Update to Costing Out the Base Resources Needed to Meet Michigan's Standards and Requirements

Prepared for the

Michigan School Finance Collaborative

By

Augenblick, Palaich and Associates

2021

Introduction

In 2017, the School Finance Resource Collaborative (SFRC) contracted with Augenblick, Palaich and Associates (APA) to conduct a costing out study to estimate the resources needed in Michigan to allow students, teachers, schools, and districts to meet state standards. The study utilized two nationally recognized costing out approaches, the professional judgment (PJ) and evidence-based (EB) approaches. The PJ approach relies on the experience and expertise of educators in the state to identify the resources needed to ensure that all districts, schools, and students can meet state standards and requirements. Resources include school-level personnel, non-personnel costs, additional supports and services, technology, and district-level resources. The EB approach uses information from research that can be used to define the resource needs of a prototypical school or district to ensure that the school or district can meet state standards. The approach not only estimates resource levels but also specifies the programs and strategies through which such resources could be used efficiently. APA's 2018 report, *Costing Out the Resources Needed to Meet Michigan's Standards and Requirements*, describes in detail the study process and results*.*

The 2018 study engaged hundreds of educators from across the state in a series of PJ and EB panels, focused on identifying the resources needed to meet standards at the school- and district-level in a series of hypothetical schools and districts. These resources include personnel (teachers, student support staff, administrative staff, etc.), additional supports and services, and non-personnel costs such as supplies/materials and technology. The identified resources from the PJ approach for the largest hypothetical school and district sizes (which are the basis for the base cost figure identified below) are shown in Appendix II.

The study results provided a detailed set of student and district adjustments for Michigan schools. Student adjustments were identified for special education students, poverty students, and English learners (EL). District adjustments were identified to account for differences in district size and cost-of-living. All adjustments are benchmarked off a base cost figure. The base cost represents the amount of funds needed to serve a student with no special needs in a district with no special circumstances.

Table 1 shows the results from the 2018 report. The base cost figure shown is for a local education agency (LEA) that only funds a defined benefit educator retirement program.[1]

---

[1] APA's report provided differing base costs related to the different educator retirement rates LEAs face in Michigan. This was done to ensure only real costs LEAs face are included in the costing out figures. This report will focus on updating the defined benefit base cost figure, Appendix IV will provide base cost figures for other retirement cost rates.

Table 1

2018 Final Recommendations	
Base	$9,590
Size Adjustment	Adjusted by Formula
Poverty Weight	0.35
ELL	
WIDA 1-2	0.70
WIDA 2-3	0.50
WIDA 5-6/FELS	0.35
Special Education	
Mild	0.70
Moderate	1.15
Severe	State Reimbursed
Preschool	$14,155
Isolation	0.04

In early 2021, the SRFC contacted APA to conduct an update of the 2018 study. Though it has only been three years since the initial study, changes to state standards, increasing understanding of the resources needed to meet standards, changes in pricing, and the COVID-19 pandemic, all provide a strong case to update the costing out estimates.

With the given time and resources, APA proposed focusing the update on the base cost figure for the study. This allows the overall system to be updated since, as mentioned above, all other components of the recommendations are benchmarked off the base cost. The base cost figure for the 2018 study is the per pupil figure for a large district (13,590 students), which represents the lowest cost point.

APA implemented the following steps to update the base cost figure:
- Identified possible changes to state standards and areas of change in resource utilization in districts.
- Worked with a panel of educators to review the possible changes and finalize the areas to examine during this update.
- Held a CFO panel to examine district level costs and pricing changes.
- Held an instructional panel to identify any changes in resources needed at the school level.
- Costed out the new per pupil base figure.

Possible Changes
In identifying the possible changes, the APA study team examined any changes to state standards, areas reviewed in the previous study for which educators might have a better understanding of resource

needs today, and any changes brought on by the recent pandemic that may lead to ongoing changes to educational practice.

The study team reviewed all education-related legislative bills from the last three years to better understand legislative changes that impact districts, including any new academic or non-academic changes to the state's educational standards. The study team also reviewed major program pages of the Michigan Department of Education website to understand how changes were being implemented. The team then spoke to Craig Thiel from Citizen's Research Council to review identified areas of change and to understand any additional Michigan context.

The study team also reviewed the revised set of state standards and requirements (referred to as the MI standard) with a panel made up of three school district superintendents and three district chief financial officers (CFOs). Panelists reviewed and made a number of edits, allowing APA to create the final MI standard used for this report's update (which can be found in Appendix I). Panelists also identified the resource areas they believe needed to be revisited based on evolving understanding of content areas since 2017 or changes in resource utilization.

The Read By Grade Three (RBG3) and Career Technical Education (CTE) standards were identified as two areas where changes may have occurred impacting the resource needs for Michigan schools and districts. RBG3 was in the midst of implementation during the current study, and full implementation has been delayed due to a lack of testing. The CTE standard in 2018 was based on the 2017 Executive Directive to Implement Recommendations of the Career Pathway Alliance. This new directive, guided much of the CTE conversation during the original study.

With regard to impacts caused by the COVID-19 pandemic, the study team identified technology hardware and support, social emotional health, and maintenance and operations costs as possible resource areas with long-term, direct impacts due to COVID. These areas were identified based on information brought forth nationally and the study team's review of the 2018 Michigan study resources.

Areas Identified for Review and Potential Update

An initial panel met to review the possible changes list created by the study team, to identify any other areas of possible change, and to finalize the scope of review for the CFO and Instructional Panels. One specific area panelists felt merited additional review was the long-term changes that may result from the pandemic. The identified focus areas for each panel were:

Areas for Review by the Instructional Panel
- Elementary Instructional staffing in light of implementation of the Read by Grade Three law
- Instructional Technology and Staffing
- Local Assessment Capacity
- Social Emotional Learning Supports

Areas for Review by the CFO Panel

- Technology Support Levels
- Custodial and Maintenance and Operations
- Substitute Teachers, both level of compensation and number of days per teacher
- Salaries, particularly for support staff
- Benefits

The panelists also identified expenses related specifically to the COVID-19 pandemic that are currently impacting district budgets. However, panelists agreed that these costs should not be included in a long-term funding formula. A list of concerns and cost areas related to COVID-19 that were raised during the panel meetings can be found at the end of the report.

