom Website	10
Creating Check-Ins to Support Students - Skill Application	42
Creating Classroom Centers	67
Curriculum Leadership Institute	45
Designing Online Success for Special Populations	14
Differentiated Instruction: Maximizing Learning for All	3,617
Digital Content in the Blended Classroom	31
Discipline Protections for Students with a Disability	2,495
Discover Sign Language	49
Discover Sign Language II	<10
Discrimination in the Workplace	170
Diversity in the Workplace	541

Course Name	Enroll Count
DLN: A Practical Approach to Working with NWEA Data	76
DLN: A Teacher's Guide to Khan Academy	28
DLN: Administrator Simulator - Staff Accountability	<10
DLN: Administrator Simulator - Staff Social Media	<10
DLN: Administrator Simulator - Student Discipline	<10
DLN: Administrator Simulator - Title IX	<10
DLN: Creating a Data Driven Culture	12
DLN: Curriculum & Instruction Alignment	<10
DLN: Disciplinary Literacy for Secondary Leaders	53
DLN: Disciplinary Literacy for Secondary Leaders with Action Plan	<10
DLN: Getting to Know the SAT Suite of Assessments	<10
DLN: Implementing Official SAT Practice on Khan Academy in Your School	<10
DLN: Instructional Supervision in a Remote Environment	<10
DLN: Leadership Communication	10
DLN: Leading Collaborative Meetings in a Virtual World	<10
DLN: Observation & Feedback	<10
DLN: Project Gameplan - Keeping Compliant Scenarios	<10
DLN: Response to Intervention (RTI)	<10
DLN: School Culture: Creating an Inclusive Learning Environment	<10
DLN: School Improvement	<10
DLN: School Law 101: What Principals Must Know	<10
DLN: School Safety Best Practices	10
DLN: Strategies for Using SAT Suite Data in Schools	298
DLN: Trauma Informed Schools: A Whole School Approach	54
DLN: Using AP Potential for Opportunity and Access	254
DLN: Using Surveys For Feedback	13
Early Literacy Resources	560
Educator Evaluation in MI: Evidence of Reflective Practice	740
Educator Evaluation in MI: Measurement of Student Growth	1,037
Educator Evaluation in MI: Preparing for Formative Review	584
Educator Evaluation in MI: Preparing for Summative Evaluation	530
Educator Evaluation in MI: Unpacking the Framework	503
Educator Evaluation: Self-Assessment and Goal Setting	791
Effective Feedback in a Virtual Setting	1,223
Elementary Career Awareness eResources in MeL	162
Elementary Career Awareness eResources in MeL (General)	31
Emergency Action Plans for Office Employees	<10
Emergency Response	<10

Course Name	Enroll Count
Empowering Students With Disabilities	28
Enhancing Language Development in Childhood	38
Equity in Online Learning for Multilingual Students	916
Essential Instructional Practices in Early Literacy: K-3 Essential 1	2,195
Essential Instructional Practices in Early Literacy: K-3 Essential 10	1,086
Essential Instructional Practices in Early Literacy: K-3 Essential 2	1,678
Essential Instructional Practices in Early Literacy: K-3 Essential 3	1,830
Essential Instructional Practices in Early Literacy: K-3 Essential 4	1,651
Essential Instructional Practices in Early Literacy: K-3 Essential 5	1,661
Essential Instructional Practices in Early Literacy: K-3 Essential 6	1,331
Essential Instructional Practices in Early Literacy: K-3 Essential 7	1,227
Essential Instructional Practices in Early Literacy: K-3 Essential 8	1,077
Essential Instructional Practices in Early Literacy: K-3 Essential 9	1,082
Essential Instructional Practices in Early Literacy: Pre-K Essential 1	1,599
Essential Instructional Practices in Early Literacy: Pre-K Essential 10	885
Essential Instructional Practices in Early Literacy: Pre-K Essential 2	1,060
Essential Instructional Practices in Early Literacy: Pre-K Essential 3	936
Essential Instructional Practices in Early Literacy: Pre-K Essential 4	876
Essential Instructional Practices in Early Literacy: Pre-K Essential 5	856
Essential Instructional Practices in Early Literacy: Pre-K Essential 6	804
Essential Instructional Practices in Early Literacy: Pre-K Essential 7	751
Essential Instructional Practices in Early Literacy: Pre-K Essential 8	774
Essential Instructional Practices in Early Literacy: Pre-K Essential 9	752
Essential Instructional Practices in Early Literacy: School-wide and Center-wide Practices	896
Exploring and Understanding Learner Agency	1,043
Family-School Partnerships for Students with Disabilities	1,553
FERPA – Family Educational Rights and Privacy Act	1,241
Fire Safety	49
Flu Symptoms and Prevention Strategies	164
Food Safety	90
Fostering Student Agency Through Positive Relationships	637
Fundamentals of Supervision and Management	10
Get Assertive!	30
Get Grants!	<10
Grammar Refresher	65
Grammar Refresher II	16
Guided Reading and Writing: Strategies for Maximum Student Achievement	21
Guided Reading: Strategies for the Differentiated Classroom	11

Course Name	Enroll Count
Hazard Communication	52
Health & Safety for Licensed Child Care Providers, Module A	10,602
Health & Safety for Licensed Child Care Providers, Module B	9,579
Health & Safety for Licensed Child Care Providers, Module C	9,213
HIPAA Compliance Training	569
How can PBL Help Elementary Students "Figure Out" Science?	576
How can PBL Help Secondary Students "Figure Out" Science?	410
How to Disaggregate Data - Successline Micro-Credential	<10
How to Get Started in Game Development	<10
Human Anatomy and Physiology II	15
IEP Boot Camp: Transition Age Students	1,031
IEP Boot Camp: Writing Meaningful and Compliant IEPs	2,624
Individual Excellence	14
Inquiry Based Learning in Secondary Mathematics Education	547
Inquiry-Based Learning in Secondary Science Education	398
Instructional Practices with Technology	25
Integrating SEL into an MTSS Framework Micro-Credential	506
Integrating Technology in the Classroom	18
Intermediate Microsoft Excel 2019/Office 365	<10
Interpersonal Communication	28
Intro to CEL's 5D/5D+ Teacher Evaluation System	367
Intro to Computer Science for High School Educators	190
Intro to Computer Science for Middle School Educators	237
Intro to Computer Science Standards for K-5 Educators	375
Intro to Online Course Facilitation, 6-12	10
Intro to Online Course Facilitation: Practical Knowledge	545
Intro to Universal Design for Learning: Action & Expression	344
Intro to Universal Design for Learning: Engagement	682
Intro to Universal Design for Learning: Representation	393
Introduction to Artificial Intelligence	<10
Introduction to Blended Learning for School Leaders	291
Introduction to Database Development	<10
Introduction to Early Childhood Standards of Quality for B-K	607
Introduction to Esports	382
Introduction to Java Programming	<10
Introduction to Microsoft Excel 2019	15
Introduction to OSHA	< 10
Introduction to Phenomenal Science	694

Course Name	Enroll Count
Introduction to Programming	<10
Introduction to Python	<10
Introduction to Windows 10	<10
ISD Led Monitoring	260
ISD Led Monitoring for SPP APR Indicators B-4, B-9, and B-10	<10
Keys to Effective Communication	<10
Landing the Job: Applications and Interviews for Educators	<10
Leadership	<10
MAC: Assessment Systems That Support 21st Century Learners	<10
MAC: Collaborative Inquiry	<10
MAC: Developing a High Quality Balanced Assessment System	<10
MAC: Developing Appropriate Assessments	<10
MAC: Making Meaning from Student Assessments	11
MAC: Understanding the Formative Assessment Process	<10
MAC: Understanding the Technical Concepts Used in Student Assessment	<10
MAC: Using Assessment Data Well	<10
Mastering Public Speaking	15
MDE Assessment Security	137
MDE Assessment Security 2022/2023	26,036
MDE Facilitating Future Proud Michigan Educator: Explore	252
MDE: Introduction to Data Use & Action Process	370
MEMSPA: Braiding MTSS & SEL	<10
MI-Access Training: Participation and Scoring Administration	624
Michigan Learning Channel: A Free Tool for Summer Learning	423
Michigan Ongoing Health & Safety Training Refresher 2023	42,505
Michigan Virtual Special Education Support	396
Micro-Credential 1: Phonemic Awareness	540
Micro-Credential 2: English Code Complexities	300
Micro-Credential 3: Decode and Encode Through Sound Boxes	286
Micro-Credential 4: Vocabulary Acquisition	271
Micro-Credential 5: Reading Fluency	336
Micro-Credential 6: Strategic Reading Conversations	289
Mindful Practices: Everyday SEL for Adults	11
Mindful Practices: Integrating SEL into Your Classroom	15
Mindful Practices: SEL for Administrators	<10
Music Made Easy	33
MyPD - 10 SCECHs	27
MyPD - 6 SCECHs	13

