MARYLAND STATE DEPARTMENT OF EDUCATION
EQUITY AND EXCELLENCE

Karen B. Salmon, Ph.D.
State Superintendent of Schools

TO: Members of the State Board of Education

FROM: Karen B. Salmon, Ph.D.

DATE: December 7, 2020

SUBJECT: Maryland High School Graduation Task Force Recommendations

PURPOSE:

The purpose of this presentation is to review the 12 recommended changes to the high school graduation regulation made by the Maryland High School Graduation Task Force.

BACKGROUND/HISTORICAL PERSPECTIVE:

The Maryland High School Graduation Task Force was first convened in January 2018 at the request of the State Board and the State Superintendent of Schools. The Task Force was to make recommendations to the Board and Superintendent on the Code of Maryland Regulations (COMAR) Chapter 13A.03.02 *Graduation Requirements for Public High Schools in Maryland*. Specifically, the Task Force was asked to focus on three areas: credit and program requirements (number of credits, subject areas, and other requirements), assessments, and options for awarding high school diplomas. All decisions were informed by current research, data, and experts.

Twenty-four organizations and stakeholder groups were invited to have a representative sit on the Task Force. The Task Force was co-chaired by Dr. Carol Williamson, Deputy Superintendent, Office of Teaching and Learning, and Dr. Dara Shaw, Executive Director, Office of Research.

The Task Force met 14 times between January and September 2018. Each meeting was three hours, and all meetings were open to the public.

EXECUTIVE SUMMARY:

The presentation includes the 12 recommendations that constitute a change to COMAR 13A.03.02. Of the 12 recommendations reviewed for this meeting, 11 have already been approved by the State Board to move forward. The recommendation regarding assessment will be introduced at this meeting and then considered for approval at the January meeting, following Board discussion.

ACTION:

For discussion and background for future decisions.

ATTACHMENTS:

Attachment I – Maryland High School Graduation Task Force Recommendations, Power Point

Attachment II – Final Report: Maryland High School Graduation Task Force

High School Graduation Task Force Recommendations

Maryland State Board of Education

December 7, 2020

WHY WAS THE TASK FORCE ESTABLISHED? CURRENT POLICY AND LEADERSHIP CONSIDERATIONS

- State Superintendent request in response to State Board interest in student performance and meaning of a Maryland diploma
- More Jobs for Marylanders Act of 2017 (SB 317)
- General nationwide concerns about student performance

Task Force Purpose and Timeline

Purpose: To make recommendations* to the Superintendent and State Board on:

- Credit and program requirements for graduation (number of credits, subject area(s), and other requirements)
- Assessment requirements for graduation
- Options for awarding high school diplomas

Timeline for Implementation for Students:

- Begin in fall 2021 – Incoming 9th grade students
- Four-year graduation – Spring 2025

**All recommendations will consider current research, data, and policies on the impact of credits, assessments, and diploma types on college and career readiness and other outcomes.*

Task Force Membership

Task Force members represent 24 organizations:

- Maryland Association of Boards of Education
- Maryland Association of Community Colleges
- Maryland Association of Elementary School Principals
- Maryland Association of Secondary School Principals
- Maryland Association of Student Councils
- Maryland Business Roundtable
- Maryland Chamber of Commerce
- Maryland Department of Human Services
- Maryland Department of Labor, Licensing and Regulation
- Maryland English Language Learning Family Involvement Network
- Maryland Governor's Office
- Maryland Higher Education Commission
- Maryland Independent College and University Association
- Maryland PTA
- Maryland School Counselor Association
- Maryland State Board of Education
- Maryland State Department of Education
- Maryland State Education Association
- Maryland Teacher of the Year
- Office of the Attorney General
- Parent
- Public School Superintendents Association of Maryland
- Special Education State Advisory
- University System of Maryland

Format and Guiding Principles

Format:

- Decisions were informed by current research, data, and experts, consistently available to all members via a Resource Hub
- Research came from a large number of diverse sources and used rigorous methods of analysis
- Task Force members worked in committees, with opportunities to bring committee work to the entire group

Guiding principles were developed by Task Force members:

- Knowledge and skills
- Personalization
- Equity

Credit Requirements

State requirements: students must earn a minimum of 21 credits. Local requirements may be *in addition to* State requirements.