Adjustments Made by the CFO Panel

The CFO Panel looked the above tasked areas for review ; as well as the following additional areas:

- Capital Improvement/Long Term Maintenance
- Textbooks
- Assessments
- Software
- Professional Development
- Insurance

The CFO Panel's work on each of these listed categories is described in greater detail below.

Maintenance and Operations

In the previous study, Maintenance and Operations (M&O) for the large district were costed at $1,100 per student. The CFO panelists analyzed their current M&O expenses. Although current M&O expenses are significantly higher due to COVID-related M&O expenditures, some of those increased costs are likely to remain long-term. For example, many districts have made improvements to or replaced HVAC systems, including utilizing more expensive filters than in years past. While those initial capital equipment costs are not reflected in ongoing M&O, the increased cost for upgraded filters, increased electricity usage, and related expenses will remain. The CFO Panel recommended a 15 percent increase in M&O costs, increasing the per student figure to $1,265.

Textbooks

The panel discussed the previous study's identified cost for textbooks ($120 per student) and whether an adjustment should be made. Although many districts are utilizing digital textbooks, teachers generally still prefer to have hard copies of textbooks available in the classroom and districts continue to purchase both hard copy textbooks as well as digital textbooks. As such, the panel recommended maintaining the $120 per student amount from the previous study.

Assessments

The previous study included a $30 per student cost for assessments. CFOs confirmed a heavy reliance on local assessments, and expect this reliance to continue after the pandemic, as those assessments provide schools with real-time data to inform instruction. The CFO Panel did not make a recommendation to change the per student figure, but instead recommended that the instructional panel review the level of personnel needed at the district- and school- levels to conduct assessments and to interpret assessment data.

Software

The previous base cost figure from APA's 2018 study included $100 per student for software purchases and licenses. Particularly with the increase in remote learning during the pandemic, districts have invested heavily in software. Many districts fully converted to paid, district-wide, online learning management systems. Now that those systems are in place, they are unlikely to be eliminated, even in post-pandemic education. Additionally, schools have utilized more software programs during the course of classroom instruction than during the previous study. Based on actual district expenditures for software, the CFO Panel recommended increasing software costs by $50, resulting in a new cost of $150 per student.

Substitute Teachers

APA's 2018 study included a cost allocation of 10 days per teacher for substitutes. CFO panelists felt that, due to the pandemic, there has been a clear shift in culture around staying home when teachers are not feeling well. CFOs expect this shift will last beyond the pandemic, making the 10 day per teacher figure too low. CFOs agreed that increasing the figure to 13 substitute days per teacher, per year is more accurate.

In addition to the number of substitute days per teacher, CFOs noted an increase in the daily rates districts must pay for substitutes since the prior study recommended substitute pay at $100 per day. While many districts are currently paying COVID-related incentives to help attract substitutes, those will be eliminated post-pandemic, and are not considered in the on-going base cost. However, as minimum wages and wages nationally increase, districts must increase their daily substitute rate to attract subs. Districts must also pay an 18 percent fee on top of the salary paid to the substitute. CFOs recommended increasing the all-in rate (including the 18 percent fee) to $150 per day to more accurately reflect actual substitute costs.

Technology

The CFO Panel reviewed the level of technology staffing provided in the previous study for IT Technicians (hardware/software "fix it" support) and Technology Specialists (instructional staff support to help teachers integrate technology in the classroom). It is important to note the 2018 study was built assuming provision of 1:1 student electronic devices, staff devices, and at least one computer lab per building. The large district (roughly 13,000 students) was staffed at 26 IT Technicians – 20 at the school-level, 6 at the district – and 15 school-level Technology Specialists. The IT technicians were staffed at 1 per 523 students, which CFOs felt was an appropriate level given the number of devices in the district.

CFOs recommended a review of the Technology Specialist staffing level with the Instructional panel, as CFOs believed many teachers prefer peer-to-peer professional development on these topics, rather than an IT person.

Salaries and Benefits

For the 2018 study, the APA team had challenges gathering teacher salary information– the only information that was accessible was the Form 1014 salary information for teachers. As a result, APA looked at other states' actual salary costs and built a relative level for each position in relation to teacher salaries (for example, a counselor salary was, on average, 106 percent of the average teacher salary in other states, so for using the Michigan average teacher salary of $62,130 the counselor salary in the study was set at 106 percent of that, or $65,931). APA outlined options for identifying salaries in this current study, and CFOs confirmed that for consistency and validity, APA should continue to use the previous study's methodology for costing out salaries.

The CFO Panel also reviewed the benefit amounts used in the prior study calculation. The previous benefit amount was $12,000, which the panel agreed is too low based on current benefit costs. The study team worked with SFRC members to come up with a new benefit amount of $16,500.

In terms of specific position salary levels, using the 2018-19 statewide average teacher salary increases in Michigan, the teacher salary used in this study from $61,875 to $62,130. Panel discussion around the average teacher salary noted that as more experienced teachers retire, districts often replace them with less-experienced, less costly teachers which brings the average cost down. However, districts have been increasing starting teacher pay to attract candidates. CFOs noted there are also regional differences in teacher salaries.

CFOs felt salaries for aides in Michigan have increased beyond the average ratio comparison to teacher salaries in other states, as districts must pay aides more in order to attract candidates, particularly with increasing minimum wages. The CFOs recommended a 5 percent increase over the 2018 study in the following categories: Media Aide, Instructional Aide, 504 Aide, Health Aide, Paraprofessional, Duty Aide and Bus Driver. The IT Technician position was costed out in the previous study at a $52,961 salary. The CFO Panel increased that salary to $60,000 as that is what the position is requiring, due to competitive salaries in other sectors.

Adjustments Made by the Instructional Panel

The Instructional Panel examined the large district's school-level resources and was tasked with looking at resource levels in several areas: elementary level instructional staffing, pupil support staffing at all levels, assessment staffing at all levels, and technology staffing at all levels.

Elementary Instructional Personnel

The panel was asked to review elementary personnel resources, as the Read By Grade Three (RBG3) was recently-enacted legislation at the time of the previous study panels, and elementary staffing levels in the early elementary grades may have been influenced by perceptions about how the law might be implemented. The panel reviewed the previous elementary staffing levels, with student-teacher ratios

of 20:1 in kindergarten through third grade, and 25:1 in grades 4 and 5. In the 390-student elementary school, two instructional coaches and one teacher tutor are also funded. The panel believed schools are seeing an increased value of instructional coaches, and believed at a base level, the staffing ratios, with the instructional coaches and tutor, were appropriate. The panel recommended no changes to the elementary instructional staffing levels.