Course Name	Enroll Count
Occupational Safety and Health Programs	<10
Online Lessons with Littles: An Overview	699
Online Lessons with Littles: Engagement	520
Online Lessons with Littles: Planning	609
Online National Standards 1: Getting Started	262
Online National Standards 2: Course Content & Design	201
Online National Standards 3: Assessment	163
Online National Standards 4: Meeting Needs	205
Online Teacher's Guide: Announcements	299
Online Teacher's Guide: Discussions	311
Online Teacher's Guide: Engagement	386
OTL Level 1 - Communicating in Online Classrooms	<10
OTL Level 1 - Course Content	<10
OTL Level 1 - Discussion Boards	<10
OTL Level 1 - Grading and Feedback	<10
OTL Level 1 - Introduction to Online Teaching and Learning	91
OTL Level 1 - Setting Up Your Online Classroom	<10
OTL Level 1 - Student Engagement	11
OTL Level 1 - Supporting Exceptional Students	<10
Personal Finance	16
Personal Protective Equipment	43
Podcast PD: Google Forms, Failure-Free Failing and CBE	15
Podcast PD: Growing Student Agency and Implementing Google Classroom	15
Podcast PD: Screencasting, the Future of Education	14
PTL 100 Hour Internship	<10
PTL 200 Hour Internship	<10
PTL: Application	238
PTL: Experienced Based Internship	35
PTL: Internship	53
PTL: Module 1	178
PTL: Module 2	203
PTL: Module 3	186
PTL: Module 4	116
PTL: Module 5	224
PTL: Module 6	201
PTL: Module 7	202
PTL: Module 8	214
PTL: Orientation	227

Course Name	Enroll Count
Reaching Your Potential through Self-Advocacy	431
Response to Intervention: Reading Strategies That Work	24
Responsive Web Design	<10
Rethinking Classroom Practices with ChatGPT	<10
Run, Hide, Fight	611
Seclusion and Restraint	2,621
Secondary Career Preparation eResources in MeL	135
Sexual Harassment and Discrimination for Employees	786
Singapore Math Strategies: Model Drawing for Grades 1-6	31
Singapore Math: Number Sense and Computational Strategies	<10
So You Want to be an Instructional Designer?	81
Social Intervention for Elementary Students with ASD	913
Social-Emotional Learning: Adult SEL and Self-Care	1,358
Social-Emotional Learning: Assessment Mechanisms	530
Social-Emotional Learning: Creating a Professional Culture Based on SEL	1,321
Social-Emotional Learning: Embedding SEL Schoolwide	1,338
Social-Emotional Learning: Equity Elaborations	572
Social-Emotional Learning: Integrating SEL Into Culturally Responsive Classrooms	1,427
Social-Emotional Learning: Integrating SEL within MTSS	751
Social-Emotional Learning: Introduction to SEL	2,676
Social-Emotional Learning: Trauma-Informed Support	1,804
Solving Classroom Discipline Problems	117
Solving Classroom Discipline Problems II	50
Spanish in the Classroom	27
Special Populations & Assessments: Paraprofessional Support	<10
Special Populations & Assessments: Planning for Teachers	<10
Speed Spanish	33
Speed Spanish II	18
Speed Spanish III	<10
SRO1: Promoting a Safe and Supportive School Climate	106
SRO2: Teaming and Collaborative Data-based Problem Solving	65
SRO3: Early Identification of Mental Health Challenges	72
SRO4: Mental Health Interventions and Care Coordination	67
SRO5: Working with Diverse Populations	81
SRO6: Self-Care and Wellness	60
Start Your Own Edible Garden	11
Supporting All Students' Executive Functioning Skills	440
Survival Kit for New Teachers	33

Course Name	Enroll Count
Take Care of Yourself: A Course in Well-Being and Self-Care	2,568
Teacher+ (Lite): Classroom Environment & Culture	<10
Teacher+: Assessment for Student Learning (Self-Paced)	<10
Teacher+: Classroom Environment & Culture (Self-Paced)	12
Teacher+: Culturally Responsive Classrooms (Self-Paced)	<10
Teacher+: Professional Collaboration & Communication (Self-Paced)	<10
Teacher+: Purposeful Teaching & Learning (Self-Paced)	<10
Teacher+: Student Engagement & Ownership (Self-Paced)	<10
Teaching Adult Learners	<10
Teaching Math: Grades 4-6	11
Teaching Preschool: A Year of Inspiring Lessons	30
Teaching Science: Grades 4-6	<10
Teaching Students With ADHD	60
Teaching Students With Autism: Strategies for Success	17
Teaching Students with Learning Disabilities	20
Teaching Transitioning Skills to Students with Disabilities	1,207
Teaching Writing: Grades 4-6	<10
Teaching Writing: Grades K-3	<10
Ted Lasso TV Series Study	26
The Creative Classroom	13
Title IX/Sexual Misconduct at Educational Facilities	437
TRAILS Social and Emotional Learning (SEL) Curriculum	115
Transitioning to Remote Teaching 1: Getting Started	94
Transitioning to Remote Teaching 2: Communication Online	77
Transitioning to Remote Teaching 3: Digital Content	72
Transitioning to Remote Teaching 4: Digital Assessment	67
Transitioning to Remote Teaching 5: Adapting to Meet Needs	69
Transitioning to Remote Teaching 6: SEL Supports	66
Transitioning to Remote Teaching: Advanced Placement Edition	257
Transportation Training for Licensed Child Care Providers	4,169
UDL: Action & Expression - Apply Your Skills	<10
UDL: Engagement - Apply Your Skills	78
UDL: Representation - Apply Your Skills	<10
Understanding Adolescents	27
Understanding the Modern Military	546
Using the Internet in the Classroom	<10
Violence in the Workplace	106
Whole Child & Continuous Improvement: A Deeper Understanding (MI Only)	618

Figure 7. 2022-23 Districts Served by Michigan Virtual with Professional Learning

ISDs (100%):

Allegan Area ESA
Alpena-Mont.-Alcona ESD
Barry ISD
Bay-Arenac ISD
Berrien RESA
Branch ISD
C.O.O.R. ISD
Calhoun ISD
Charlevoix-Emmet ISD
Cheb-Otsego-Presque Isle ESD
Clare-Gladwin RESD
Clinton County RESA
Copper Country ISD
Delta-Schoolcraft ISD
Dickinson-Iron ISD
Eastern Upper Peninsula ISD
Eaton RESA
Genesee ISD
Gogebic-Ontonagon ISD

Gratiot-Isabella RESD
Heritage SW ISD
Hillsdale ISD
Huron ISD
Ingham ISD
Ionia ISD
Iosco RESA
Jackson ISD
Kalamazoo RESA
Kent ISD
Lapeer ISD
Lenawee ISD
Livingston ESA
Macomb ISD
Manistee ISD
Marquette-Alger RESA
Mecosta-Osceola ISD
Menominee ISD
Midland County ESA

Monroe ISD
Montcalm Area ISD
Muskegon Area ISD
Newaygo County RESA
Northwest Ed. Services
Oakland Schools
Ottawa Area ISD
Saginaw ISD
Sanilac ISD
Shiawassee Regional ESD
St. Clair County RESA
St. Joseph County ISD
Tuscola ISD
Van Buren ISD
Washtenaw ISD
Wayne RESA
West Shore ESD
Wexford-Missaukee ISD

LEA Districts (99%):

Adams Township School District
Addison Community Schools
Adrian Public Schools
Airport Community Schools
Akron-Fairgrove Schools
Alanson Public Schools
Alba Public Schools
Albion Public Schools
Alcona Community Schools
Algonac Community School
    District
Allegan Public Schools
Allen Park Public Schools
Allendale Public Schools
Alma Public Schools
Almont Community Schools
Alpena Public Schools
Anchor Bay School District
Ann Arbor Public Schools
Armada Area Schools
Arvon Township School District
Ashley Community Schools

Athens Area Schools
Atherton Community Schools
Atlanta Community Schools
Au Gres-Sims School District
AuTrain-Onota Public Schools
Avondale School District
Bad Axe Public Schools
Baldwin Community Schools
Bangor Public Schools (Van
    Buren)
Bangor Township S/D #8
Bangor Township Schools
Baraga Area Schools
Bark River-Harris School District
Bath Community Schools
Battle Creek Public Schools
Bay City School District
Beal City Public Schools
Bear Lake Schools
Beaver Island Community School
Beaverton Schools
Bedford Public Schools

Beecher Community School
    District
Belding Area School District
Bellaire Public Schools
Bellevue Community Schools
Bendle Public Schools
Bentley Community School
    District
Benton Harbor Area Schools
Benzie County Central Schools
Berkley School District
Berrien Springs Public Schools
Bessemer Area School District
Big Bay De Noc School District
Big Rapids Public Schools
Birch Run Area Schools
Birmingham Public Schools
Blissfield Community Schools
Bloomfield Hills Schools
Bloomingdale Public School
    District
Bois Blanc Pines School District

