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## *Welcome to the State Board of Education's Plan to Improving High School Graduation Requirements in Michigan*

### Overview

In Michigan, public education is about assuring all students have the knowledge and skills needed to succeed. In today's global workplace, many subjects and skills once thought optional have become essential for all students to enter college or the workplace. These changes have led us to evaluate whether the courses and credits required for high school graduation, adequately prepare Michigan students for success.

Over the past year, the Michigan Department of Education (MDE) has worked to identify and understand challenges students and school districts face, survey current district graduation requirements, tap national and international experts and study best practice or what is working in the area of high school reform across the country.

Equipped with this knowledge, on December 13, 2005, the State Board of Education unanimously approved a set of increased state high school graduation requirements for all Michigan students. The graduation requirements titled the "Michigan Merit Curriculum" include two main components: the Michigan Merit Core, and, the 21<sup>st</sup> Century Learning Core. The State Board's plan also requires each high school student take the Michigan Merit Exam, or MI-ACCESS alternate assessment, in the spring of his or her junior year.

While the State Board's plan would instill rigor into high school graduation requirements, it also provides some flexibility in the form of district phase-in of the new requirements and student modification provisions in limited circumstances after their junior year. **To become law, the Michigan Merit Curriculum must be introduced and passed by the Michigan Legislature and signed by the Governor.**

Governor Jennifer M. Granholm has called for the adoption of improved high school graduation requirements for all students, arguing that Michigan's economy will suffer if the state does not have a highly educated workforce. Last year, Governor Granholm appointed *The Cherry Commission on Higher Education and Economic Growth*, which called for higher academic standards to prepare students for greater success in their post-secondary education, and to meet the Governor's goal of doubling the number of college graduates in Michigan.

The Michigan Merit Curriculum would begin with the freshman class next year, if legislation is passed and enacted by March 1, 2006. If legislation is not enacted by that time, the requirements would begin with the following freshman class.

Simultaneously, the Michigan Department of Education is developing High School Content Expectations that will serve as a guide for district curriculum development.

To provide additional information regarding the State Board of Education's action to improve high school graduation requirements in the state, the Michigan Department of Education has developed the following Frequently Asked Questions (FAQs).

## *Frequently Asked Questions (FAQs) regarding the State Board of Education's action to improve high school graduation requirements in Michigan*

### *Michigan Merit Curriculum*

**Q: What's the difference between the state's current graduation requirements and the recently State Board of Education (SBE) approved Michigan Merit Curriculum graduation requirements?**

**A:** Currently, the state of Michigan requires only one semester of civics for high school graduation. The new Michigan Merit Curriculum is designed for the 21<sup>st</sup> Century student. The curriculum is required of each and every student. It supports the need for personalization, acceleration, and innovation in an atmosphere of high expectations and high support for students. The Michigan Merit Curriculum is crafted around the philosophical belief that all students will need extended learning opportunities for extended learning beyond high school. As the learning skills for college and the workplace have merged, this curriculum can take students wherever life leads them in the future.

The Michigan Merit Curriculum addresses the academic and the applied learning skills needed for success in the 21<sup>st</sup> Century. The 21<sup>st</sup> Century Applied Learning Core has expanded the traditional elective course offerings to include applied learning demonstrations of competency.

The online learning requirement represents the belief that all students need to have the experience of learning in the powerful virtual learning environment.

Complete descriptions of the Michigan Merit Curriculum including course credits, and the 21<sup>st</sup> Century Applied Learning Core are available in Appendix A and B.

**Q: Don't most school districts already have similar graduation requirements?**

**A:** While most districts have locally adopted graduation requirements, they vary widely throughout the state. In a recent survey of the district high school graduation requirements conducted by the Michigan Department of Education (MDE), less than one-third of the districts require Algebra I and slightly more than one-third required Biology. Instead, districts tended only to require "x number of math credits" or "x number of science credits" without designating the rigorous subjects that have been determined to be necessary for students to have mastered to be successful in the 21<sup>st</sup> Century global economy.

For those school districts that already require many or all of the new requirements, they will be that much further ahead in providing their students with the necessary credits to meet these improved state high school graduation requirements.

**Q: Have any states already mandated similar graduation requirements? Which ones?**

**A:** A 2004 study by Achieve, Inc. indicates that Arkansas, Indiana, and Texas require these graduation requirements. These states have reported a significant increase in the number of students attending postsecondary institution and a decrease in students required to take remedial classes in college.

Idaho brought almost identical recommendations to their Board of Education on November 16, 2005. Many other states are currently working with the American Diploma Project and the National Governors Association to raise academic rigor in their states. A report from the Council of Chief State School Officers (CCSSO) shows that nearly every state in the nation is looking at ways to increase rigor as a part of high school reform efforts. Michigan is unique in that we are the only state to date to include the online requirement. For a copy of the report, please go to [http://www.ccsso.org/content/pdfs/hsredesign\\_statematrix.pdf](http://www.ccsso.org/content/pdfs/hsredesign_statematrix.pdf)

**Q: I thought the State Board of Education couldn't mandate specific classes. How can they mandate the Michigan Merit Core?**

**A:** The SBE approved the Superintendent's recommendations, with amendments, and the Board encouraged the Legislature and Governor to enact complementary laws that would make the Board's actions a requirement. However, the Michigan Merit Core is a recommendation of credits based on courses meeting course content expectations. The local district still determines what constitutes a credit. The items on the MME will be based on the state's courses meeting course content expectations. The Board has established the "what" of graduation requirements, but has allowed flexibility for locals to determine the "how."

**Q: The state currently is developing *Course Content Expectations* for high school courses. Shouldn't we wait until those are complete before making these graduation requirements?**

**A:** A draft version of the high school *Course Content Expectations*, at least for 9th grade level credits/courses, will be available next fall. Granted, schools would have liked to have them to work on over the summer. But that is no reason to delay the new requirements by another year.

The requirements affect only next fall's 9th graders. Ninth grade classes like Algebra, Biology, English, and U.S. History are not new things. Until specific standards are developed for them, the State will accept whatever local districts have defined as Algebra I, etc.

It is better to have all next year's 9th graders required to take Algebra (whatever Algebra I is in their school), than to wait a year and allow next year's 9th graders to take whatever math they want, once again perpetuating the problem of students not taking the rigorous curriculum they need.

The draft mathematics expectations are currently on the MDE website for public comment. They contain a clear Algebra strand. Even without identifying what's Algebra I and what's Algebra II, a school can get a pretty good idea how those expectations will be divided up into credit/courses.