Pupil Support Staff

Elementary School Pupil Support Staff. The panel discussed the level of pupil support staff provided in the 2018 APA study to address students' social emotional needs. While the previous study divided non-health pupil support staff among multiple positions (counselors, psychologist, social worker, and behavior interventionist), the combined positions provided approximately 2.0 FTE in pupil support staff for the 390-student elementary school, which that panel felt was reasonable for the base, given that additional pupil support resources are available when students with additional needs are added. For the health staff, the previous study included 0.2 nurse positions and 0.8 health aide positions. The panel noted that in most cases, a school health aide is a paraprofessional with additional training and compensation, and thus the health aide position is likely underfunded in the previous study. The panel recommended funding at 1.0 nurse position and eliminating the health aide position, knowing that districts would still retain the ability to utilize health aides if they choose to.

Middle School Pupil Support Staff. For the 735-student middle school, the panel believed the previous study's 4.1 pupil support staff (comprised of counselors, psychologists, behavior interventionists, and social workers) was an appropriate level of pupil support staff at the base level and recommended no changes in middle school pupil support staff. It also believed the existing 1.0 nurse was the appropriate staffing level for the base.

High School Pupil Support Staff. For the 1,600-student high school, the previous study included a total of 10.5 pupil support staff (comprised of counselors, psychologists, behavior interventionists, social workers, and postsecondary planning staff). After discussion about the increasing need for social emotional support for all students – not just those with additional identified needs – the panel recommended increasing the overall pupil support staff by 0.5. The 0.5 FTE was split evenly between psychologist and social worker, bringing psychologist up from 0.1 to 0.35, and social worker up from 1.0 to 1.25.

Assessment Staffing Level

As previously noted, the CFO Panel requested that the Instructional Panel review the school-level personnel available to both conduct student assessments and to help analyze results. The Instructional Panel reviewed the staffing at all three school levels and believed the base level staffing – between administration and instructional coach positions – was sufficient to both coordinate student assessment and to help teachers analyze results. It recommended no increase in personnel was needed to conduct or interpret student assessment data.

Technology

The panel reviewed the technology included in the prior study, as significant changes in educational technology have occurred as a result of the COVID-19 pandemic. This includes districts shifting to full online learning and providing remote learning options once in-person classes resumed. The APA study team noted that it would review and update pricing for all technology components, as shifts in pricing – particularly hardware – are common.

The panel reviewed the technology set-up at all three school levels (elementary, middle and high). The previous study included a device for every student, which the panel believed reflected the current reality of most districts going to 1:1 during the pandemic. The panel did not see a need for changes to the number of devices. The study team confirmed that the visual presentation system in each classroom included an auditory system, which the panel recommended should be included.

The panel recommended including a trackable camera in each classroom – these cameras make in-person instruction and remote learning a more similar and synchronous experience for remote learners. Panelists believe this will be an ongoing need for districts, and it will help level the playing field for absent students, who will now be able to have access to the classroom while unable to attend in person. Since the visual presentation system included in the prior study includes a screen per classroom, the only additional cost is for the camera itself. One trackable camera per classroom has been included in the updated technology pricing at all school levels.

Additional technology the panel recommended adding is a student recording kit – this provides recording devices for students to demonstrate their competence in ways other than paper/pencil assessments and traditional online submission. Each kit includes four recording devices, two microphones, and the related software. One kit is provided per elementary classroom. Since the use of higher-powered devices and personal devices tends to increase with age, at the middle school level a kit was provided in every classroom.

The panelists reviewed the number of student and staff devices provided, the number of fixed labs per school (which could be used as mobile labs or other technology set-ups per district determination) and general school technology and felt the prior study provided appropriate levels of hardware. Given the number of student devices in the school, the panel recommended including additional power cords for student devices to ensure student devices are operational throughout the day without interruption to instruction. The panel recommended including 10 device power cords per classroom. The panel felt strongly that technology expenses remain in the base cost, as currently most technology purchases in Michigan are made through bond issues, which can create inequities based on a local district's bonding ability and capacity.

Final Costing Out

Once the study team adjusted the resource levels and adjusted salaries and benefit rates based upon the panelists' feedback, there was a $831 increase in the recommended per pupil amount from $9,590 to $10,421. The increases for salaries and benefits (including an additional $3,500 per staff member for

benefits) account for 68 percent of the change and the adjustment to resource levels accounts for 32 percent of the change.

Two forms of inflation measures could be used to address the change in the base cost from 2018 to 2021. The most common form of inflation is Consumer Price Index (CPI) which measures the average change over time in the prices paid by urban consumers for a market basket of consumer goods and services. The CPI inflation rate is 1.2 percent [2] and would result in an increase in base funding of $352 per pupil from the prior study. Another measure of inflation that is utilized is the Implicit Price Deflator for State and Local Government Purchases (S&L IPD) which is used to adjust for the impact of inflation on total state and local government revenues and expenditures. The S&L IDP inflation rate is 7.7 percent and would result in an increase in of $738 per pupil from the prior study which is close to the new increase of $831 in this study.

In the prior study, the study team presented three outcomes depending on the retirement rate utilized, which the study team has again calculated and included in as Appendix IV.

Costs Resulting from Covid

During the three panels, panelists listed short-term and one-time costs that districts have to bear due to COVID-19. Panelists mentioned the cost of purchasing new HVAC systems, costs associated with synchronous/asynchronous/hybrid learning, and additional extended learning time to combat learning loss due to COVID.

In the 2018 study, the study added an additional $400 dollars per student that was not included in the base to address unmet/ongoing capital needs in districts. The study team recommended that there be a capital study performed to better understand districts' capital needs. The need for additional capital funding has become more serious during the time of COVID-19. Some districts still have antiquated HVAC systems that do not move air particularly well throughout their buildings – particularly in light of COVID, those issues need to be addressed, but are not part of the base cost.

Many districts are running synchronous, asynchronous, or hybrid learning in response to COVID-19. There is a cost associated with providing the proper technology to these students. The technology includes devices, internet, and software for the students. Additionally, there are professional development needs for teachers to learn to teach both with the new technology and with students in class while also teaching remote learners at the same time.