Boyne City Public Schools

Boyne Falls Public School District

Brandon School District in the Counties of Oakland and Lapeer

Brandywine Community Schools

Breckenridge Community Schools

Breitung Township School District

Bridgeport-Spaulding Community School District

Bridgman Public Schools

Brighton Area Schools

Brimley Area Schools

Britton Deerfield Schools

Bronson Community School District

Brown City Community Schools

Buchanan Community Schools

Buckley Community Schools

Bullock Creek School District

Burr Oak Community School District

Byron Area Schools

Byron Center Public Schools

Cadillac Area Public Schools

Caledonia Community Schools

Camden-Frontier School

Capac Community Schools

Carman-Ainsworth Community Schools

Carney-Nadeau Public Schools

Caro Community Schools

Carrollton Public Schools

Carson City-Crystal Area Schools

Carsonville-Port Sanilac School District

Caseville Public Schools

Cass City Public Schools

Cassopolis Public Schools

Cedar Springs Public Schools

Center Line Public Schools

Central Lake Public Schools

Central Montcalm Public Schools

Centreville Public Schools

Charlevoix Public Schools

Charlotte Public Schools

Chassell Township School District

Cheboygan Area Schools

Chelsea School District

Chesaning Union Schools

Chippewa Hills School District

Chippewa Valley Schools

Church School District

Clare Public Schools

Clarenceville School District

Clarkston Community School District

Clawson Public Schools

Climax-Scotts Community Schools

Clinton Community Schools

Clintondale Community Schools

Clio Area School District

Coldwater Community Schools

Coleman Community Schools

Coloma Community Schools

Colon Community School District

Columbia School District

Comstock Park Public Schools

Comstock Public Schools

Concord Community Schools

Constantine Public School District

Coopersville Area Public School District

Corunna Public Schools

Covert Public Schools

Crawford AuSable Schools

Crestwood School District

Croswell-Lexington Community Schools

Dansville Schools

Davison Community Schools

Dearborn City School District

Dearborn Heights School District #7

Decatur Public Schools

Deckerville Community School District

Delton Kellogg Schools

DeTour Area Schools

Detroit City School District

Detroit Public Schools Community District

DeWitt Public Schools

Dexter Community School District

Dollar Bay-Tamarack City Area K-12 School

Dowagiac Union School District

Dryden Community Schools

Dundee Community Schools

Durand Area Schools

East China School District

East Grand Rapids Public Schools

East Jackson Community Schools

East Jordan Public Schools

East Lansing School District

Easton Township S/D #6

Eastpointe Community Schools

Eaton Rapids Public Schools

Eau Claire Public Schools

Ecorse Public Schools

Edwardsburg Public Schools

Elk Rapids Schools

Elkton-Pigeon-Bay Port Laker Schools

Ellsworth Community School

Engadine Consolidated Schools

Escanaba Area Public Schools

Essexville-Hampton Public Schools

Evart Public Schools

Ewen-Trout Creek Consolidated School District

Excelsior Township S/D #1

Fairview Area School District

Farmington Public School District

Farwell Area Schools

Fennville Public Schools

Fenton Area Public Schools

Ferndale Public Schools

Fitzgerald Public Schools

Flat Rock Community Schools
Flint, School District of the City of
Flushing Community Schools
Forest Area Community Schools
Forest Hills Public Schools
Forest Park School District
Fowler Public Schools
Fowlerville Community Schools
Frankenmuth School District
Frankfort-Elberta Area Schools
Fraser Public Schools
Freeland Community School District
Fremont Public School District
Fruitport Community Schools
Fulton Schools
Galesburg-Augusta Community Schools
Garden City Public Schools
Gaylord Community Schools
Genesee School District
Gibraltar School District
Gladstone Area Schools
Gladwin Community Schools
Glen Lake Community Schools
Glenn Public School District
Gobles Public School District
Godfrey-Lee Public Schools
Godwin Heights Public Schools
Goodrich Area Schools
Grand Blanc Community Schools
Grand Haven Area Public Schools
Grand Ledge Public Schools
Grand Rapids Public Schools
Grandville Public Schools
Grant Public School District
Grant Township S/D #2
Grass Lake Community Schools
Greenville Public Schools
Grosse Ile Township Schools
Grosse Pointe Public Schools
Gull Lake Community Schools
Gwinn Area Community Schools
Hagar Township S/D #6
Hale Area Schools

Hamilton Community Schools
Hamtramck, School District of the City of
Hancock Public Schools
Hanover-Horton School District
Harbor Beach Community Schools
Harbor Springs School District
Harper Creek Community Schools
Harper Woods, The School District of the City of
Harrison Community Schools
Hart Public School District
Hartford Public Schools
Hartland Consolidated Schools
Haslett Public Schools
Hastings Area School District
Hazel Park, School District of the City of
Hemlock Public School District
Hesperia Community Schools
Highland Park City Schools
Hillman Community Schools
Hillsdale Community Schools
Holland City School District
Holly Area School District
Holt Public Schools
Holton Public Schools
Homer Community School District
Hopkins Public Schools
Houghton Lake Community Schools
Houghton-Portage Township School District
Howell Public Schools
Hudson Area Schools
Hudsonville Public School District
Huron School District
Huron Valley Schools
Ida Public School District
Imlay City Community Schools
Inland Lakes Schools
Ionia Public Schools

Ionia Township S/D #2
Iron Mountain Public Schools
Ironwood Area Schools of Gogebic County
Ishpeming Public School District No. 1
Ithaca Public Schools
Jackson Public Schools
Jefferson Schools (Monroe)
Jenison Public Schools
Johannesburg-Lewiston Area Schools
Jonesville Community Schools
Kalamazoo Public Schools
Kaleva Norman Dickson School District
Kalkaska Public Schools
Kearsley Community School District
Kelloggsville Public Schools
Kenowa Hills Public Schools
Kent City Community Schools
Kentwood Public Schools
Kingsley Area Schools
Kingston Community School District
Laingsburg Community Schools
Lake City Area School District
Lake Fenton Community Schools
Lake Linden-Hubbell School District
Lake Orion Community Schools
Lake Shore Public Schools (Macomb)
Lakeshore School District (Berrien)
Lakeview Community Schools (Montcalm)
Lakeview Public Schools (Macomb)
Lakeview Sch. District (Calhoun)
LakeVille Community School District
Lakewood Public Schools
Lamphere Public Schools
L'Anse Area Schools

L'Anse Creuse Public Schools
Lansing Public School District
Lapeer Community Schools
Lawrence Public Schools
Lawton Community School District
Leland Public School District
Les Cheneaux Community Schools
Leslie Public Schools
Lincoln Consolidated School District
Lincoln Park, School District of the City of
Linden Community Schools
Litchfield Community Schools
Livonia Public Schools School District
Lowell Area Schools
Ludington Area School District
Mackinac Island Public Schools
Mackinaw City Public Schools
Madison District Public Schools
Madison School District (Lenawee)
Mancelona Public Schools
Manchester Community Schools
Manistee Area Public Schools
Manistique Area Schools
Manton Consolidated Schools
Maple Valley Schools
Mar Lee School District
Marcellus Community Schools
Marion Public Schools
Marlette Community Schools
Marquette Area Public Schools
Marshall Public Schools
Martin Public Schools
Marysville Public Schools
Mason Consolidated Schools (Monroe)
Mason County Central Schools
Mason County Eastern Schools
Mason Public Schools (Ingham)
Mattawan Consolidated School

Mayville Community School District
McBain Rural Agricultural Schools
Melvindale-North Allen Park Schools
Memphis Community Schools
Mendon Community School District
Menominee Area Public Schools
Meridian Public Schools
Merrill Community Schools
Mesick Consolidated Schools
Michigan Center School District
Mid Peninsula School District
Midland Public Schools
Milan Area Schools
Millington Community Schools
Mio-AuSable Schools
Mona Shores Public School District
Monroe Public Schools
Montabella Community Schools
Montague Area Public Schools
Montrose Community Schools
Moran Township School District
Morenci Area Schools
Morley Stanwood Community Schools
Morrice Area Schools
Mount Clemens Community School District
Mt. Morris Consolidated Schools
Mt. Pleasant City School District
Munising Public Schools
Muskegon Heights School District
Muskegon, Public Schools of the City of
Napoleon Community Schools
Negaunee Public Schools
New Buffalo Area Schools
New Haven Community Schools
New Lothrop Area Public Schools
Newaygo Public School District
NICE Community School District

Niles Community Schools
North Adams-Jerome Public Schools
North Branch Area Schools
North Central Area Schools
North Dickinson County Schools
North Huron School District
North Muskegon Public Schools
Northport Public School District
Northview Public Schools
Northville Public Schools
Northwest Community Schools
Norway-Vulcan Area Schools
Nottawa Community School
Novi Community School District
Oak Park, School District of the City of
Oakridge Public Schools
Okemos Public Schools
Olivet Community Schools
Onaway Area Community School District
Oneida Township S/D #3
Onekama Consolidated Schools
Onsted Community Schools
Ontonagon Area School District
Orchard View Schools
Oscoda Area Schools
Otsego Public Schools
Ovid-Elsie Area Schools
Owendale-Gagetown Area School District
Owosso Public Schools
Oxford Community Schools
Parchment School District
Paw Paw Public School District
Peck Community School District
Pellston Public Schools
Pennfield Schools
Pentwater Public School District
Perry Public Schools
Pewamo-Westphalia Community Schools
Pickford Public Schools
Pinckney Community Schools
Pinconning Area Schools

Pine River Area Schools

Pittsford Area Schools

Plainwell Community Schools

Plymouth-Canton Community Schools

Pontiac City School District

Port Huron Area School District

Portage Public Schools

Portland Public Schools

Posen Consolidated School District No. 9

Potterville Public Schools

Powell Township Schools

Public Schools of Calumet, Laurium & Keweenaw

Public Schools of Petoskey

Quincy Community Schools

Rapid River Public Schools

Ravenna Public Schools

Reading Community Schools

Redford Union Schools, District No. 1

Reed City Area Public Schools

Reese Public Schools

Reeths-Puffer Schools

Republic-Michigamme Schools

Richmond Community Schools

River Rouge, School District of the City of

River Valley School District

Riverview Community School District

Rochester Community School District

Rockford Public Schools

Rogers City Area Schools

Romeo Community Schools

Romulus Community Schools

Roscommon Area Public Schools

Roseville Community Schools

Royal Oak Schools

Rudyard Area Schools

Saginaw Township Community Schools

Saginaw, School District of the City of

Saline Area Schools

Sand Creek Community Schools

Sandusky Community School District

Saranac Community Schools

Saugatuck Public Schools

Sault Ste. Marie Area Schools

Schoolcraft Community Schools

Shelby Public Schools

Shepherd Public Schools

Sigel Township S/D #3F

Sigel Township S/D #4F

Sodus Township S/D #5

South Haven Public Schools

South Lake Schools

South Lyon Community Schools

South Redford School District

Southfield Public School District

Southgate Community School District

Sparta Area Schools

Spring Lake Public Schools

Springport Public Schools

St. Charles Community Schools

St. Ignace Area Schools

St. Johns Public Schools

St. Joseph Public Schools

St. Louis Public Schools

Standish-Sterling Community Schools

Stanton Township Public Schools

Stephenson Area Public Schools

Stockbridge Community Schools

Sturgis Public Schools

Summerfield Schools

Superior Central School District

Suttons Bay Public Schools

Swan Valley School District

Swartz Creek Community Schools

Tahquamenon Area Schools

Tawas Area Schools

Taylor School District

Tecumseh Public Schools

Tekonsha Community Schools

Thornapple Kellogg School District

Three Rivers Community Schools

Traverse City Area Public Schools

Trenton Public Schools

Tri County Area Schools

Troy School District

Ubly Community Schools

Union City Community Schools

Unionville-Sebewaing Area S.D.