**Q: Do the requirements give the option for students to take either physical education OR health?**

**A:** No. One credit that includes both physical education AND health must be earned by high school students for graduation.

**Q: What if a student takes Algebra I in the 8<sup>th</sup> grade? Does the student have to take 4 years of math in high school?**

**A:** The answer will depend on local district policy. A district may choose to grant high school credit for Algebra I taken in the eighth grade if the district determines that the eighth grade algebra course is based on the high school course content expectations for Algebra I. If the district grants high school credit for the course, the student would not be required to take 4 years of mathematics in high school. However, the student must take mathematics or a math related course in the senior year.

If a student successfully completes Algebra I in 8<sup>th</sup> grade, and the 8<sup>th</sup> grade Algebra I course covers the high school course content expectations, but the district does not grant high school credit, the student will advance in 9<sup>th</sup> grade to the next highest mathematics course and will have to take 4 years of mathematics in high school.

If, however, the 8<sup>th</sup> grade Algebra I course does not meet the high school Algebra I content expectations, the district may choose to have the student repeat Algebra I in high school, or arrange in some other way for the student to satisfactorily complete the missing expectations (e.g. through a special semester course in Algebra I).

**Q: I heard that a student pursuing the International Baccalaureate (IB) curriculum would have to “opt out” of the Michigan Merit Core. Is that true?**

**A:** No. The International Baccalaureate program is consistent with and goes beyond the Merit Core. The IB curriculum would not require “opt out” documents for the students enrolled in and completing the IB diploma requirements.

## **Credits**

**Q: With some of our students, it may take two years to earn credit in Algebra I or II. If we divide Algebra I, for instance, into a two-year sequence for some students, is this acceptable in meeting the graduation requirements?**

**A:** Yes. The emphasis in the requirements is not on courses but on credits. The decision your local district would have to make is whether or not to give two credits, one for each year of the Algebra I course. If you did, this would count as two of the four math credits required for graduation.

**Q: What if it takes some students two years to earn credit in Algebra I, and two years to earn credit in Geometry. They will finish high school without meeting the Algebra II requirement. What happens then?**

**A:** If this is the case, the student and his/her parents would need to request a modification of the graduation requirements (waiving Algebra II) in order for this student to graduate.

**Q: We teach Algebra I in the eighth grade. Does this count as meeting the graduation requirements?**

**A:** It depends on whether or not your district awards high school credit for middle school Algebra. If it does, then this would count as one of the four required high school math credits and the student would need to earn only three more credits in high school. If, however, the student does indeed earn only three more high school math credits, one of those credits/courses must be in the senior year.

Your district’s decision as to whether to award high school credit for middle school Algebra should be based on whether or not the middle school Algebra class covers the same expectations for Algebra I as the high school. This doesn’t necessarily mean using the same textbook but it does mean meeting the same content expectations. At the present time, the district would have to determine this. Within the next year, the State Board of Education will be approving specific course content expectations for the credit areas in the graduation requirements (the Merit Core). Once the expectations are approved by the State Board of Education, they can be used as a yardstick to measure whether all Algebra courses taught in the district, at whatever level, are designed to meet the same course expectations.

**Q: The proposed requirements seem to be geared to raise the “rigor” of the curriculum for students who may not have been choosing to enroll in more challenging classes. What about the students who have? What about the advanced learners? How will these new graduation requirements affect them?**

**A:** The proposed requirements should have little, if any, effect on students already choosing a rigorous curriculum. Such a student is likely to already have decided on and included in his/her high school plan the credits proposed in the new requirements.

Furthermore, it is clearly understood that a student taking an Advanced Placement (AP) class in Mathematics, Science, English Language Arts, Social Studies, or Visual and Performing Arts would be satisfying the credit requirements, providing the AP class is in one of the credit areas specified in the requirements (for example, AP Biology).

Michigan schools offering the International Baccalaureate (IB) program would also be providing students the opportunity to meet the proposed graduation requirements since the IB program covers the credit areas listed in the requirements.

Students who are “dual-enrolled” in community college or university classes in the credit areas specified in the graduation requirements would also be considered as meeting these requirements.

Students who successfully complete a credit-earning on-line class through the Michigan Virtual High School, a community college, or a university (in a required graduation credit area, e.g. U. S. History) would also be considered as having met the particular graduation requirement. In addition, by successfully completing the on-line course, the student would also be considered to have met the further graduation credit of taking an on-line course (for credit or not for credit) or learning experience.

**Q: With four math credits required what happens to the student who fails a math class? As math is a sequential subject that requires mastery at each level before proceeding, what happens to those students who may require math classes taught at a slower pace. Several local districts for example, teach Algebra I as a two-year class. Under the proposed graduation requirements, that class would have to be eliminated. What happens then?**

**A:** This plan is emphasizing that the requirements are credits, and not specific classes. This plan gives a lot of the control to local school districts. If a district gives a credit for each of the two years in a two-year Algebra I class, it would count for two credits. There also is built-in flexibility so that after a student's junior year, if the student appears to not be on track to complete all of the required credits, the student and his/her parents could request a modification to the state high school graduation requirements.

**Q: What was the thinking behind the choice of courses listed in the Science Core recommendation?**

**A:** The recommendation includes three credits of science: Biology; Physics or Chemistry; and one year of additional science. These courses are specified because they are most often the prerequisite courses for additional study in science mathematics, or engineering. These “credits or courses” will be defined by a set of course content expectations that are being developed. The recommendation does not specify a sequence. Local school districts still will have the control to sequence the course offerings as they see fit. The examples include some non-traditional science classes that likely would spark student interest. The list is not meant to be exclusive. Districts could add other courses, such as **earth science**, that could be used to meet the requirement or be used to satisfy additional local requirements.

**Q: With respect to physics and chemistry classes, will a basic level of those classes be acceptable or will students have to take the more rigorous classes that require higher level mathematics and therefore have to be taken during the junior and senior years?**

**A:** Again, this plan gives a lot of control to the local school districts. At the present time, whatever a school district considers to be its chemistry or physics class, would be considered its classes in those subjects. Yet, within a year the state will have developed course content expectations outlining what students will be expected to learn in chemistry and physics. The high school Michigan Merit Exam will be based upon those course content expectations. Districts will be expected to incorporate the course content expectations into their local curriculum.

**Q: Will the new proposal have a negative effect on those students who wish to take four years of band as well as choir? Currently some schools use a variation of a six-class day which would mean that they have 24 credits during their high school career. If 18 are required and mandated by the state, what happens to those students who are gifted in the fine arts?**

**A:** The State Board of Education believes it is important to assure every student has the ability to obtain a strong foundation in the basic academic core subjects which include the visual and performing arts like band, choir, theatre, or dance. There is flexibility built into the plan to allow students to earn merit core credits in ways other than formal classes (on line, summer school, etc.) leaving additional classroom time for electives. We encourage high school students to further pursue their interests through the use of elective credits.