Lastly, the panelists mentioned the additional costs associated with provided extending learning to students to address the learning loss that occurred from school closures and remote learning due to COVID-19. Districts and states have discussed managing this loss by providing extended learning opportunities to help catch students up. It is important to note that some of these costs will likely be, at least in part, covered by Federal COVID relief dollars.

---

[2] https://fred.stlouisfed.org/graph/?g=4PA

Appendix

Appendix I: Standard

Review of Michigan Standards and Requirements

February 2021; Excludes Temporary COVID Measures

Minimum Days and Hours of Instruction[3]

Beginning in 2016-2017, the required minimum number of days of pupil instruction is 180. If a collective bargaining agreement that provides a complete school calendar was in effect for employees of a district as of the effective date of the amendatory act that added this subdivision, and if that school calendar is not in compliance with this subdivision, then this does not apply to that district until after the expiration of that collective bargaining agreement.

The *State School Aid Act* establishes a minimum of 1,098 hours of pupil instruction in a school year. The state superintendent may waive the minimum instructional hour requirement for a department-approved alternative education program. School districts have the option of counting up to 38 hours of professional development time toward the 1,098 hours of pupil instruction requirement.

Flexible Learning Options[4]

Flexible learning options available to public school students in Michigan include:
1) Seat Time Waivers: Section 101(9) of the State School Aid Act (MCL 388.1701) allows the State Superintendent to waive the required days and hours of student instruction for alternative education programs or another innovative program. This would include a four-day school week. The alternate program must be approved by the Michigan Department of Education (MDE).
2) Options for Hours and Days Waivers: Under 388.1701 (9), waivers can be granted to districts for the minimum number of hours and days (to 146) of student instruction. This waiver can be granted for a MDE-approved alternative education program or another approved innovative program. The waiver can include a 4-day school week.
3) Work-Based Learning Experiences: This program involves a work-based learning experience coordinated by the school district through a contract with the employer providing the educational experience. The experience must be related to school instruction and a training plan of supervised work is required. The work experience is to be monitored by a certified instructor employed by the district. Students may receive high school credit for the learning experience if the requirements of the program are met. The experience must not generate more than one-half of the student's full-time equivalency (FTE) and the employment of the student must not exceed the maximum hours set by the district.
4) College Course Enrollment and Early/Middle Colleges: Public school and approved nonpublic school students are potentially eligible to take up to 10 college courses while in grades 9-12. A district or ISD may apply to implement an Early/Middle College school or program where a

---

[3] http://www.legislature.mi.gov/(S(b3xikk420l2judvdf5mvi4h2))/mileg.aspx?page=getObject&objectName=mcl-388-1701
[4] http://www.michigan.gov/documents/mde/Flexible_Learning_Document_3_458395_7.pdf

student may earn a high school diploma, an associate's degree, 60 transferable credits, or a certificate of merit over the course of 5 years.

5) Career and Technical Education (CTE) Options: The Michigan Merit Curriculum (MMC) specifies that credit is based on proficiency with the expectations outlined in the state's academic standards. This opens the door for alternative delivery methods of the academic content, including academic content naturally embedded in CTE instructional programs. Click here for more information on using CTE to deliver academic content.

6) Testing Out: Students can earn credit for content required under the MMC by simply testing out. According the MMC Law, Section 380.1278(1)(4)(c), a public school can grant credit to students for earning a score, determined by the MDE or by the school district, on the assessments developed or selected for the subject area. The school is responsible for ensuring that a student's understanding of the subject area content applies to the credit.

7) Personal Curriculum: The Personal Curriculum (PC) is a process to modify specific credit requirements and/or content expectations based on the individual learning needs of a student. PC is designed to serve students who want to accelerate, or go beyond, the MMC requirements and for students who need to individualize learning requirements to meet MMC expectations.

Early Literacy Initiative[5]

Michigan as a state is focusing on increasing the early literacy skills of its students through MDE's Early Literacy Initiative. The MDE believes that to ensure the early literacy skills of all Michigan's students, it needs to develop and deliver an educational system that provides high-quality instruction to all students, provides regular information on student progress and strategically intervenes with research-based strategies when students fall behind. The MDE also believes that prior to children becoming students (at kindergarten entry), engaging and supporting parents and other family members in supporting language and age-appropriate early literacy development will provide the foundation for later success for students, as well as increased engagement of families in their children's schooling.

The Early Literacy Initiative is a core component of supporting the implementation of College- and Career-Ready standards in Michigan, particularly in the earliest grades. MDE is making a concerted effort to consistently focus on the foundations described above and build capacity to support districts on literacy.

Read by Grade Three (RBG3) Law[6]

Enacted in October 2016, House Bill 4822 establishes requirements to provide assistance to students to "help ensure that more pupils will achieve a score of at least proficient in English language arts on the grade 3 state assessment." It requires that school districts and school academies utilize valid and reliable screening, formative, and diagnostic reading assessment systems, and requires that K-3 students who exhibit a reading deficiency are provided reading intervention programs. Students who score more than grade level behind on the end of third grade assessment will be retained. RBG3 was set to 'trigger'

---

[5] http://www.michigan.gov/mde/0,4615,7-140-28753_74161---,00.html
[6] https://www.michigan.gov/mde/0,4615,7-140-28753_74161-498394--,00.html and www.michigan.gov/documents/mde/2020_FAQ_for_RBG3_IRIPs_Assessments_and_Updates_702667_7.pdf

retention beginning with the 2019-2020 school year but was paused due to the COVID-19 pandemic. For the 2020-21 school year, all RBG3 requirements remain in place, including retention of students reading significantly below grade level. and districts must have at least one initial and one extensive assessment from the MDE-approved list. RBG3 also provides opportunities for students determined to be retained by the state assessment to demonstrate a grade 3 reading level through an alternative standardized reading assessment approved by the superintendent of public instruction or through a pupil portfolio demonstrating competency in grade 3 English language arts standards.

Michigan Merit Curriculum (MMC)[7]

Districts must ensure that any student who entered 8th grade during or after the 2005-2006 school year and wishes to receive a high school diploma from a public school must meet the requirements of the MMC. This includes alternative and adult education students. Modifications can be made to the MMC based on student needs.