Utica Community Schools

Van Buren Public Schools

Van Dyke Public Schools

Vanderbilt Area Schools

Vandercook Lake Public Schools

Vassar Public Schools

Vestaburg Community Schools

Vicksburg Community Schools

Wakefield-Marenisco School District

Waldron Area Schools

Walkerville Public Schools

Walled Lake Consolidated Schools

Warren Consolidated Schools

Warren Woods Public Schools

Waterford School District

Watersmeet Township School District

Watervliet School District

Waverly Community Schools

Wayland Union Schools

Wayne-Westland Community School District

Webberville Community Schools

West Bloomfield School District

West Branch-Rose City Area Schools

West Iron County Public Schools

West Ottawa Public School District

Western School District

Westwood Community School District

Westwood Heights Schools

White Cloud Public Schools
White Pigeon Community Schools
Whitefish Township Schools
Whiteford Agricultural School District of the Counties of Lenawee and Monroe
Whitehall District Schools

Whitmore Lake Public School District
Whittemore-Prescott Area Schools
Williamston Community Schools
Wolverine Community School District

Woodhaven-Brownstown School District
Wyandotte, School District of the City of
Wyoming Public Schools
Yale Public Schools
Ypsilanti Community Schools
Zeeland Public Schools

PSA Districts (100%):

Academic and Career Education Academy
Academy for Business and Technology
Academy of Warren
ACE Academy (SDA)
Achieve Charter Academy
Advanced Technology Academy
AGBU Alex-Marie Manoogian School
Alternative Educational Academy of Iosco County
Alternative Educational Academy of Ogemaw County
American International Academy
American Montessori Academy
Ann Arbor Learning Community
Arbor Academy
Arbor Preparatory High School
Arts Academy in the Woods
Arts and Technology Academy of Pontiac
Augusta Academy
Barack Obama Leadership Academy
Battle Creek Area Learning Center
Battle Creek Montessori Academy
Bay City Academy
Bay-Arenac Community High School
Benton Harbor Charter School Academy
Black River Public School

Blended Learning Academies Credit Recovery High School
Blue Water Middle College
Bradford Academy
Branch Line School
Bridge Academy
Bridge Academy of Southwest Michigan
Burton Glen Charter Academy
Byron Center Charter School
Caniff Liberty Academy
Canton Charter Academy
Canton Preparatory High School
Capstone Academy Charter School (SDA)
Casman Alternative Academy
Center Line Preparatory Academy
Central Academy
Cesar Chavez Academy
Chandler Park Academy
Chandler Woods Charter Academy
Charlevoix Montessori Academy for the Arts
Charlton Heston Academy
Charyl Stockwell Academy
Chatfield School
Clara B. Ford Academy (SDA)
Cole Academy
Commonwealth Community Development Academy
Concord Academy - Boyne
Concord Academy - Petoskey
Conner Creek Academy East
Copper Island Academy

Cornerstone Health and Technology School
Cornerstone Jefferson-Douglass Academy
Countryside Academy
Covenant House Academy Detroit
Covenant House Academy Grand Rapids
Creative Montessori Academy
Creative Technologies Academy
Crescent Academy
Cross Creek Charter Academy
Crossroads Charter Academy
Da Vinci Institute
David Ellis Academy
David Ellis Academy West
Detroit Academy of Arts and Sciences
Detroit Achievement Academy
Detroit Community Schools
Detroit Edison Public School Academy
Detroit Enterprise Academy
Detroit Innovation Academy
Detroit Leadership Academy
Detroit Merit Charter Academy
Detroit Premier Academy
Detroit Prep
Detroit Public Safety Academy
Detroit Service Learning Academy
Distinctive College Prep.
Dove Academy of Detroit
Dr. Joseph F. Pollack Academic Center of Excellence

Eagle Crest Charter Academy

Eagle's Nest Academy

East Arbor Charter Academy

East Shore Leadership Academy

Eaton Academy

Endeavor Charter Academy

Escuela Avancemos

Evergreen Academy

Excel Charter Academy

Faxon Academy

Flagship Charter Academy

Flat River Academy

Flex High School of Michigan

FlexTech High School

Flextech High School Shepherd

Flint Cultural Center Academy

Forest Academy

Fortis Academy

Fostering Leadership Academy

Four Corners Montessori Academy

Francis Reh PSA

Francis Street Primary School

Frontier International Academy

Gateway To Success Academy

GEE White Academy

Genesee STEM Academy

George Crockett Academy

George Washington Carver Academy

Global Heights Academy

Global Preparatory Academy

Global Tech Academy

Grand Blanc Academy

Grand Rapids Child Discovery Center

Grand River Academy

Grand River Preparatory High School

Grand Traverse Academy

Great Lakes Academy

Great Lakes Learning Academy

Great Oaks Academy

Greater Heights Academy

Hamilton Academy

Hamtramck Academy

Hanley International Academy

Henry Ford Academy

Highland Park Public School Academy System

Highpoint Virtual Academy of Michigan

Hillsdale Preparatory School

Holly Academy

Honey Creek Community School

Hope Academy

Hope Academy of West Michigan

Hope of Detroit Academy

Huron Academy

ICademy Global

Inkster Preparatory Academy

Innocademy

Innocademy Allegan Campus

Insight School of Michigan

International Academy of Flint

International Academy of Saginaw

Island City Academy

Ivywood Classical Academy

Jackson Preparatory & Early College

Jalen Rose Leadership Academy

Jefferson International Academy

Joseph K. Lumsden Bahweting Anishnabe Academy

Joy Preparatory Academy

Kensington Woods Schools

Keys Grace Academy

Keystone Academy

Kingsbury Country Day School

Knapp Charter Academy

Lake Superior Academy

Landmark Academy

Lansing Charter Academy

Laurus Academy

Leelanau Montessori Public School Academy

Legacy Charter Academy

LifeTech Academy

Light of the World Academy

Lighthouse Academy

Lighthouse Connections Academy

Linden Charter Academy

Livingston Classical Academy

MacDowell Preparatory Academy

Macomb Academy

Macomb Montessori Academy

Madison Academy

Madison-Carver Academy

Marshall Academy

Martin Luther King, Jr. Education Center Academy

Marvin L. Winans Academy of Performing Arts

Merritt Academy

Metro Charter Academy

Michigan Connections Academy

Michigan Educational Choice Center

Michigan Great Lakes Virtual Academy

Michigan International Prep School

Michigan Mathematics and Science Academy

Michigan Online School

Michigan Preparatory Virtual School

Michigan Virtual Charter Academy

Mid-Michigan Leadership Academy

Mildred C. Wells Preparatory Academy

Momentum Academy

Mt. Clemens Montessori Academy

Multicultural Academy

Muskegon Heights Public School Academy System

Muskegon Montessori Academy for Environmental Change

Nah Tah Wahsh Public School Academy

New Bedford Academy

New Branches Charter Academy

New Dawn Academy of Warren
New Paradigm College Prep
New Paradigm Glazer-Loving
    Academy
NexTech High School
Noor International Academy
North Saginaw Charter Academy
North Star Montessori Academy
Northridge Academy
Oakland Academy
Oakland County Academy of
    Media & Technology
Oakland FlexTech High School
Oakland International Academy
Oakside Scholars Charter
    Academy
Ojibwe Charter School
Old Mission Peninsula School
Old Redford Academy
Orchard Academy
Outlook Academy
Pansophia Academy
Paragon Charter Academy
Paramount Charter Academy
Pathways Academy
Pembroke Academy
Plymouth Educational Center
    Charter School
Plymouth Scholars Charter
    Academy
Pontiac Academy for Excellence
Prevail Academy
Quest Charter Academy
Reach Charter Academy
Regent Park Scholars Charter
    Academy
Regents Academy
Relevant Academy of Eaton
    County
Renaissance Public School
    Academy
Richfield Public School Academy
Ridge Park Charter Academy
Rising Stars Academy
River City Scholars Charter
    Academy

River Heights Academy
Riverside Academy
Rutherford Winans Academy
Saginaw Covenant Academy
Saginaw Learn to Earn Academy
Saginaw Preparatory Academy
Sigma Academy for Leadership
    and Early Middle College
South Arbor Charter Academy
South Canton Scholars Charter
    Academy
South Pointe Scholars Charter
    Academy
Southwest Detroit Community
    School
St. Clair County Intervention
    Academy
Star International Academy
State Street Academy
Success Virtual Learning Centers
    of Michigan
Summit Academy North
Taylor Exemplar Academy
Taylor Preparatory High School
The Dearborn Academy
The Greenspire School
The James and Grace Lee Boggs
    School
The New Standard Academy
The Woodley Leadership
    Academy
Three Lakes Academy
Three Oaks Public School
    Academy
Timberland Academy
Tipton Academy
Trillium Academy
Triumph Academy
Universal Academy
Universal Learning Academy
University Preparatory Academy
    (PSAD)
University Preparatory Art &
    Design
University Preparatory Science
    and Math (PSAD)