A recent analysis of trend data from New York State, which has had high school graduation requirements similar to Michigan's Merit Core in place for several years, indicates increased student enrollment in high school general music and significant increases in performing arts courses since the requirements were put in place.

**Q: The description of the proposed graduation requirements implies some academic credit could be earned in Career and Technical Education programs. How can this be done? What about the "highly qualified teacher" issue?**

**A:** This is an area where districts are encouraged to be innovative and involve career education and academic teachers in a dialogue to explore this issue. There are a few models of what other states are doing. In one case, an academic teacher (Algebra, for instance) meets with a career education teacher (e.g. Electronics) and the two review the expectations for the algebra class and determine how many of those expectations can be met in the Electronics class. Depending on how many expectations are not covered in Electronics, the school organizes a short-course (semester, 9-weeks, summer class) in Algebra to cover the expectations not covered in the Electronics course.

Another approach is one used in New York State called "collaborative teaching," where the academic and career education teachers again line their respective expectations up against each other, determine the overlap, and then, on certain days in the year, the math teacher actually goes into the career education class and teaches math lessons while the career education teacher covers the math teacher's classes. New York has approved awarding both a math and a career tech credit for the career education class because the math is being taught by a "highly qualified" teacher. For more information on New York's program, go to: <http://www.highered.nysed.gov/nclb04-2003c.htm>

**Q: Why isn't a "technology" credit required?**

**A:** The State Board of Education did not want to limit the concept of students using and mastering technology in learning to a single credit or two. The State Board was explicit in its insistence that "it is expected that technology, including assistive technology devices and services, will be used to deliver instruction to meet the Michigan Merit Core content standards."

In addition, an on-line course or learning experience (for credit or non-credit) is being required. The application of technology is a critical skill for all students.

## ***Implementation***

**Q: Why can't we take longer to implement new graduation requirements – it feels like we're rushing toward this change.**

**A:** If we implement this change with next year's 9<sup>th</sup> graders, we still will be four years away from a class of graduates that must meet the requirements, in which 100% of the students are prepared for work and postsecondary education in the 21<sup>st</sup> Century.

**Q: It says that a district may apply to "phase in" the graduation requirements if serious circumstances exist which do not permit a district to implement the graduation requirements immediately. What does this mean and what does a district have to do to request this?**

**A:** The graduation requirements themselves contain a "phase in" period, meaning that they first would apply only to next year's freshman class of 2010 in high school. The graduation requirements would not apply to next year's sophomores, juniors, or seniors. This means that a district would need to be prepared to offer next year's freshmen:

- An English class – that includes a writing, speaking, representing, listening, viewing, literature, culture and language that districts may currently require or into which they may currently

schedule freshmen into (a credit in English Language Arts is required each of the four years of high school).

- A Mathematics class – preferably Algebra I for all freshmen. However, because the graduation requirements call for a “math-related” class as the fourth credit, districts might schedule freshmen into a math class that is not Algebra I, realizing, however, that after the freshman year students would need to begin earning the required credits in Algebra I, Geometry, and Algebra II.
- Social Studies – since only three credits are required for graduation, a district may choose not to enroll freshmen in a social studies class, or may choose to use the freshman year to enroll students in one of the credit areas required for graduation (Civics/Government., Economics, U.S. History including Geography, or World History including Geography).
- Science – since only three credits are required for graduation, a district may choose not to enroll freshmen in a science class, or may choose to use the freshman year to enroll students in one of the credit areas required for graduation (Biology, Physics or Chemistry) or some other science class that the district offers.
- 21<sup>st</sup> Century Applied Learning Skills – the district should identify the elective areas/classes that correspond to one or several of the 21<sup>st</sup> Century Applied Learning skills and encourage students to select these as part of their Individualized Learning Plan (ILP).

It also means that a district would need to provide the full Michigan Merit Curriculum by 2010, which would include Visual and Performing Arts, World Languages and Health/Physical Education.

If a district cannot meet the above, for seriously constraining reasons, the district would be able to apply to the Superintendent of Public Instruction for permission to phase-in the 9<sup>th</sup> grade requirements at a later date. If the district made such an application, it would need to describe a timeline by which the district would meet the requirements. As next year’s freshman class moves on to become sophomores, juniors, and seniors, circumstances may arise that might require a district to request phase-in permission at that time.

### **21<sup>st</sup> Century Applied Learning Core**

**Q: Is the 21<sup>st</sup> Century Applied Learning Core another set of required classes?**

**A:** No. The 21<sup>st</sup> Century Applied Learning Core is a set of skills that all students need to know and apply -- to prepare for employment and postsecondary education. These skills can be integrated into a district’s elective courses. Because of the importance of the 21<sup>st</sup> Century skills, it is hoped that each district would examine the electives offered to students to ensure that they focus on the skills. (See Appendix B)

**Q: There are classes listed as examples in the 21<sup>st</sup> Century Applied Learning section. Is that an exclusive list?**

**A:** No. Those are examples of classes that fit into particular 21<sup>st</sup> Century Skills. Some of the classes align with more than one skill. School districts may create other classes as dictated by the needs of their local communities.

**Q: Are the 21<sup>st</sup> Century Applied Learning Core classes going to be assessed on the Michigan Merit Exam (MME)?**

**A:** No. The MME will assess students using the ACT to test college readiness, Work Keys to assess work readiness, and a battery of “wrap around” assessments to measure the high school content expectations not covered by the other two tests but required by the MME legislation and other state and federal requirements.

**Q: If a school district currently offers elective classes that are not listed as examples in the 21<sup>st</sup> Century Applied Learning Core, does the district have to stop offering those classes?**

**A:** The intent is for the 21<sup>st</sup> Century Learning Skills to permeate both the Merit Core and the Applied Learning Core courses. If a class cannot be aligned with any of the 21<sup>st</sup> Century Learning Skills, the Department suggests it should no longer be offered.

### ***Flexibility for Schools and Students***

**Q: It says that a district may apply to “phase in” the graduation requirements if serious circumstances exist which do not permit a district to implement the graduation requirements immediately. What does this mean and what does a district have to do to request this?**

**A:** Please refer to answer on page 8.

**Q: How will the "Individual Student Exception" be developed to guarantee some parents do not abuse the option? Will this be up to the local districts to monitor and develop procedures/policies?**

**A:** The state high school graduation requirement plan approved by the State Board of Education provides for a “curriculum modification” for students after three years of the Michigan Merit Core. This modification would need to be requested by the student and parents, and agreed to by the school district. Arkansas and Indiana have developed model procedures that include a stringent approval process that requires input from parents and school officials. The student and the parent are required to sign a strongly-worded statement, in which both student and parent acknowledge that by not completing the required curriculum they may be jeopardizing future educational and workplace pursuits. The Michigan Department of Education will develop a model procedure and documents for use by local school districts.