The MMC is crafted around the philosophical belief that all students will need postsecondary learning opportunities beyond high school. It is not a curriculum in the traditional sense in that it doesn't describe instructional materials and approaches. Instead it specifies that all students who earn a diploma, at a minimum, have demonstrated proficiency with the content outlined by the state academic standards or guidelines. Since districts are responsible for awarding diplomas, so too are they responsible for providing all students the opportunity to learn the content outlined by the standards. As the learning skills for college and the workplace have merged, the MMC, if properly implemented, will prepare students with the skills and knowledge needed to be successful in our global economy and workplace. It supports the need for personalization, acceleration, and innovation in an atmosphere of high expectations and high support for students.

---

[7] http://www.michigan.gov/documents/mde/Complete_MMC_FAQ_August_2014_467323_7.pdf

Michigan High School Graduation Requirements (18 Credits)[8]
ENGLISH LANGUAGE ARTS (ELA) – 4 Credits - Proficiency in State Content Standards for ELA (4 credits)
MATHEMATICS – 4 Credits - Proficiency in State Content Standards for Mathematics (3 credits); and - Proficiency in district approved 4th Mathematics credit options (1 credit) (Student MUST have a Math experience in their final year of high school.)
ONLINE LEARNING EXPERIENCE - Course, Learning, or Integrated Learning Experience
PHYSICAL EDUCATION & HEALTH – 1 Credit - Proficiency in State Content Standards for Physical Education and Health (1 credit); or - Proficiency with State Content Standards for Health (1/2 credit) and district approved extra-curricular activities involving physical activities (1/2 credit)
SCIENCE – 3 Credits - Proficiency in State Content Standards for Science (3 credits); or - Proficiency in some State Content Standards for Science (2 credits) and completion of a Department approved formal Career and Technical Education (CTE) program (1 credit)
SOCIAL STUDIES – 3 Credits - Proficiency in State Content Standards for Social Studies (3 credits)
VISUAL, PERFORMING, AND APPLIED ARTS – 1 Credit - Proficiency in State Content Standards for Visual, Performing, and Applied Arts (1 credit)
WORLD LANGUAGE – 2 Credits) - Formal coursework or an equivalent learning experience in Grades K-12 (2 credits); or - Formal coursework or an equivalent learning experience in Grades K-12 (1 credit) and completion of a Department approved formal CTE program; or an additional visual, performing, and applied arts credit (1 credit)

Awarding of Credits

The MMC requires that credit be awarded not by the commonly used Carnegie unit, which is based on seat time, but based on a student's demonstration that he or she has successfully met the content expectations for the credit area. The content area standards and guidelines outline the content required for earning the total credit in each content area as specified in the legislation. Credit assigned to courses and other learning opportunities are at the discretion of the district, and may or may not be the same as the credit earned by the student.

Students may earn credit if they successfully demonstrate mastery of subject area content expectations or guidelines for the credit. The assignment of credit must be based, at least in part, on student performance on assessments designed to measure the extent to which they meet the credit expectations and guidelines. Districts determine the assessments and criteria of success for determining student proficiency.

---

[8] https://www.michigan.gov/documents/mde/OES_-_Michigan_Merit_Curriculum_-_Final_659056_7.pdf

As noted under Flexible Learning Options, beyond earning credit through a traditional course setting, a student may earn a credit in a variety of ways, including, but not limited to:

- Work-based learning programs
- Integrated sequences
- Project-based learning
- Independent teacher-guided study
- Testing out
- Career and Technical Education
- College Coursework
- Early College
- Advanced Placement Courses
- International Baccalaureate
- On-line classes

Educational Development Plan (EDP)

The MMC legislation 380.1278b (11) states: The board of a school district or board of directors of a public school academy shall provide the opportunity for each pupil to develop an educational development plan during grade 7, and shall ensure that each pupil reviews his or her educational development plan during grade 8 and revises it as appropriate before he or she begins high school. An educational development plan shall be developed, reviewed, and revised by the pupil under the supervision of the pupil's school counselor or another designee qualified to act in a counseling role under section 1233 or 1233a selected by the school principal and shall be based on high school readiness scores and a career pathways program or similar career exploration program. An educational development plan shall be designed to assist pupils to identify career development goals as they relate to academic requirements. During the process of developing and reviewing a pupil's educational development plan, the pupil shall be advised that many of the curricular requirements of this section and section 1278a may be fulfilled through career and technical education.

College and Career Ready Skills[9]

Career & college-ready students possess the skills necessary to earn a self-sustaining wage and participate in postsecondary opportunities without remediation.

This means that they:
- Use technology and tools strategically in learning and communicating;
- Use argument and reasoning to do research, construct arguments, and critique the reasoning of others;
- Communicate and collaborate effectively with a variety of audiences;
- Solve problems, construct explanations and design solutions;

---

[9] http://www.michigan.gov/mde/0,4615,7-140-28753---,00.html

These characteristics of career & college-ready students are evident within all of the academic standards, including the arts and the CTE Career Ready Practices. Students that are career & college-ready are provided with opportunities throughout their K-12 education to use technology and tools; engage in argument, reasoning, and problem solving; and to communicate and collaborate.

SB 685[10], enacted in 2018, added career-related elements to each school's required school improvement plan. It specifies that on-the-job-learning, previously required, must involve "active, direct, hands-on learning" to enhance a student's employability. School improvement plans must also provide to pupils a variety of age-appropriate career informational resources in grades K to 12.

Michigan Assessments [11]

The following assessments are required to be administered:
- Early Literacy and Mathematics Benchmark (K-2) assessments (also referred to as the K-2s)
- M-STEP (Michigan Student Test of Educational Progress)
    - o English language arts and mathematics will be assessed in grades 3–7, science in grades 5 and 8, and social studies in grades 5 and 8.
- PSAT 8/9 and PSAT 10
    - o The PSAT 8/9 is given to students in grade 9 only and the PSAT 10 given to grade 10 students
- The Michigan Merit Examination (MME)
    - o Administered to students in grade 11 and eligible students in grade 12 based on Michigan high school standards.
    - o Consists of three components that include the College Board SAT, ACT WorkKeys job skills assessment in reading, mathematics, and locating information and the M-STEP science and social studies.
- MI-Access
    - o Michigan's alternate assessment system designed for students who have, or function as if they have, cognitive impairments whose IEP (Individualized Educational Program) Team has determined that General Assessments, even with accommodations, are not appropriate. The three MI-Access assessments are Functional Independence, Supported Independence, and Participation.
- W-APT (WIDA-ACCESS Placement Test)
    - o An English language proficiency "screener" test given to incoming students who may be designated as English language learners.
- WIDA ACCESS for ELLs
    - o An English language proficiency assessment given to Kindergarten through 12th graders who have been identified as English language learners (ELLs).