University Yes Academy
Uplift Michigan Academy
Vanderbilt Charter Academy
Vanguard Charter Academy
Virtual Learning Academy of St.
    Clair County
Vista Charter Academy
Vista Meadows Academy
Voyageur Academy
Walden Green Montessori
Walker Charter Academy
Walton Charter Academy
Warrendale Charter Academy
Washington-Parks Academy
Washtenaw Technical Middle
    College
Waterford Montessori Academy
W-A-Y Academy
WAY Academy - Flint
WAY Michigan
Wellspring Preparatory High
    School
West MI Academy of Arts and
    Academics
West MI Academy of
    Environmental Science
West Michigan Aviation
    Academy
West Village Academy
Westfield Charter Academy
Weston Preparatory Academy
White Pine Academy
Will Carleton Charter School
    Academy
William C. Abney Academy
Windemere Park Charter
    Academy
Windover High School
Woodland Park Academy
Woodland School
WSC Academy
Youth Advancement Academy

Nonpublic Schools (78%):

Academy of International Studies

Academy of Sacred Heart - BLOOMFIELD HILLS

Acton Academy Ann Arbor (A2) - ANN ARBOR

Ada Christian School - ADA

Adams Christian School - WYOMING

Adelphian Junior Academy - HOLLY

Aim High School - Farmington Hills

Al-Furqan Quran Academy - DETROIT

Algoma Christian School - KENT CITY

Al-Ikhlas Training Academy - DETROIT

All Saints Academy Elementary - GRAND RAPIDS

All Saints Catholic Academy - IRONWOOD

All Saints Catholic School - ALPENA

All Saints Catholic School - CANTON

All Saints Central School - BAY CITY

All Saints Elementary - BAY CITY

Allendale Christian School - ALLENDALE

American International Prep School - Troy

AnchorPoint Christian School - Wyoming

Ann Arbor Academy - ANN ARBOR

Ann Arbor Children's House - ANN ARBOR

Ann Arbor Christian School - ANN ARBOR

Ann Arbor Hills Child Dev. Ctr. - ANN ARBOR

ASA Higher Learning Preparatory - Detroit

Assumption of the Blessed Virgin Mary Catholic School - BELMONT

Auburn Area Catholic School - AUBURN

Auburn Hills Christian School - AUBURN HILLS

Austin Catholic High School - Chesterfield

Baldwin Road Church Academy - PONTIAC

Battle Creek Academy - BATTLE CREEK

Beth Jacob School - OAK PARK

Bethany Christian School - TROY

Bethel Community Education - ROCKFORD

Bethel Lutheran School - Bay City

Bethlehem Lutheran School - SAGINAW

Beverly Hills Academy - Beverly Hills

Birch Grove University Prep - ROCHESTER HLS

Bishop Baraga Catholic School - CHEBOYGAN

Bishop Baraga Catholic School - IRON MOUNTAIN

Bishop Foley Catholic High School - MADISON HEIGHTS

Bloomfield Christian School - Bloomfield Hills

Borculo Christian School - ZEELAND

Bridgeport Baptist Academy - BRIDGEPORT

Brightmont Academy - Birmingham - Birmingham

Brightmont Academy - Plymouth - Plymouth

Brookfield Academy - Livonia

Brookfield Academy - ROCHESTER HILLS

Brookfield Academy - Troy

Brookfield Academy - WEST BLOOMFIELD

Brookview School - BENTON HARBOR

Brother Rice High School - BLOOMFIELD HILLS

Byron Center Christian School - BYRON CENTER

Cabrini High School - ALLEN PARK

Cadillac Heritage Christian - CADILLAC

Calhoun Christian School - BATTLE CREEK

Calvary Baptist Academy - MIDLAND

Calvary Christian Academy - West Branch

Calvary Christian School - FRUITPORT

Calvin Christian Middle School & High School - GRANDVILLE

Cardinal Mooney Catholic School - MARINE CITY

Catholic Central High School - GRAND RAPIDS

Cedar Classical Academy - OKEMOS

Cedar Crest Academy - CLARKSTON

Charlotte Mason Community School - DETROIT

Chesterton Academy of Detroit - CLINTON TWP

Childrens Technological Academy - SOUTHFIELD

Chiquitos Bilingual Montessori (Chiquitos Inc) - UTICA

Christ the King Lutheran School - SOUTHGATE

Christ the King Lutheran-Sebewaing - SEBEWAING

Christ the King Lutheran-Unionville - UNIONVILLE

Christ the King School - DETROIT

Christian Montessori School - ANN ARBOR

Concordia Lutheran South - REDFORD

Conductive Learning Center - Grand Rapids

Cornerstone Christian School - BRIGHTON

Cornerstone Schools Association - DETROIT

Corpus Christi Catholic School - HOLLAND

Covenant Christian High School - GRAND RAPIDS

Covenant Christian School - LUDINGTON

Cranbrook School - BLOOMFIELD HILLS

Crescent Academy International - CANTON

Cross Lutheran School - PIGEON

Cross of Glory Lutheran School - WASHINGTON

Crown of Life Lutheran School - WARREN

Daycroft Montessori School - Ann Arbor

Daycroft School - ANN ARBOR

Dearborn Heights Montessori Center - DEARBORN HEIGHTS

DeLaSalle Collegiate High School - WARREN

Demick School - WARREN

Detroit Catholic Central High School - NOVI

Detroit Christian Schools of Excellence - Detroit

Detroit Country Day

Detroit Cristo Rey High School - DETROIT

Divine Child Elementary School - DEARBORN

Divine Child High School - DEARBORN

Divine Grace Lutheran School - LAKE ORION

Divine Providence Academy - Conklin - CONKLIN

Divine Providence Academy - Ravenna - RAVENNA

Dreamy Islamic Academy - Dearborn Heights

Dutton Christian School - CALEDONIA

Eagle Creek Academy - OAKLAND

Early Impressions - SOUTHFIELD

East Martin Christian School - MARTIN

Eastside Christian School - GRAND RAPIDS

Ebenezer Christian School - ELLSWORTH

Emanuel First Lutheran School - LANSING

Emanuel Lutheran School - TAWAS CITY

Emerson School - ANN ARBOR

Emmanuel Lutheran School - DEARBORN

Escanaba SDA Elementary School - ESCANABA

Eton Academy - BIRMINGHAM

Everest Academy - CLARKSTON

Evergreen Lutheran School - DETROIT

Faith Baptist School - DAVISON

Faith Christian Academy - SOUTHFIELD

Faith Christian Schools - CLINTON TOWNSHIP

Faith Community Christian School - BELDING

Faith Lutheran School - BAY CITY

Faithway Christian Academy - BURTON

Farber Hebrew Day School - Yeshivat Akiva - SOUTHFIELD

Fellowship Baptist Academy - CARSON CITY

First Flint SDA School - FLINT

Fr. Gabriel Richard High School - ANN ARBOR

Fr. Luke M. Powers High School - Flint

Fr. Marquette Catholic School - MARQUETTE

Fr. Marquette Middle School - MARQUETTE

Fremont Christian School - FREMONT

Gabriel Richard Catholic High School - RIVERVIEW

Gagie School - KALAMAZOO

Genesee Academy - SWARTZ CREEK

Genesee Christian School - BURTON

Gesu Elementary School - DETROIT

Gobles Junior Academy - GOBLES

God's Lighthouse - LAMBERTVILLE

Good Shepherd Lutheran School - LAKE ORION

Grace Christian School - SAGINAW

Grace Christian School - WATERVLIET

Grace Lutheran School - SAINT JOSEPH

Grand Blanc Montessori - GRAND BLANC

Grand Haven Christian School - GRAND HAVEN

Grand Rapids Christian Elementary School - Evergreen Campus - Grand Rapids

Grand Rapids Christian Elementary School - Grand Rapids

Grand Rapids Christian High School - GRAND RAPIDS

Grandville Christian School - GRANDVILLE

Grant Christian School - GRANT

Grayling SDA School - GRAYLING

Great Revelations Academy - Dearborn

Greater Lansing Adventist School - LANSING

Greater Lansing Islamic School - EAST LANSING

Greenhills School - ANN ARBOR

Grosse Pointe Academy - GROSSE POINTE FARMS

Guardian Angels School - CLAWSON

Guardian Lutheran School - DEARBORN

Hackett Catholic Prep - KALAMAZOO

Hadi Educational Institute - DEARBORN

Harbor Light Christian School - HARBOR SPRINGS

Hastings SDA School - HASTINGS

Hebrew Day School of Ann Arbor - ANN ARBOR

Heritage Christian Academy - Edwardsburg

Heritage Christian Academy - KALAMAZOO

Heritage Christian School - AUBURN HILLS

Heritage Christian School - HUDSONVILLE

Hillel Day School - FARMINGTON HILLS