### ***Effect on Local Control***

**Q: Does the Michigan Merit Curriculum eliminate decisions made by local school districts?**

**A:** The Michigan Merit Curriculum—the “**what** should be taught”—is based on content expectations and 21<sup>st</sup> Century learning skills. These expectations and skills have been thoroughly researched and embraced by state and national experts. Their recommendations strongly urge that all students in the state of Michigan be required to complete this curriculum because this curriculum will prepare Michigan’s students for education beyond high school. This is a moral and economic imperative.

However, the equally important task of instruction—the “**how** the curriculum should be taught” -- is left to the local school districts. In collaboration with their teachers, students, parents, and community, local school districts will determine how best to teach content skills so that all students meet the content expectations.

Local school districts will still issue the diploma. Other decisions in this plan left to the local districts include, but are not limited to: school calendar and credit awarding system, textbooks and resources, development of the Accelerated Learning process, additional graduation requirements, scheduling options, and 21<sup>st</sup> Century Applied Learning offerings. The intent is to provide local school districts maximum flexibility within the framework of uniform course content expectations for all students.

**Q: It says that a district may apply to “phase in” the graduation requirements if serious circumstances exist which do not permit a district to implement the graduation requirements immediately. What does this mean and what does a district have to do to request this?**

**A:** Please refer to answer on page 8.

**Q: I thought the State Board of Education couldn't mandate specific classes. How can they mandate the Michigan Merit Core?**

**A:** Please refer to answer on page 5.

***Effect on Career Tech and Alternative Education Programs***

**Q: Will the Michigan Merit Curriculum requirements adversely impact the scheduling of regional Career and Technical Education (CTE) programs?**

**A:** With careful planning, students who wish to participate in regional Career and Technical programs should be able to schedule these for a full two year sequence. Generally, students need one-half of the 6-period day (or three hours) for class instructional time and travel time to and from a center. The graphic below illustrates how students can participate in the two-year CTE program. It will be important, however, for students entering the 9th grade to know in advance that they will enroll in a CTE program in their junior and senior years, and include this in their four-year high school plan. In addition, CTE classes may be able to meet some of the credit requirements in Mathematics, Science, English Language Arts, and Social Studies (see a related question in this document). After conducting alignment studies, districts may choose to offer special classes to supplement core content in CTE classes.

**Sample Student Schedules:**

Career and Technical Education				
	Grade 9	Grade 10	Grade 11	Grade 12
Period 1	English 9	English 10	English 11	English 12
Period 2	Biology	US History	Algebra II	Math-Related
Period 3	World History	Chemistry	Gov/Econ	Science
Period 4	Health/PE	Geometry	CTE	CTE
Period 5	Algebra I	Fine Arts/Music		
Period 6	World Language	World Language		

The same would be true for students who are interested in the Visual and Performing Arts.

Music Interest & World Language				
	Grade 9	Grade 10	Grade 11	Grade 12
Period 1	English 9	English 10	English 11	English 12
Period 2	Biology	US History	Algebra II	Math-Related
Period 3	World History	Chemistry	Gov/Econ	Science
Period 4	Health/PE	Geometry	World Language	Elective/Elective
Period 5	Algebra I	World Language	Elective/Elective	Elective/Elective
Period 6	Band	Band	Band	Band

Many schools have expanded student course offerings with little or no additional costs, by going to an alternative schedule like:

- 4x4 or A/B Block
- A modified 6-period block
- Trimester
- Zero and 7<sup>th</sup> hour (modified staff reporting times)

For additional class scheduling samples, please refer to section “Effect on High School Scheduling,” page 15.

**Q: Has the board carefully considered the impact on Career & Technical Education? More explanation is needed for the "CTE Sequence." Will this eliminate elective offerings (music, art, drama, etc...) for students who attend a career & technical program?**

**A:** The high school graduation requirements approved by the State Board of Education require credits, and not specific courses, per se. It will be allowed, and very likely, that Career Technical courses will be used to give students the necessary "credits" in a variety of the academic core. A student may be able to meet algebra and geometry expectations in building trades classes, A Student be able to earn credit for the "one additional year" of science in an electronics class, for instance.

Yet even if a student were to take these credits in the traditional classroom settings, it would account for 18 credits and allow use of the remaining six credits to sufficiently complete a Career Technical program. The director of the Career and Technical Education office in the Michigan Department of Labor and Economic Growth was an integral member of the research task force that developed the basis for this high school graduation requirement plan. This important educational pathway was fully considered and accommodated in the development of these high school graduation requirements.

**Q: The description of the proposed graduation requirements implies some academic credit could be earned in Career and Technical Education programs. How can this be done? What about the "highly qualified teacher" issue?**

**A:** Please refer to answer of page 11.

**Q: How do Skills Center classes work with these requirements? Currently up to 25 percent of the students at a local districts take classes at the ISD Skills Center, in everything from home building to flower arranging. Most of the students are interested in jobs that require more hands-on and less formal education ( less college training) to be successful. Will the new requirements mean that students will have to try to fit the Skills Center classes on top of everything else?**

**A:** The high school graduation requirements approved by the State Board of Education require credits, and not specific courses, per se. It will be allowed, and very likely, that Career Technical courses will be used to give students the necessary "credits" in a variety of the academic core. A student would be able to learn algebra and geometry in their building trades classes. A student would be able to earn their credit for the "one additional year" of science in an electronics class, for instance.

Yet even if a student were to take these credits in the traditional classroom settings, it would account for 18 credit and allow them to use the remaining six credits to sufficiently complete a Career Technical program. The director of the Career and Technical Education office in the Michigan Department of Labor and Economic Growth was an integral member of the research task force that developed the basis for this high school graduation requirement plan. This important educational tract was fully considered and accommodated in the development of these high school graduation requirements.

**Q: Will students attending alternative education programs have to meet all of these requirements?**

**A:** If the alternative education program leads to a high school diploma (and not a GED), the students attending the program will be expected to complete the Michigan Merit Curriculum requirements.

### ***Effect on Special Education Students***

**Q: What about students who receive special education services? Will they all be expected to take a college-prep curriculum?**

**A:** Special Education students are general education students first, and must be given access to, and support for success, in the general curriculum.