---

[10] https://www.legislature.mi.gov/documents/2017-2018/publicact/pdf/2018-PA-0231.pdf
[11] http://www.michigan.gov/mde/0,4615,7-140-22709---,00.html;
https://www.michigan.gov/documents/mde/Guide_to_State_Assessments_622260_7.pdf

Michigan District and School Accountability[12]

MDE releases school accountability reports including Michigan's Parent Dashboard for School Transparency and the Michigan School Index System, as well as the Michigan School Grades System.

Michigan School Grades System[13]

The Michigan School Grades System is a part of Michigan's current school accountability system. Public Act 601, enacted in 2018, created the system, which assigns an A-F letter grade to most schools in Michigan. In the Michigan school grades system, schools receive up to five letter grades and three ranking labels based on various school performance components. The eight elements required of the A-F system: proficiency, growth, performance among peers, student subgroup performance, assessment participation, graduation rate, English language (EL) progress, and attendance.

Due to the suspension of state summative assessments due to COVID-19 in 2019-20, grades are based only on the three elements not tied to state summative assessments: graduation rate, English language (EL) progress, and attendance.[14] School grades are posted on the MISchool Data website (https://www.mischooldata.org/).

Michigan School Index[15]

The Michigan School Index System reports the degree to which schools are meeting performance targets in six areas required by ESSA. It provides an overall index value ranging from 0-100 for each school based on: student growth, proficiency, graduation rates, English learner progress, attendance rates, advanced coursework completion, postsecondary enrollment, and staffing ratios. Schools with low index values may be identified as one of three low-performing school types defined by the federal requirements specified in Every Student Succeeds Act of 2015 (ESSA).

Educator Evaluations[16]

Requirements for Teacher Evaluations

- The performance evaluation system shall include at least an annual year-end evaluation for all teachers.
- For the 2015-2016, 2016-2017, and 2017-2018 and 2018-19 school years, 25% of the annual year-end evaluation shall be based on student growth and assessment data.
- Beginning with the 2019-20 school year, 40% of the annual year-end evaluation shall be based on student growth and assessment data.
- Beginning with the 2019-2020 school year, for core content areas in grades and subjects in which state assessments are administered, 50% of student growth must be measured using the state assessments. Districts may choose to use state assessment data prior to 2018-19, but are not

---

[12] http://www.michigan.gov/mde/0,4615,7-140-22709_59490---,00.html
[13] https://www.michigan.gov/mde/0,4615,7-140-81376_59490_64456-473140--,00.html
[14] https://www.michigan.gov/documents/mde/AF_Available_706383_7.pdf
[15] https://www.michigan.gov/mde/0,4615,7-140-81376_59490-251853--,00.html
[16] https://www.michigan.gov/documents/mde/Educator_Evaluations_At-A-Glance_522133_7.pdf

required to do so. The MDE will provide student growth percentiles (SGPs) as the state measure of student growth starting with the 2015-16 state assessments.

- Student assessment and growth data not based on the state measure must be measured using multiple research-based growth measures or alternative assessments that are rigorous and comparable across schools within the school district, ISD, or PSA. They may include student learning objectives (SLOs) or nationally normed or locally adopted assessments that are aligned to state standards or based on achievement of individualized education program goals.
- The portion of a teacher's annual year-end evaluation that is not based on student growth and assessment data shall be based primarily on a teacher's performance as measured by the observation tool developed or adopted by the school district, ISD, or PSA.
- The system must assign to each teacher an effectiveness rating of highly effective, effective, minimally effective, or ineffective.
- Midyear progress reports are required for teachers who are (a) in the first year of the probationary period or (b) received a rating of minimally effective or ineffective on the most recent annual evaluation.
- Teachers who are rated as highly effective on three consecutive annual evaluations may be evaluated biennially instead of annually.
- Unless a teacher has received a rating of effective or highly effective on his/her two most recent annual year-end evaluations, there must be at least two classroom observations of the teacher each school year. Beginning with the 2016-2017 school year, at least one observation must be unscheduled. The school administrator responsible for the teacher's performance evaluation shall conduct at least one of the observations. Within 30 days after each observation, the teacher must be provided with feedback from the observation.
- Teachers who are rated ineffective on three consecutive annual year-end evaluations must be dismissed from employment by the district.

Requirements for Administrator Evaluations

- The performance evaluation system shall include at least an annual year-end evaluation for all administrators regularly involved in instructional matters.
- For the 2015-2016, 2016-2017, 2017-2018, and 2018-19 school years, 25% of the annual year-end evaluation shall be based on student growth and assessment data.
- Beginning with the 2019-20 school year, 40% of the annual year-end evaluation shall be based on student growth and assessment data.
- The student growth component of the evaluation must be an aggregate of all of the student growth and assessment data used in teacher evaluations in the school or district.
- The portion of the evaluation that is not based on student growth data and the district's adopted evaluation tool must be based on the administrator's proficiency in using the observation tool for teachers; the progress made by the school or district in meeting the goals set forth in the school or district improvement plan as applicable; student attendance in the school or school district; and student, parent, and teacher feedback.

- The system must assign to each school administrator an effectiveness rating of highly effective, effective, minimally effective, or ineffective.
- An improvement plan is required for a school administrator who is rated as minimally effective or ineffective.
- Administrators who are rated as highly effective on three consecutive annual year-end evaluations may be evaluated biennially instead of annually.
- Administrators who are rated as ineffective on three consecutive annual year-end evaluations must be dismissed from employment by the district.

Additional Requirements for Special Needs Students

ELL Students

<u>Title III - Language Instruction for Limited English Proficient and Immigrant Students[17]</u>

The Title III program is designed to assure speedy acquisition of English language proficiency, assist students to achieve in the core academic subjects, and to assist students to meet State standards. It also provides immigrant students with high quality instruction to meet challenging State standards, and assists the transition of immigrant children and youth into American society.

<u>Michigan English Language Proficiency Standards[18]</u>

The Michigan English Language Proficiency Standards are correlated with the national Teachers of English to Speakers of Other Languages (TESOL) English as a Second Language (ESL) Standards for Pre-K-12 Students and the Michigan Curriculum Framework: English Language Arts Standards. The Michigan English Language Proficiency Standards are "applied standards" relevant to the language acquisition process for English language learners and are presented in the language acquisition domains of listening, speaking, reading, and writing. Although the skill domains (listening, speaking, reading, and writing) are addressed separately, they are integrated in classroom instruction. Within each domain, standards apply to each level of proficiency. The benchmarks clarifying each standard are designed to outline the progression of achievement within the standard. Proficiency in listening, speaking, reading, and writing as outlined in these standards will allow English language learners to make a successful transition to full participation in the English language arts curriculum and achievement of the English Language Arts Standards.