Holland Adventist Academy - HOLLAND

Holland Christian High School - HOLLAND

Holt Lutheran Schools - HOLT

Holy Angels Elementary School - TRAVERSE CITY

Holy Cross Catholic School - MARINE CITY

Holy Cross Lutheran School - SAGINAW

Holy Family Regional School - ROCHESTER HILLS

Holy Family School - GRAND BLANC

Holy Ghost Lutheran School - MONROE

Holy Name High School A Chesterton Academy - ESCANABA

Holy Name School - BIRMINGHAM

Holy Name School - ESCANABA

Holy Redeemer Elementary School - DETROIT

Holy Rosary School - FLINT

Holy Spirit Central School - NORWAY

Holy Spirit Roman Catholic School - BRIGHTON

Holy Spirit School - GRAND RAPIDS

Holy Trinity Catholic School - COMSTOCK PARK

Holy Trinity Ev Lutheran School - WYOMING

Hope Protestant Reformed Christian School - GRAND RAPIDS

Howardsville Christian School - MARCELLUS

Huda School and Montessori - FRANKLIN

Huda Upper School - Farmington Hills

Hudsonville Christian School - HUDSONVILLE

Huron Valley Catholic School - YPSILANTI

Huron Valley Lutheran High School - WESTLAND

Immaculate Conception Elementary School - TRAVERSE CITY

Immaculate Conception School - IRA

Immaculate Conception School - THREE RIVERS

Immaculate Conception Ukranian School - WARREN

Immaculate Heart of Mary - Lansing

Immaculate Heart of Mary School - GRAND RAPIDS

Immanuel - St. James Lutheran School - GRAND RAPIDS

Immanuel Lutheran School - ALPENA

Immanuel Lutheran School - BAY CITY

Immanuel Lutheran School - MACOMB

Immanuel Lutheran School - SAGINAW

Inter City Baptist School - ALLEN PARK

Interlochen Arts Academy - Interlochen

Jackson Christian School - JACKSON

Jenison Christian School - JENISON

John Paul II Catholic School - LINCOLN PARK

Kalamazoo Christian High School - KALAMAZOO

Kalamazoo Christian School - KALAMAZOO

Kalamazoo Country Day - PORTAGE

Kazoo School - KALAMAZOO

Ladywood High School-- Detroit - LIVONIA

Lake Michigan Academy - GRAND RAPIDS

Lake Michigan Catholic MS/HS - SAINT JOSEPH

Lake Michigan Catholic School - SAINT JOSEPH

Lake Orion Baptist School - LAKE ORION

Lakes Area Montessori School - Walled Lake

Lamont Christian School - COOPERSVILLE

Lansing Baptist School - LANSING

Lansing Catholic Central High School - LANSING

Lansing Christian School - LANSING

Leelanau School - GLEN ARBOR

Legacy Christian Elementary School - GRAND RAPIDS

Legacy Christian School - GRAND RAPIDS

Lenawee Christian School - ADRIAN

Libertas Christian School - Hudsonville

Light of Christ Academy - AUGUSTA

Living Stones Academy - Grand Rapids

Livingston Christian Schools - BRIGHTON

Loyola High School - DETROIT

Ludington Area Catholic School - LUDINGTON

Lumen Christi Catholic School - JACKSON

Lutheran High School NW - ROCHESTER HILLS

Lutheran High School-North - MACOMB

Macomb Christian Schools - WARREN

Manistee Catholic Central Schools - MANISTEE

Maple Tree Montessori Academy - BRIGHTON

Maria Montessori Center - FARMINGTON HILLS

Marian High School - BLOOMFIELD HILLS

Marquette SDA School - NEGAUNEE

Martin Luther High School - LANSING

Meadow Montessori School - MONROE

Mercy High School - FARMINGTON HILLS

Michigan Islamic Academy - ANN ARBOR

Michigan Lutheran High School - SAINT JOSEPH

Michigan Montessori International Ctr. - OKEMOS

Midland Christian School - MIDLAND

Moline Christian School - MOLINE

Monroe Catholic ES - St. John Campus - MONROE

Monroe Catholic ES - St. Mary Campus - MONROE

Monroe Catholic ES - St. Michael Campus - MONROE

Montessori Childrens Academy - CLINTON TOWNSHIP

Montessori Children's Center - KALAMAZOO

Montessori Children's Center of Allen Park, Inc. - Allen Park

Montessori Childrens House - LANSING

Montessori Children's House, Grand Traverse - TRAVERSE CITY

Montessori Society of Greater G.R. - GRAND RAPIDS

Montessori Stepping Stones - MOUNT CLEMENS

Most Holy Trinity School - DETROIT

Most Holy Trinity School - FOWLER

Mt. Pleasant SDA School - MOUNT PLEASANT

Muskegon Catholic Central

Muskegon Christian School - MUSKEGON

Muslim American Youth Academy - DEARBORN

ND Marist Acade. Middle Div. - PONTIAC

ND Marist Academy-Lower Div. - Pontiac

New Era Christian School - NEW ERA

New Life Christian Academy - KIMBALL

New Morning School - PLYMOUTH

Niles SDA School - NILES

Noor Academy - ROCHESTER HLS

Northern Michigan Christian School - MC BAIN

NorthPointe Christian School - GRAND RAPIDS

Northville Christian School - NORTHVILLE

Nouvel Catholic Central Elementary - SAGINAW

Nouvel Catholic Central High School - SAGINAW

Novi Christian Academy - NOVI

Oakland Children's Academy - TROY

Oakland Christian School - AUBURN HILLS

Oakwood christian Preschool and Daycare - BELDING

Oceana Christian School - HART

Oholei Yosef Yitzchak Lubavitch - Oak Park

One School Global - Bloomfield Hills

Otsego Christian School - GAYLORD

Our Lady of Consolation School - ROCKFORD

Our Lady of Good Counsel School - PLYMOUTH

Our Lady of Lake Huron School - HARBOR BEACH

Our Lady of Refuge School - ORCHARD LAKE

Our Lady of Sorrows School - FARMINGTON HILLS

Our Lady of the Lake School - PRUDENVILLE

Our Lady of the Lakes School - WATERFORD

Our Lady of Victory School - NORTHVILLE

Our Lady Queen of Martyrs School - BEVERLY HILLS

Our Lady Star of the Sea School - GROSSE POINTE WOODS

Our Savior Lutheran School - GRAND RAPIDS

Our Savior Lutheran School - HARTLAND

Our Savior Lutheran School - LANSING

Our Savior Lutheran School - MARLETTE

Our Shepherd Lutheran School - BIRMINGHAM

Parkway Christian School - STERLING HEIGHTS

Peace Lutheran School - LIVONIA

Peace Lutheran School - SAGINAW

Peace Lutheran School - SHELBY TOWNSHIP

Peterson-Warren Academy - INKSTER

Pine Mountain Christian School - IRON MOUNTAIN

Pinecrest School - HALE

Plymouth Christian Academy - CANTON

Plymouth Christian Elementary School - GRAND RAPIDS

Plymouth Christian High School - GRAND RAPIDS

Potters House High School - WYOMING

Potters House School - WYOMING

Precious Angels Christian Academy - CHESTERFIELD

Queen of Miraculous Medal School - JACKSON

Red Hill Montessori - FARMINGTON HILLS

Reformed Heritage Christian School - KALAMAZOO

Regina High School - WARREN

Resurrection School - LANSING

Rochester Hills Christian - ROCHESTER HILLS

Rockford Christian School - ROCKFORD

Roeper City and Country Elementary School - BLOOMFIELD HILLS

Roeper City and Country Upper - BIRMINGHAM

Roots Montessori - PLYMOUTH

Rose Park Christian School - HOLLAND

Rudolf Steiner High School - Ann Arbor

Rudolf Steiner School of Ann Arbor - ANN ARBOR

Sacred Heart Academy - GRAND RAPIDS

Sacred Heart Academy - MOUNT PLEASANT

Sacred Heart School - DEARBORN

Sacred Heart School - HUDSON

Sacred Heart School - MOUNT PLEASANT

Saginaw Chippewa Indian Tribe of Michigan - MOUNT PLEASANT

Saint John Paul II Catholic Academy - MENOMINEE

San Juan Diego Academy - Wyoming

School of Love - DETROIT

Schoolhouse Montessori Academy - Canton

Shajara Tayyiba School - Canton

Shepherd of the Lakes Lutheran School - BRIGHTON

Shrine Catholic Grade School - ROYAL OAK

Shrine Catholic High School & Academy - ROYAL OAK

South Christian High School - BYRON CENTER

South Olive Christian School - HOLLAND

South Side Christian School - HOLLAND

Southfield Christian School - SOUTHFIELD

Spiritus Sanctus Academy - ANN ARBOR

Spiritus Sanctus Academy - PLYMOUTH

Springfield Christian Academy - CLARKSTON

SS. Peter and Paul School - IONIA

St. Ann School - CADILLAC

St. Anne Catholic Grade School - WARREN