All students receiving special education services in Michigan must have an Individualized Education Program (IEP) that details the appropriate education plan for that student. The IEP overrides all other state and local district requirements, including the Michigan Merit Core, if so stated. The State Board of Education firmly believes however, that special education students can learn and participate in the general education setting, and that special education students should be given every opportunity to meet many, if not all, of the Michigan Merit Core content expectations.

### ***Effect on Statewide Student Assessment Tests***

**Q: How will the new graduation requirements affect the Michigan Merit Exam?**

**A:** The requirements should better students prepare students to be successful on the new Merit Exam. The legislation that created the Merit Exam called for the exam to test English, Mathematics, Science, U.S. History, Government, World History, and Geography. The Merit Core curriculum in ELA, Math, Science, and Social Studies would require precisely the credits necessary to be prepared for the exam. Social Studies includes: U.S. history, world history, world geography, economics, and American government.

In the past, depending on a local school district's graduation requirements, it might have been possible for a student who did not elect the right classes to be ill-prepared for what was tested.

**Q: With upcoming changes to the Michigan Merit Exam, as well as this proposal, what professional development opportunities will be offered?**

**A:** The Michigan Merit curriculum is closely aligned with the recommended ACT College Readiness Benchmarks. Students who successfully complete the Merit core will be fully prepared for the ACT and WorkKeys portions of the MME, as these proposed requirements meet and exceed the recommended ACT Core. [http://www.act.org/path/policy/pdf/crisis\\_report.pdf](http://www.act.org/path/policy/pdf/crisis_report.pdf)

#### **The ACT Core Curriculum**

The core curriculum espoused by ACT is based on the curriculum proposed in 1983 in *A Nation at Risk*. ACT has long held that the core curriculum best prepares students for college or other forms of postsecondary training. The courses that constitute ACT's definition of the core curriculum, by subject area, are:

- English (four years or more)—One year credit each for English 9, English 10, English 11, and English 12;
- Mathematics (three years or more)—One year credit each for Algebra I, Algebra II, and Geometry. One half-year credit each for Trigonometry, Calculus, or other mathematics courses beyond Algebra II (e.g., Computer Mathematics/Computer Science);
- Social studies (three years or more)—One year credit each for American History, World History, and American Government. One half year credit each for Economics, Geography, Psychology, and other History (e.g., European, State); and
- Natural sciences (three years or more)—One year credit each for General/Physical/Earth Science, Biology, Chemistry, and Physics.

For more information, please go to: [http://www.21stcenturyskills.org/assess21/assess\\_definitions.php](http://www.21stcenturyskills.org/assess21/assess_definitions.php)

**Q: Will the state be developing end-of-course exams?**

**A:** Yes. The current plan calls for end-of-course exams to be developed within the next year or two, beginning with the Merit Core credit areas that will presumably be covered in 9<sup>th</sup> grade (for example, Algebra I, Biology, English 9, U.S. History).

Before end-of-course exams can be developed, however, the specific course content expectation for these credit areas must be clearly identified and approved by the State Board of Education. These

expectations are currently under development and, at least for 9<sup>th</sup> grade credit areas, will be available for public review by fall of 2006.

End-of-course exams will then be developed, based on the approved course content expectations. The current plan is for these end-of-course exams to be provided to districts and schools to be used on a voluntary basis, as a way of checking to what extent students are meeting the course content expectations.

The course content expectations, coupled with end-of-course exams, will help unify throughout the state what a particular course means and what is taught in that course, regardless of which high school a student attended. The appearance of “Algebra I” on a student transcript will signify that the student has been successful in meeting the expectations for what the State of Michigan defines as Algebra I.

**Q: Are the 21<sup>st</sup> Century Applied Learning Core classes going to be assessed on the Michigan Merit Exam (MME)?**

**A:** No. The MME will assess students using the ACT to test college readiness, Work Keys to assess work readiness, and Social Studies, Science, Math, and English language arts “wrap around” assessments will measure the high school content expectations not covered by the other two tests but required by the MME legislation.

## Curriculum

**Q: Is the state mandating a curriculum for schools to adopt?**

**A:** No. The state is developing high school graduation requirements – not mandating a curriculum for schools to adopt. The Michigan Department of Education continues to develop course content expectations (of what students will be expected to learn from the various courses) for local school districts to develop their own local curricula. School districts will be able to incorporate the content into a variety of flexible and student-relevant courses. For instances, schools could incorporate the algebra content expectations into a building trades class. But the state is not mandating a curriculum, nor the textbooks or supporting materials for a school district’s curriculum. In fact, the plan approved by the State Board of Education encourages innovative and alternative ideas by school districts for the development and delivery of the course content.

**Q: Were defined targets/standards considered, instead of credits/courses? This would have allowed for greater flexibility for schools.**

**A:** In our document, “credit” is defined as the satisfactory completion of a prescribed set on course requirements which are based on meeting course content expectations. After the student has satisfactorily met the content expectations, the local district will award “credit” for the course. The High School Content Expectations, from which specific course content expectations are being developed.

**Q: How will the requirements be worded to address all the differing high school schedules, such as traditional six-hour-day-all-year-classes, block classes for 90 minutes one semester, block classes for 70 minutes for 24 weeks (trimesters), etc.?**

**A:** See previous question. The amount of credit awarded for the satisfactory completion of the course requirement is the decision of the local school district.

**Q: Can you define “credit” versus “year” of classes?**

**A:** See above. “Credit” is tied to the satisfactory completion of the course requirements which are based in meeting course content expectations, not an seat time.

**Q: Will state expectations and benchmarks be assigned to classes—specifically the math and science classes—as has been done with the lower level grade level content expectations?**

**A:** Yes. The complete range of high school content expectations has been developed for mathematics and English language arts. These expectations will be assigned to specific courses by September 2006. The science and social studies content expectations development process is also beginning.  
<http://www.michigan.gov/mde/0,1607,7-140-38935---,00.html>

**Q: With respect to physics and chemistry classes, will a basic level of those classes be acceptable or will students have to take the more rigorous classes that require higher level mathematics and therefore have to be taken during the junior and senior year?**

**A:** Please refer to answer on page 7. Again, this plan gives a lot of control to the local school districts. At the present time, whatever a school district considers to be its chemistry or physics class, would be considered its classes in those subject. Yet, within a year the state will have developed course content expectations for what students will be expected to learn in chemistry and physics. The high school Michigan Merit Exam will test each high school students based upon those course content expectations. Districts would do right by their students at that time to learn the content that will be needed to pass the Michigan Merit Exam.