Local school districts are encouraged to use the standards as a framework for developing programs designed to meet the needs of English language learners.

<u>Common Statewide Entrance and Exit Protocol (EEP)[19]</u>

The Entrance and Exit Protocol constitutes the official MDE road map for identifying and placing English learners in local English Language Acquisition, language assistance program/Title III supplemental services as well as for exiting them from such programs. As of the beginning of the 2012/2013 school

---

[17] http://www.michigan.gov/mde/0,4615,7-140-6530_30334_40078---,00.html
[18] https://www.michigan.gov/documents/English_Lang_153694_7._Proficiency_Standards.pdf
[19] https://www.michigan.gov/documents/mde/MDE_Entrance_and_Exit_Protocol_705175_7.pdf

year, the Michigan Department of Education expects all teachers and administrators to adhere to the protocol and procedures delineated in the EEP document.

The purpose of the common Entrance and Exit Protocol is to:
- Adhere to and apply federal requirements
- Provide a uniform and consistent method for determining eligibility for English learner services to students who are identified as potentially Limited English Proficient based on the Home Language Survey across Michigan schools
- Ensure that English learners are able to demonstrate proficiency in English and on local assessments before they are exited from bilingual/ESL services and programs

The Michigan's English learner Entrance and Exit Protocol was updated in 2017 to align with the new WIDA standard setting cut scores, and in 2020 to reflect updated exit criteria and the auto exit process. Prekindergarten/preschool identification was removed, and separate guidance is expected to be issued in 2020-21.

Special Education Students

Michigan Administrative Rules for Special Education (MARSE) With Related Individuals with Disabilities Education Act (IDEA) Federal Regulations[20]

Federal law requires states to provide a free appropriate public education (FAPE) to all students with disabilities through age 21 who are found to be in need of special education services. In Michigan, schools and districts must meet all Michigan Administrative Rules for Special Education (MARSE) and related Individuals with Disabilities Education Act (IDEA) Federal Regulations. According to MARSE and IDEA, education programs for disabled students must be designed to meet their individual needs and could include specially designed instruction in classrooms, at home, or in private or public settings. Examples of these services include speech, occupational, and physical therapy, psychological counseling, and medical diagnostic services that are necessary to a child's education. Teachers of students with disabilities are required to be trained in the instruction of disabled students. Services begin as soon as eligibility is determined.

Standards for Extended School Year Services in Michigan[21]

The need for extended school year (ESY) services must be considered for every student with a disability at each Individualized Education Program (IEP) Team meeting. ESY services must be provided if the IEP Team determines that such services are necessary for the provision of a FAPE to the student. The need for ESY must be determined individually and may not be provided or denied based upon category of disability or program assignment. Related services (including therapy services and transportation) and supplemental aids and services must be considered, as well as instructional programming when developing a plan for ESY services.

---

[20] http://www.michigan.gov/documents/mde/MARSE_Supplemented_with_IDEA_Regs_379598_7.pdf
[21] https://www.michigan.gov/documents/mde/GuidanceDocforESY_245915_7.pdf

Appendix II: Panel Resource Update

Instructional Panel

Personnel Resources

Base Elementary School (390 students), Personnel FTE		
	Prior Study	**Update**
Personnel		
Teachers	18.2	18.2
Specials Teachers	3.0	
Instructional Facilitator (Coach)	2.0	2.0
Teacher Tutor/ Interventionist	1.0	1.0
Librarians/Media Specialists	0.5	
Technology Specialist	0.5	0.5
504 Aide	1.0	
Media Aide	0.5	
Pupil Support Staff		
Counselors	0.5	0.5
Nurses	0.2	1.0
Psychologists	0.1	0.1
Health Aide	0.8	0
Social Worker	0.2	0.2
Behavior Interventionist	0.2	0.2
Administrative Staff		
Principal	1.0	
Clerical/Data Entry	2.0	
Other Staff		
Substitute	1.0	
IT Technician	0.5	0.5
Duty Aide	2.0	

Base Middle School(735 students) Personnel FTE		
	Prior Study	Update
Personnel		
Teachers	39.2	
Instructional Facilitator (Coach)	2.0	
Teacher Tutor/ Interventionist	2.0	
Librarians/Media Specialists	1.0	
Technology Specialist	1.0	1.0
Media Aide	1.0	
504 Aide	2.0	
Pupil Support Staff		
Counselors	3.0	3.0
Nurses	1.0	1.0
Psychologists	0.1	0.1
Behavior Interventionist	0.5	0.5
Social Worker	0.5	0.5
Administrative Staff		
Principal	1.0	
Assistant Principal	2.0	
Clerical/Data Entry	3.0	
Other Staff		
School Resource Officer	0.25	
IT Technician	1.0	1.0
Duty Aide	2.6	
Substitute	2.0	
Security	0.25	

Base High School (1,600 students) Personnel FTE		
	Prior Study	Update
Personnel		
Teachers	85.3	
Instructional Facilitator (Coach)	5.0	
Teacher Tutor/ Interventionist	4.0	
Librarians/Media Specialists	1.0	
Technology Specialist	1.0	
Media Aide	2.0	
504 Aide	3.0	
Pupil Support Staff		
Counselors	6.4	6.4
Nurses	1.0	1.0
Psychologists	0.1	0.35
Social Worker	1.0	1.25
Behavior Interventionist	1.0	1.0
Post Secondary Planning	1.0	
Administrative Staff		
Principal	1.0	
Assistant Principal	3.0	
Bookkeeping	1.0	
Athletic Director	1.0	
Clerical/Data Entry	4.0	
Other Staff		
School Resource Officer	1.0	
Security	4.0	
Duty Aide	3.2	
IT Technician	2.0	2.0