St. Anthony of Padua School - GRAND RAPIDS

St. Augustine Catholic School - RICHMOND

St. Bartholomew Lutheran School - KAWKAWLIN

St. Basil School - SOUTH HAVEN

St. Brigid Catholic School - MIDLAND

St. Catherine of Siena Academy - WIXOM

St. Charles Borromeo Catholic School - COLDWATER

St. Charles Catholic School - GREENVILLE

St. Charles School - NEWPORT

St. Clare of Montefalco School - GROSSE POINTE PARK

St. Edith Catholic School -

St. Edward Child Care - LAKE ODESSA

St. Edward on the Lake School - LAKEPORT

St. Elizabeth Catholic School - REESE

St. Fabian Catholic School - FARMINGTON HILLS

St. Frances Cabrini School - ALLEN PARK

St. Francis de Sales School - MANISTIQUE

St. Francis High School - TRAVERSE CITY

St. Francis of Assisi School - ANN ARBOR

St. Francis Xavier School - PETOSKEY

St. Gerard School - LANSING

St. Germaine Elementary School - SAINT CLAIR SHORES

St. Hugo of the Hills School - BLOOMFIELD HILLS

St. Ignatius Catholic School - ROGERS CITY

St. Isaac Jogues Catholic School - SAINT CLAIR SHORES

St. Joan of Arc School - SAINT CLAIR SHORES

St. John Ev Lutheran School - PIGEON

St. John Lutheran School - BAY CITY

St. John Lutheran School - FRASER

St. John Lutheran School - NEW BOSTON

St. John Lutheran School - ROCHESTER

St. John Lutheran School - ROGERS CITY

St. John the Evangelist School - FENTON

St. John the Evangelist School - JACKSON

St. John Vianney School - FLINT

St. John Vianney School - WYOMING

St. John's Evangelical Lutheran School - WESTLAND

St. Johns Lutheran Amelith - BAY CITY

St. Johns Lutheran School - GRAND HAVEN

St. John's Lutheran School - MIDLAND

St. Joseph Catholic School - ERIE

St. Joseph Catholic School - LAKE ORION

St. Joseph Elementary School - BATTLE CREEK

St. Joseph Middle School - BATTLE CREEK

St. Joseph School - HOWELL

St. Joseph School - PEWAMO

St. Joseph School - SAINT JOHNS

St. Joseph School - TRENTON

St. Joseph School - WEST BRANCH

St. Joseph the Worker School - MOUNT PLEASANT

St. Joseph's School - WAYNE

St. Lawrence School - UTICA

St. Linus School - DEARBORN HEIGHTS

St. Lorenz Lutheran School - FRANKENMUTH

St. Martha School - OKEMOS

St. Mary Assumption School - BRONSON

St. Mary Cathedral School - GAYLORD

St. Mary Catholic Central High School - MONROE

St. Mary Catholic School - SAULT SAINTE MARIE

St. Mary Catholic School - SPRING LAKE

St. Mary School - ALMA

St. Mary School - BIG RAPIDS

St. Mary School - CHARLEVOIX

St. Mary School - CHARLOTTE

St. Mary School - LAKE LEELANAU

St. Mary School - Mount Clemens

St. Mary School - NILES

St. Mary School - PINCKNEY

St. Mary School - ROYAL OAK

St. Mary School - WAYNE

St. Mary School - WILLIAMSTON

St. Mary Star of the Sea School - JACKSON

St. Mary/McCormick Catholic Academy - PORT HURON

St. Mary's of Hannah School - KINGSLEY

St. Mary's Preparatory School - ORCHARD LAKE

St. Mary's Visitation School - BYRON CENTER

St. Matthew Lutheran School - WALLED LAKE

St. Matthew Lutheran School - WESTLAND

St. Michael Academy - Petoskey

St. Michael Lutheran School - RICHVILLE

St. Michael Lutheran School - WAYNE

St. Michael School - GRAND LEDGE

St. Michael School - LIVONIA

St. Michael School - REMUS

St. Michael's Lutheran School - PORTAGE

St. Monica School - KALAMAZOO

St. Patrick School - ADA

St. Patrick School - BRIGHTON

St. Patrick School - CARLETON

St. Patrick School - WHITE LAKE

St. Patrick's School - PORTLAND

St. Paul Lutheran School - ANN ARBOR

St. Paul Lutheran School - BAY CITY

St. Paul Lutheran School - FLINT

St. Paul Lutheran School - LAPEER

St. Paul Lutheran School - LIVONIA

St. Paul Lutheran School - MILLINGTON

St. Paul Lutheran School - NORTHVILLE

St. Paul Lutheran School - ROYAL OAK

St. Paul Lutheran School - SAGINAW

St. Paul Lutheran School - SOUTH HAVEN

St. Paul School - GROSSE POINTE FARMS

St. Paul School - OWOSSO

St. Paul The Apostle School - GRAND RAPIDS

St. Paul's Lutheran School - STEVENSVILLE

St. Peter Lutheran School - BIG RAPIDS

St. Peter Lutheran School - EASTPOINTE

St. Peter Lutheran School - HEMLOCK

St. Peter Lutheran School - MACOMB

St. Peter Lutheran School - SAINT JOHNS

St. Peter's Lutheran School - RICHMOND

St. Philip Catholic Central High School - BATTLE CREEK

St. Pius Catholic School - SOUTHGATE

St. Regis School - BLOOMFIELD HILLS

St. Robert Bellarmine School - FLUSHING

St. Robert Catholic School - ADA

St. Rose of Lima Catholic School - HASTINGS

St. Stephen Elementary School - NEW BOSTON

St. Stephen Lutheran School - ADRIAN

St. Stephen School - GRAND RAPIDS

St. Thecla Catholic School - CLINTON TOWNSHIP

St. Therese Catholic School - WAYLAND

St. Thomas Aquinas School - EAST LANSING

St. Thomas the Apostle School - ANN ARBOR

St. Thomas the Apostle School - GRAND RAPIDS

St. Valentine School - REDFORD

St. William Catholic School - WALLED LAKE

State Line Christian School - TEMPERANCE

Stepping Stones Montessori School - EAST LANSING

Tawheed Center of Detroit School - Dearborn Heights

Temple of Faith Day Care Kindergarten - DETROIT

The Goddard School - MACOMB

The Jean and Samuel Frankel Jewish Academy - WEST BLOOMFIELD

The Montessori School Rochester - ROCHESTER HLS

The Pathfinder School, Inc. - TRAVERSE CITY

Traverse City Christian School - TRAVERSE CITY

Traverse City SDA School - TRAVERSE CITY

Trinitas Classical Association - Grand Rapids

Trinity Ev Lutheran School - BAY CITY

Trinity Lutheran Monitor - BAY CITY

Trinity Lutheran School - BERRIEN SPRINGS

Trinity Lutheran School - CLINTON TOWNSHIP

Trinity Lutheran School - CONKLIN

Trinity Lutheran School - JACKSON

Trinity Lutheran School - MANISTEE

Trinity Lutheran School - MONROE

Trinity Lutheran School - PAW PAW

Trinity Lutheran School - REED CITY

Trinity Lutheran School - REESE

Trinity Lutheran School - SAINT JOSEPH

Trinity Lutheran School - STURGIS

Trinity Lutheran School - TRAVERSE CITY

Trinity Lutheran School - UTICA

Tri-Unity Christian Elementary School - Wyoming

Tri-Unity Christian Middle/High School - Wyoming

Troy Academy of STEM - TROY

Troy Adventist Academy - TROY

Unity Christian High School - HUDSONVILLE

University of Detroit Jesuit - DETROIT

University-Liggett School - GROSSE POINTE WOODS

Upland Hills School - OXFORD

Valley Lutheran High School - SAGINAW

Village SDA Elementary School - BERRIEN SPRINGS

Waldorf School Assn. of Michigan - DETROIT

Warren SDA Junior Academy - WARREN

Warren Woods Christian School - WARREN

Washtenaw Christian Academy - SALINE

Waterford Adventist School - WATERFORD

West Catholic High School - GRAND RAPIDS

West Michigan Lutheran High School - Wyoming

West Shore Lutheran School - MUSKEGON

West Side Christian School - GRAND RAPIDS

Western Michigan Christian High School - MUSKEGON

Westland Christian Academy - WESTLAND

Westshore Christian Academy - NORTON SHORES

Westside Christian Academy - REDFORD

White Pine Montessori Children's Center - MT PLEASANT

WISE Academy - Dearborn Heights

Wixom Christian School - WIXOM

Yeshiva Beth Yehudah School - SOUTHFIELD

Yeshivas Darchei Torah - SOUTHFIELD

Zeeland Christian School - ZEELAND

Zion Christian School - BYRON CENTER

Zion Lutheran Beaver School - AUBURN

Zion Lutheran School - BAY CITY

Zion Lutheran School - HARBOR BEACH

Zion Lutheran School - MONROE

Figure 8. 2022-23 Michigan Virtual ISD, LEA, PSA Districts and Nonpublic Schools with Professional Learning Enrollments
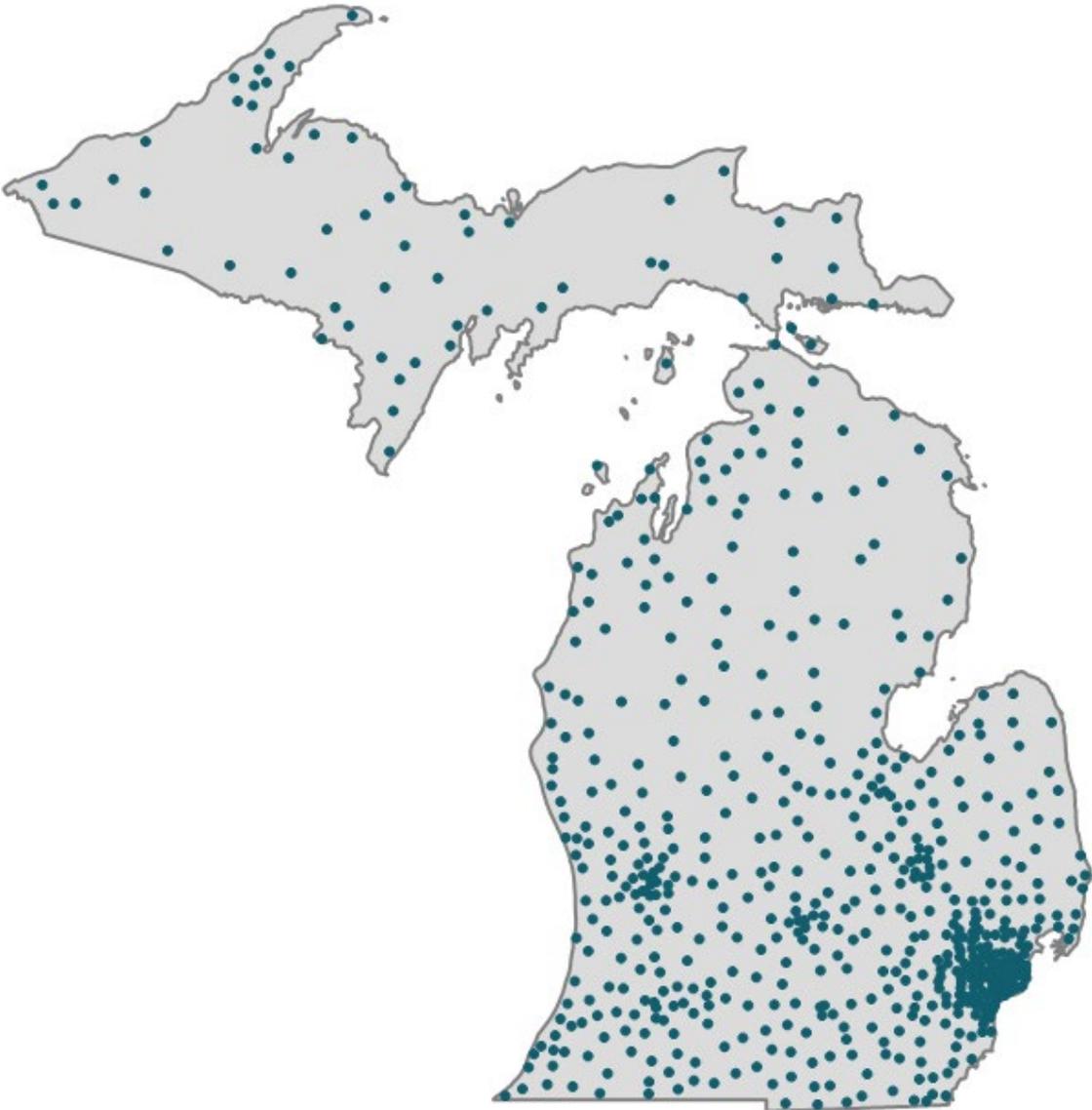
Endnotes