**Q: Will there still be room for “consumer mathematics”?**

**A:** One of the four math credits is a “math or math-related” credit. The local district would decide if a “consumer mathematics” credit meets the requirement.

**Q: What about online courses as possible requirement, especially if there is no computer requirement?**

**A:** In keeping with state technology standards, technology is integrated into all the credits in the Michigan Merit Core. It will be a local school district’s decision as to how the online learning experience will be met as part of the graduation requirement.

**Q: Will districts have to cut electives to adopt this curriculum?**

**A:** Many electives such as health/PE, visual and performing arts, and world languages are now part of the Merit core. Many of the other electives that are currently offered can be redesigned nicely to fit into the 21<sup>st</sup> Century Learning core.

**Q: How are districts throughout the state preparing for the senior year math requirements?**

**A:** Districts design a math sequence. Students can choose to take the next course in the sequence or another math related course.

### ***Effect on High School Scheduling***

**Q: Different school districts have varying ways in which they schedule their high school class day. Will these new requirements force districts to change their high school class day schedules?**

**A:** No. There is flexibility provided to school districts to maintain their current scheduling system, or develop other systems to meet the individual needs and desires of each district. Below are some sample scheduling options that show how the Michigan Merit Core can be implemented in a variety of ways.

## 6 Period Day Schedule

### 4 x 4 Block / AB Block Schedule

#### First Semester or A Schedule

	Grade 9	Grade 10	Grade 11	Grade 12
Block 1	English 9	English 10	English 11	English 12
Block 2	Algebra I	Geometry	Algebra II	Math-Related
Block 3	Health/PE	World Language	CTE or Elective	CTE or Elective
Block 4	Elective	Elective	CTE or Elective	CTE or Elective

#### Second Semester or B Schedule

	Grade 9	Grade 10	Grade 11	Grade 12
Period 1	English 9	English 10	English 11	English 12
Period 2	Biology	US History	Algebra II	Math-Related
Period 3	World History	Chemistry	Gov/Econ	Science
Period 4	Health/PE	Geometry	CTE or Elective	CTE or Elective
Period 5	Algebra I	Visual/Performing Arts	CTE or Elective	CTE or Elective
Period 6	World Language	World Language	CTE or Elective	CTE or Elective

	Grade 9	Grade 10	Grade 11	Grade 12
Block 1	World History	US History	Physics	Govt/Economics
Block 2	Biology	Chemistry	CTE or Elective	CTE or Elective
Block 3	Visual/Performing Arts	World Language	CTE or Elective	CTE or Elective
Block 4	Elective	Elective	CTE or Elective	CTE or Elective

### Trimester Schedule

#### Trimester 1

	Grade 9	Grade 10	Grade 11	Grade 12
Period 1	English 9 A	English 10 A	CTE or Elective	CTE or Elective
Period 2	Biology A	US History A	CTE or Elective	CTE or Elective
Period 3	World History A	Elective	CTE or Elective	CTE or Elective
Period 4	Visual/Performing Arts A	Elective	English 11 A	English 12 A
Period 5	Algebra I A	World Language 2A	Algebra II A	Math-Related A

#### Trimester 2

	Grade 9	Grade 10	Grade 11	Grade 12
Period 1	Health/PE A	Elective	CTE or Elective	CTE or Elective
Period 2	Biology B	Elective	CTE or Elective	CTE or Elective
Period 3	Algebra I B	Chemistry A	CTE or Elective	CTE or Elective
Period 4	Visual/Performing Arts B	Geometry A	Algebra II B	Math-Related B
Period 5	World Language 1A	World Language 2B	Economics	Science A

### Trimester 3

	Grade 9	Grade 10	Grade 11	Grade 12
Period 1	English 9 B	English 10 B	CTE or Elective	CTE or Elective
Period 2	Health/PE B	US History B	CTE or Elective	CTE or Elective
Period 3	World History B	Chemistry B	CTE or Elective	CTE or Elective
Period 4	World Language 1B	Geometry B	Government	English 12 B
Period 5	Elective	Elective	English 11 B	Science B

### 7 Period Day Schedule

	Grade 9	Grade 10	Grade 11	Grade 12
Period 1	English 9	English 10	English 11	English 12
Period 2	Algebra I	Geometry	Algebra II	Math-Related
Period 3	Earth Science	Biology	Physics	CTE or Elective
Period 4	World History	US History	Govt./Economics	CTE or Elective
Period 5	Health/PE	World Language	CTE or Elective	CTE or Elective
Period 6	Visual/Performing Arts	Elective	CTE or Elective	CTE or Elective
Period 7	World Language	Elective	CTE or Elective	CTE or Elective

### *On-Line Course Requirement*

**Q:** Why has an online learning experience been added to the Michigan Merit Curriculum? What counts for the online learning requirement?

**A:** Online learning or e-learning will be a part of every high school student's future learning experiences. The State of Michigan Education Technology Plan calls for Michigan to act decisively or risk falling far behind in a global society. A key recommendation from the plan states: ***“Every Michigan student will have meaningful technology-enabled learning opportunities based on research and best practice that include virtual learning experiences.”***

In addition, the State Board of Education's Task Force on Embracing the Information Age (2001) included the recommendation: “Require . . . all high school students to take no less than one on-line course from the Michigan Virtual High School or other quality distance learning institution as a condition for graduation.”

Virtual learning will be a part of our students' everyday lives. Already, many universities and colleges require students to have a laptop with them when they arrive on campus. Businesses conduct training sessions online, and cities now are providing wireless internet access in businesses to attract customers to their establishments. To give our students an experience of learning in a virtual world, the online learning experience is included in the Michigan Merit Curriculum requirements.

Credit for the online learning experience could be gained by enrollment in programs such as:

- Michigan Virtual High School <http://www.mivhs.org/> or another online school
- Courses using online textbooks
- Online preparation courses for Advanced Placement Examinations, and ACT or SAT Test Preparation
- CTE online courses like CISCO Networking Certification, Engineering Drafting/CAD, Computerized Accounting
- A Career Awareness class [currently in development by Michigan Virtual High School (MVHS)]
- Freedom to Learn classrooms

As technology in this area quickly advances, more and more opportunities to meet the e-learning requirement will become available.

**Q: The proposed on-line course that students would be required to take is going to cost money? Who is going to pay for this?**

**A:** It is true that most of the on-line courses we are aware of have student or school registration fees attached. The requirement states that students would complete such a course sometime prior to graduation. For the immediate future, we are in negotiations with a corporate sponsor to fund the development of a course in Career Planning that would be made available free to all schools and students through the Michigan Virtual High School. For the longer-range future, it is our intention to aggressively pursue funding that would allow this course to continue to be available free of charge, and add others to the list as well.