Technology Resources

Base Elementary School (390 Students) Technology				
	Prior Study		**Update**	
Administration/Main Office				
Computers	1	/office staff member	1	/office staff member
Laptops	1	/professional	1	/professional
Copier/Printer	5	total # needed	5	total # needed
Mobile Devices	5	total # needed	5	total # needed
Faculty				
Laptops	1	/professional	1	/professional
Classroom				
Computers	1	/classroom	1	/classroom
Visual Presentation System	1	/classroom	1	/classroom
Trackable Cameras			1	/classroom
Microphones			2	/classroom
Cameras			5	/classroom
Power Cord			10	/classroom
Computer Lab(s)- Fixed				
# of fixed labs	1	total # needed	1	total # needed
Computers	30	/fixed lab	30	/fixed lab
Printers	1	/fixed lab	1	/fixed lab
Visual Presentation System	1	/fixed lab	1	/fixed lab
Headphones	30	/fixed lab	30	/fixed lab
Media Center				
Computers	3	total # needed	3	total # needed
Printers	1	total # needed	1	total # needed
Visual Presentation System	1	total # needed	1	total # needed
Other				
Student Devices	1.1	/student	1.1	/student
Portable visual presentation system (DVD,etc)	1	total # needed	1	total # needed
Copier/Printer	1	total # needed	1	total # needed
3D Printer	1	total # needed	1	total # needed

Base Middle School (735 Students) Technology				
District Size Category	**Prior Study**		**Update**	
Administration/Main Office				
Computers	1	/office staff member	1	/office staff member
Laptops	1	/professional	1	/professional
Copier/Printer	3	total # needed	3	total # needed
Mobile Devices	1	/administrator	1	/administrator
Cell phones	1	professional	1	professional
Faculty				
Laptops	1	/professional	1	/professional
Classroom				
Computers	1	/classroom	1	/classroom
Visual Presentation System	1	/classroom	1	/classroom
Trackable Cameras			1	/classroom
Microphone			2	/classroom
Cameras			5	/classroom
Power Cords			10	/classroom
Computer Lab(s)- Fixed				
# of fixed labs	2		2	
Computers	30	/fixed lab	30	/fixed lab
Printers	1	/fixed lab	1	/fixed lab
Visual Presentation System	1	/fixed lab	1	/fixed lab
Other				
Student Devices	1.1	/student	1.1	/student
3D Printer	1	total # needed	1	total # needed
Maker Space	1	total # needed	1	total # needed

High School				
District Size Category	**Large**		**Update**	
Administration/Main Office				
Computers	1	/office staff member	1	/office staff member
Laptops	1	/professional	1	/professional
Copier/Printer	4	total # needed	4	total # needed
Mobile Devices	1	/administrator	1	/administrator
Faculty				
Laptops	1	/professional	1	/professional
Classroom				
Visual Presentation System	1	/classroom	1	/classroom
Trackable camera			1	/classroom
Power Cords			10	/classroom
Computer Lab(s)- Fixed				
# of fixed labs	5		5	
Computers	32	/fixed lab	32	/fixed lab
Visual Presentation System	1	/fixed lab	1	/fixed lab
Media Center				
Computers	5	total # needed	5	total # needed
Visual Presentation System	1	total # needed	1	total # needed
Other				
Student Devices	1.1	/student	1.1	/student
3D Printer	1	total # needed	1	total # needed

CFO Resource Panel

Technology Personnel

Personnel	Elementary	Middle	High	District	Total
Size	**390**	**735**	**1,600**	**13,590**	
# of Schools	**8**	**6**	**5**		
IT Technician	0.5	1	2	6	26
Technology Specialist	0.5	1	1	0	15

District and School Other Costs

District Level		
	Prior Study	**Update**
Maintenance and Operations	$1,100/student	$ 1,265/student
Capital Improvement/Long Term Maintenance	$400/student	
Safety and Security	$15/student	
Textbooks	$120/student	$120/student
Assessments	$30/student	$30/student
Software	$100/student	$150/student
Professional Development	$3 / student	
Insurance	$30/student	$36/student
Legal	$271,800	
School Board	$100,000	
Marketing	$15/student	
Tax Collection	$20/student	
Dual Enrollment/Concurrent	$60/student	

School Level		
	Prior Study	**Update**
Elementary		
Substitutes	10 days/teacher	13 days/teacher
Middle		
Substitutes	10 days/teacher	13 days/teacher
High		
Substitutes	10 days/teacher	13 days/teacher

Appendix III: Salaries and Benefits

Salaries

Position Title	Prior Study	Update
Instructional Staff		
Teachers	$61,875	$62,130
Specials Teachers	$61,875	$62,130
Instructional Facilitator (Coach)	$68,703	$68,986
Teacher Tutor/ Interventionist	$61,875	$62,130
Librarians/Media Specialists	$69,125	$69,410
Technology Specialist	$69,125	$69,410
Media Aide	$25,101	$26,356
Instructional Aides	$23,659	$24,842
504 Aide	$23,659	$24,842
Pupil Support Staff		
Counselors	$65,660	$65,931
Nurses	$57,168	$57,404
Psychologists	$76,495	$76,810
Social Worker	$69,138	$69,423
Language Service	$34,359	$34,359
Family Liaison	$34,359	$34,359
Behavior Interventionist	$66,122	$66,395
Health Aide	$23,280	$24,444
Speech	$69,969	$70,257
OT/PT	$69,969	$70,257
ELL Coordinator	$61,875	$62,130
IEP Coordinator	$61,875	$62,130
Transition Coordinator	$61,875	$62,130
Work Based Learning Coordinator	$61,875	$62,130
Administrative Staff		
Principal	$104,692	$105,123
Assistant Principal	$91,430	$91,807
Clerical/Data Entry	$37,826	$37,982
Para	$23,659	$24,842
Bookkeeping	$37,826	$37,982
Athletic Director	$80,596	$80,928
Other Staff		
IT Technician	$52,961	$60,000
Substitute	$61,875	$62,130
Duty Aide	$23,659	$24,841
Security	$17,257	$25,101

Appendix IV: Impacts of Retirement and Benefit Rates

The table below shows the variation in base cost depending on retirement rate used, for two scenarios:

1. Using the 6.0 percent retirement rate included in the recommended base cost, representing the costs associated with a defined benefit program.
2. Using an alternative retirement rate of 26.96 percent that traditional public schools and some charter schools pay.

Comparison of Updated Base with Various Retirement rates

Base using 6.0% Retirement Rate	Base using 26.96% Retirement Rate
$10,421	$11,547

By adding in the 26.95 percent retirement rate the new base amount will increase by $1,126 per pupil.