[1] To read more about the new strategic plan, please visit https://michiganvirtual.org/strategic-planning/

[2] Statistics cited from *Michigan's K-12 Virtual Learning Effectiveness Report, 2021-22* available at https://michiganvirtual.org/research/publications/michigans-k-12-virtual-learning-effectiveness-report-2021-22/

[3] See the *Michigan Merit Curriculum Guidelines: Online Experience* document available at https://www.michigan.gov/documents/mde/Online10.06_final_175750_7.pdf

[4] A full text version of Section 21f is available at http://legislature.mi.gov/doc.aspx?mcl-388-1621f

[5] The statewide catalog of online courses can be found at https://micourses.org

[6] Center for Educational Performance and Information Detailed Entity Search is available at https://cepi.state.mi.us/eem/EntitySearchDetailed.aspx

[7] The statewide virtual learning pass rate of 69% comes from Michigan's K-12 Virtual Learning Effectiveness Report, 2021-22 available from https://michiganvirtual.org/er21-22

[8] Street Data and Empathy: Revealing What Educators Truly Want From Professional Learning is available at https://michiganvirtual.org/blog/street-data-and-empathy/

[9] The *National Standards for Quality Online Courses* are available at https://www.nsqol.org/thestandards/quality-online-courses/. While these standards were designed specifically for K-12 student learners, many remain applicable for adult audiences.

[10] People can submit a help desk ticket at https://help.michiganvirtual.org/support/tickets/new/

[11] *Michigan Virtual's* web page detailing its professional learning online course standards and steps for filing a complaint is available at https://michiganvirtual.org/pls-standards/

[12] The Future of Learning Council's website is https://futureoflearningcouncil.org/

[13] More information on this partnership can be found at https://michiganvirtual.org/sro

[14] Detailed information related to this legislation can be found at http://www.legislature.mi.gov/(S(hlzdyoz1sxazt2dpxc1wq3nm))/mileg.aspx?page=GetObject&objectname=mcl-388-1698

[15] *How Will Artificial Intelligence Change Education? Let's Ask and AI to Find Out* ... is available at https://michiganvirtual.org/blog/how-will-artificial-intelligence-change-education/

[16] *ChatGPT and the Future of Digital Learning* is available at https://www.digitallearningcollab.com/blog/2023/2/2/chatgpt-and-the-future-of-digital-learning

[17] *AI in Education: What You Need to Know About This Game-Changing Technology* is available at https://michiganvirtual.org/blog/ai-in-education-what-you-need-to-know-about-this-game-changing-technology/

[18] *Designing For The Future With AI: Lessons Learned in Curriculum Development* is available at https://michiganvirtual.org/blog/designing-for-the-future-with-ai-lessons-learned-in-curriculum-development/

[19] *AI's Growing Role in Education: Top 5 Predictions From Michigan School Leaders* is available at https://michiganvirtual.org/blog/ais-growing-role-in-education-top-5-predictions-from-michigan-school-leaders/

[20] *How AI Tools are Impacting Digital Learning* is available at https://www.digitallearningcollab.com/blog/2023/8/17/how-ai-tools-are-impacting-digital-learning

[21] *Michigan Virtual's Artificial Intelligence (AI) Integration Framework for School Districts* is available at https://michiganvirtual.org/wp-content/uploads/2023/07/AI-Integration-Framework-for-School-Districts.pdf

[22] *Examining Mentors' Navigation of Online Environments and Use of Student Support Practices* is available at https://michiganvirtual.org/research/publications/examining-mentors-navigation-of-online-environments

[23] *Shared Space and Time,* is available at https://michiganvirtual.org/research/publications/shared-space-and-time/

[24] *Innovative Approaches to Online CTE* is available at https://michiganvirtual.org/research/publications/innovative-approaches-to-online-cte-lessons-from-missouri-idaho-and-arkansas/

[25] The *Quality Online Program Standards* are available at https://www.nsqol.org/the-standards/quality-online-programs/

[26] The *National Standards for Quality Online Learning* are available at https://www.nsqol.org/

[27] The *Effectiveness Report* is available at https://michiganvirtual.org/er21-22

[28] View the *Effectiveness Report* infographic at https://michiganvirtual.org/wp-content/uploads/2023/03/Effectiveness-Report-At-A-Glance-Infographic.pdf

[29] View the Effectiveness Report presentation at https://www.youtube.com/watch?v=jXgSy7bFb6Q&feature=youtu.be

[30] *Guides to Online Learning* are available at https://michiganvirtual.org/resources/guides/

[31] *The First Weeks in an Online Course: Differences Across Schools* is available at https://michiganvirtual.org/research/publications/first-weeks-in-an-online-course/

[32] *Mapping the Mentorship Landscape: Insights on Mentoring in Different School* Settings is available at https://michiganvirtual.org/blog/mapping-the-mentorship-landscape-insights-on-mentoring-in-different-school-settings/

[33] *Examining Mentors' Navigation of Online Environments and Use of Student Support Practices* is available at https://michiganvirtual.org/research/publications/examining-mentors-navigation-of-online-environments-and-use-of-student-support-practices/

[34] *What Do We Mean When We Say Student Centered Learning?* Is available at https://michiganvirtual.org/research/publications/what-do-we-mean-when-we-say-student-centered-learning/

[35] *Insights into the Effectiveness of Student-Centered Learning in K-12 Education* is available at https://michiganvirtual.org/research/publications/insights-into-scl/

[36] *Making Learning "Sticky" Through A Work- and Project-Based Program at Hamilton Community Schools* is available at https://michiganvirtual.org/research/publications/making-learning-sticky/

[37] *From Seat Time to Mastery: Competency-Based Education at Fraser Public Schools* is available at https://michiganvirtual.org/research/publications/cbe-at-fraser-public-schools/

[38] *Tailoring Learning for Teachers: The Power of Personalized Professional Development* is available at https://michiganvirtual.org/research/publications/the-power-of-personalized-professional-development/

[39] The Clearinghouse website is available at http://k12onlineresearch.org/

[40] The Winter 2022 Clearinghouse Newsletter is available at https://mail.michiganvirtual.org/winter-2022-quarterly-research-clearinghouse-newsletter

[41] The Spring 2023 Clearinghouse Newsletter is available at https://mail.michiganvirtual.org/spring-2023-quarterly-research-clearinghouse-newsletter

[42] The Summer 2023 Clearinghouse Newsletter is available at https://mail.michiganvirtual.org/summer-2023-quarterly-research-clearinghouse-newsletter-1

[43] The Fall 2023 Clearinghouse Newsletter is available at https://mail.michiganvirtual.org/fall-2023-%F0%9F%93%8A-quarterly-research-clearinghouse-newsletter

[44] The Research Clearinghouse is available at https://k12onlineresearch.org/

[45] View the National Standards professional learning courses at https://plp.michiganvirtual.org/?keyword=nsq

[46] Michigan's Online Course Catalog, also known as Micourses, is available at https://micourses.org/

[47] View the National Standards professional learning courses at https://plp.michiganvirtual.org/?keyword=nsq

[48] 21f resources are available at https://michiganvirtual.org/resources/21f/

[49] Knowledge base articles for Michigan's Online Course Catalog can be accessed through the *Michigan Virtual* website at https://help.michiganvirtual.org/support/solutions/articles/65000174495-michigan-s-onlinecoursecatalog

[50] The *National Standards for Quality Online Teaching* are available at https://www.nsqol.org/the-standards/quality-online-teaching/

[51] The crosswalk document can be downloaded at https://www.nsqol.org/nsq-online-resources/teaching-danielson-fft-crosswalk/

[52] The statewide virtual pass rate for 2021-22 is published in *Michigan's K-12 Virtual Learning Effectiveness Report 2021-22* available at https://michiganvirtual.org/er21-22/

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