**Q: Why isn't a "technology" credit required?**

**A:** Please refer to the answer on page 8.

### *Will This Cause More Students to Drop Out?*

**Q: Won't the dropout rate increase with higher graduation requirements?**

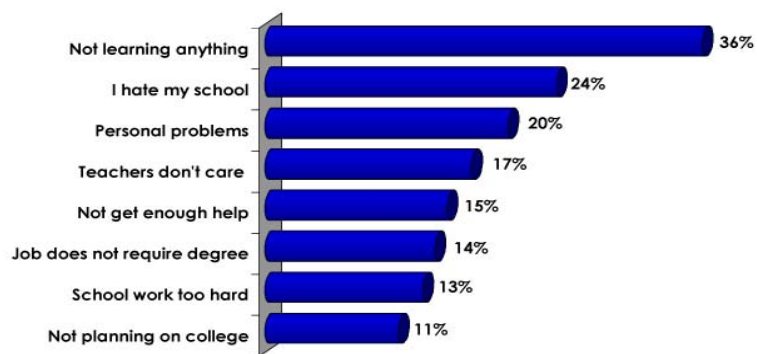
**A:** Research tells us that this is more a myth than a reality. Students do not drop out because they are asked to work harder. Perhaps, the more compelling evidence comes from the students themselves. According to the June 2005 National Governors' Association survey of over 100,000 students aged 16-18, only 13 % of the students who left school or are planning to leave said that the reason was because the work is too hard. <http://preview.nga.org/Files/ppt/RATEYOURFUTURESURVEY.PPT>

Other data from the survey:

- Less than 1 in 10 say high school has been "very hard."
- More than one-third of the respondents said high school has been "easy."
- 32% "strongly agree" they would work harder if high school offered more demanding and interesting courses.



### **Reason Teens Leave High School Early or are Thinking About It**



The 2005 Horatio Alger “State of Our Nation’s Youth Report” has similar findings.

- Almost nine in 10 students say they would work harder if their high school expected more of them.
- Less than one-third of students say their school sets high academic expectations

“High school rigor? Bring it on students say” <http://www.msnbc.msn.com/id/8884564/>

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In Michigan, this fall’s “Your Child” survey confirms these national surveys. Only one in eight (12%) Michigan teens say that high school is “very challenging.”

[http://www.mea.org/clients/pdf/yourchild\\_IV\\_summary.pdf#search='EpicMra%20Your%20Child](http://www.mea.org/clients/pdf/yourchild_IV_summary.pdf#search='EpicMra%20Your%20Child)

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Several studies document that students of all abilities learn more in academically rigorous classes.

- Students are more likely to pass high-level courses than low-level courses. Thus, the research suggests that increasing access by all students to advanced academic course work will improve student academic achievement.
- Students expected to master more demanding curricula are more likely to persist in school, achieve at higher levels, and be better prepared for the workforce after their formal education ends.

For more information, go to <http://www.ed.gov/about/offices/list/ovae/pi/hsinit/papers/highex.doc>

The evidence is conclusive. High expectations for all students, coupled with high support for students, can keep students in school and make them ready for the world of education and work beyond high school.

### ***How Will Schools Pay For This?***

**Q: Won’t implementing these new requirements cost school districts more money?**

**A:** No, the number of teachers and the total number of classes offered at each building should not increase based on these requirements. (FTE, Full time students remain the same.)

**Q: The proposed on-line course that students would be required to take is going to cost money. Who is going to pay for this?**

**A:** It is true that most of the on-line courses of which we are aware have student or school registration fees attached. The requirement states that students would complete such a course sometime prior to graduation. For the immediate future, the state is in negotiations with a corporate sponsor to fund the development of a course in Career Planning that would be made available free to all schools and students through the Michigan Virtual High School. For the longer-range future, it is our intention to aggressively pursue funding that would allow this course to continue to be available free of charge, and add others to the list as well.

### ***Are There Enough Teachers For These Required Subjects?***

**Q: Where are schools going to find enough math and science teachers to meet the need for all of these newly-required classes?**

**A:** Math and science classes already are required by local school districts. Most school districts have enough math and science teachers to meet the needs for the improved high school graduation requirements. The federal No Child Left Behind law requires classes be taught by Highly Qualified Teachers in those fields.

The issue is: what classes are those teachers currently teaching? Instead of teachers teaching a less rigorous math or science class, they now will have to teach one of the newly-required content areas – like Algebra II for math teachers, or Chemistry for science teachers. Granted, this may be a challenge for small or rural school districts, but there are available opportunities to offer these more rigorous credits through the Michigan Virtual High School, or other on-line courses. The Michigan Department of Education will work with school districts uniquely challenged in providing adequate teachers through the plan’s limited “phase-in” option. We expect that school districts that have creative solutions, such as distance learning and on-line learning and others, will share their success stories.

**Q: Will there be enough highly qualified teachers available to meet the need in world languages, advanced math, and science?**

**A:** MDE will support local efforts to recruit and retain highly qualified teachers in these areas. Alternative and emergency teacher certification procedures are in place to help serve the needs of districts. We are studying how other states approach the teacher shortages in these areas. We are also exploring interesting concepts like providing an accelerated certification process for displaced professionals.

**Q: Will teachers lose jobs (if they aren’t highly qualified to teach the required courses)?**

**A:** We do not foresee massive job loss as a direct implication of the high school requirement proposal. However, teachers may need to teach more advanced or alternative courses, especially in math and science. Elective classes such as health/PE, visual and performing arts, and world languages are now a part of the core requirements.

### ***Will Non-Public Schools Need to Meet These Requirements?***

**Q: Do the proposed graduation requirements apply to private and parochial schools?**

**A:** No, not unless the legislature specifically requires this as a condition to earn a high school diploma in a non-public Michigan school. Currently the requirement for one semester credit in Civics/Government does apply to all public and non-public schools in Michigan.

**Michigan Merit Core**

The Merit Core content standards may be met in a traditional course sequence or in different contexts or formats such as a Humanities course sequence, Career and Technical Education programs, or a specialized small school curriculum, or as an online course. Schools that offer courses in a different format must be prepared to demonstrate how these courses align with the Merit Core content standards and demonstrate how the content standards will be assessed. In all instances it is expected that technology, including assistive technology devices and services, will be used to deliver instruction to meet the Michigan Merit Core content standards.

APPENDIX A

<b>English Language Arts</b> 4 Credits	<b>Credits to Include:</b> <ul style="list-style-type: none"> <li>■ English 9 {or Humanities sequence, or CTE sequence}</li> <li>■ English 10</li> <li>■ English 11</li> <li>■ English 12</li> </ul> These courses will include writing, expository writing, creative writing, grammar, informational text, speaking, representing, reading, listening, viewing, literature, culture and language.
<b>Mathematics</b> 4 Credits	<b>Credits to Include:</b> <ul style="list-style-type: none"> <li>■ Algebra I {or Integrated Math sequence, or CTE sequence}</li> <li>■ Geometry</li> <li>■ Algebra II</li> <li>■ 1 Additional Math or Math-Related class</li> </ul> (For example: Calculus, Trigonometry, Electronics, Accounting, Probability and Statistics) Math must be taken in the Senior year.
<b>Science</b> 3 Credits	<b>Credits to Include:</b> <ul style="list-style-type: none"> <li>■ Biology {or Integrated Science sequence, or CTE sequence}</li> <li>■ Physics or Chemistry</li> <li>■ 1 year of Additional Science</li> </ul> Examples: Earth Science, Environmental Science, Forensic Science, Microbiology, Nanoscience, Oceanography, AP/IB/College for credit Sciences, Health Sciences, Agriscience, Chemistry, Physics
<b>Social Science</b> 3 Credits	<b>Credits to Include:</b> <ul style="list-style-type: none"> <li>■ Government/Civics .5 (semester) {or Humanities sequence, or CTE sequence}</li> <li>■ Economics .5 (semester)</li> <li>■ US History (integrated with Geography)</li> <li>■ World History (integrated with Geography)</li> </ul>
<b>Health/Physical Education</b> 1 Credit	Examples: Health, Personal Fitness
<b>Visual and Performing Arts</b> 1 Credit	Examples: Vocal and Instrumental Music, Art, Music Appreciation, Art History, Multicultural Art, Readers' Theater, and Dance
<b>World Languages</b> 2 Credits	
<b>SUBTOTAL</b>	<b>18 Credits</b>

# 21st Century Applied Learning Core

**All remaining elective credits must include teaching and learning of 21<sup>st</sup> century skills, examples shown below.**

The following set of skill categories represent the 21<sup>st</sup> century skills that all students need to know and apply for successful living in the 21<sup>st</sup> century. These skills permeate the **Merit Academic Core** and are enhanced by courses in the elective areas. The course content standards must incorporate one or more of the following categories. Assessments in the 21<sup>st</sup> Century Applied Learning Core often involve demonstration of satisfactory performance by applying the course content standards to real-world tasks and projects, and contexts.

*\*adapted from the Partnership for 21<sup>st</sup> Century Skills*

<http://www.21stcenturyskills.org/index.php>

## 21<sup>st</sup> Century Skill: Global Literacy

- Understand and address global issues.
- Learn from and work with others from diverse cultures, religions, and lifestyles.
- Master non-English language skills as a tool for understanding other nations and cultures.

## Course Examples

Fine Arts  
 Music and Performing Arts  
 World Languages: including world languages Chinese, Japanese, Arabic, Swahili, Hindi, Sign language, in addition to Spanish, French, German, etc.  
 Global Studies  
 Multicultural Studies: including, African American Studies, Native American Studies, Latino Studies, Asian Studies  
 World Religions  
 Philosophy  
 Anthropology  
 Sociology/Psychology  
 International Business  
 MVHS Online Classes  
 Advanced Placement Courses  
 JROTC

## 21<sup>st</sup> Century Skill: Civic Literacy

- Participate effectively in government as an informed citizen
- Exercise the rights and obligations of citizenship at local, state, national and global levels.
- Understand the local and global implications of civic decisions.
- Apply 21st century skills to make intelligent choices as a citizen.

## Course Examples

Student Government  
 Leadership  
 Law  
 Service Learning  
 Legislative Internship  
 Business Ethics  
 MVHS Online Classes  
 Advanced Placement Courses

## 21<sup>st</sup> Century Skill: Financial, Economic, and Entrepreneurial Literacy

- Make appropriate personal economic choices.
- Understand the role of the economy and the role of business in the economy.
- Apply appropriate 21st century skills to function as a productive contributor within an organizational setting.
- Integrate oneself within and adapting continually to our nation's evolving economic and business environment.

## Course Examples

Business Technology  
 Entrepreneurship, Accounting, Marketing  
 Global Economics  
 Junior Achievement Applied Economics  
 Internships  
 Life Science –Personal Living  
 Financial Management  
 Business Management

## 21<sup>st</sup> Century Skill: Information and Communications Technology Literacy

- Using information and media literacy skills.
- Analyzing, accessing, managing, integrating, evaluating and creating information in a variety of forms and media.
- Understanding the role of media in society.
- Understanding, managing and creating effective oral, written and multimedia communication in a variety of forms and contexts.
- Demonstrating interpersonal and self-direction skills. Becoming more productive in accomplishing tasks and developing interest in improving own skills.

## Course Examples

Multimedia, Broadcasting, CISCO, Computer Science  
 Debate and Forensics  
 Oral Communication  
 Journalism—Publications  
 Creative Writing  
 Drama  
 Theater Arts  
 Film and Photography  
 Desktop Publishing  
 Advertising  
 Graphic Arts and Design  
 Fine Arts  
 Performing Arts—Dance, Orchestra, Marching Band, Music Technology  
 MVHS Online Classes

## 21<sup>st</sup> Century Learning Skills

- **Thinking and Problem-Solving**—Critical thinking, systems thinking, exercising sound reasoning, making complex decisions, problem identification, formulation and solution.
- **Interpersonal and Self-Directional**—Teamwork and leadership; adapting to varied roles and responsibilities; working productively with others; exercising empathy; respecting diverse perspectives.
- **Information and Communication**— Creativity and intellectual curiosity, information and media skills, communications skills, self direction.

## Course Examples

Electronics, Aviation, Building and Construction Trades  
 Robotics  
 Internships  
 Work Based Learning Experiences  
 Probability and Statistics  
 Health Sciences  
 Personal Fitness and Wellness

## Accelerated Learning

- Acknowledges that students learn at different rates
- Can occur at any time in a student's high school experience
- Can assist students in moving beyond grade level, remaining at grade level, or moving to grade level.

## Course Examples

Advanced Placement Courses  
 Dual Enrollment Courses  
 Online courses  
 Literacy Labs  
 Math Labs  
 Gear Up  
 Upward Bound  
 Ramp Up Courses  
 Mentor Reading  
 2 + 2 + 2 Articulated Programs

## 21<sup>st</sup> Century Applied Learning Core

**Total credits for graduation determined by district**