English – 4 credits

Math – 3 credits

Science – 3 credits

Social Studies – 3 credits

- Government – 1 credit
- U.S. History – 1 credit
- World History – 1 credit

- **Fine Arts** – 1 credit

Physical Education – ½ credit

Health – ½ credit

Technology Education – 1 credit

One of the following:

- World Language – 2 credits
- Advanced Technology – 2 credits
- CTE Program Completion

Other electives – 3 credits

Current and Recommended Credit Requirements:

State requirements: students must earn a minimum of ~~21~~ 22 credits.
Local requirements may be *in addition to* State requirements.

English – 4 credits

Math – ~~3~~ 4 credits (must be enrolled all four years in math)

Science – 3 credits

Social Studies – 3 credits
- Government – 1 credit
- U.S. History – 1 credit
- World History – 1 credit

- **Fine Arts** – 1 credit

Physical Education – ½ credit

Health – ~~½~~ 1 credit

~~**Technology Education**~~ **Computer Science**– 1 credit

One of the following:
- World Language – 2 credits **of the same language**
- ~~Advanced Technology – 2 credits~~
- CTE Program Completion

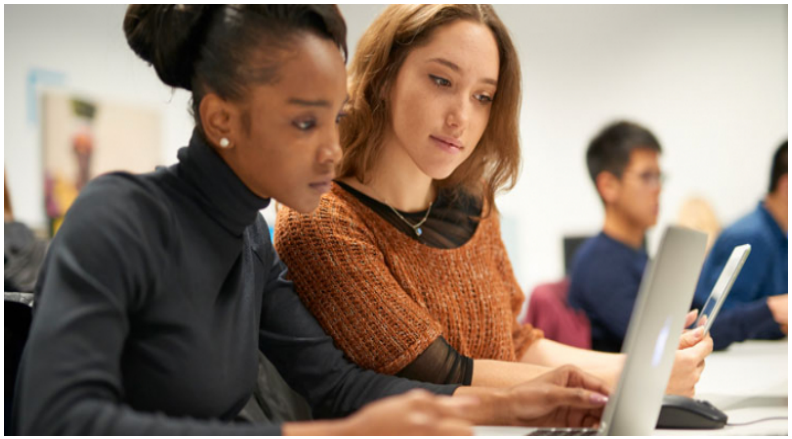
Other electives – ~~3~~ **2.5** credits

Credit and Program Regulatory Recommendations

Recommendation	State Board August 2019	State Board September 2019	State Board October 2019
1.2 Mathematics: Increase credit requirements from 3 to 4 credits;.	X approved		
1.5 Health Education: Increase credit requirement from .5 to 1.0.			X approved
1.8 Technology Education: Transition from Tech Ed to Computer Science.			X approved
1.9 Graduation Pathway: Eliminate Advanced Technology option; require two pathways - Successful completion of a State-approved Career and Technical Education (CTE) program and/or completion of 4-year college or university requirements (two years of the same language, Algebra II, and two of three sciences as lab sciences).		X approved	
1.B Dual Enrollment: Dual Enrolled students who successfully complete a college course that is aligned with MD standards should receive high school (HS) credit.		X approved	

Annotated Code

- **7-205.1(c) High school curriculum and graduation requirements**
  - Beginning with the **9th grade class of 2014**,…, each student shall **enroll in a mathematics course in each year of high school** that the student attends high school.



Code of Maryland Regulations (COMAR)

- **COMAR 13A.03.02.03(A)**
  - Beginning with students entering the 9th grade class of 2014 – 2015 school year, each student shall enroll in a mathematics course in each year of high school that the student attends, up to a maximum of 4 years of attendance, unless in the 5th or 6th year a mathematics course is needed to meet a graduation requirement.
- **COMAR 13A.03.02.03(B)(3)**
  - Mathematics — **three credits**, including **one with instruction in algebra aligned with the Maryland High School Assessment for algebra** or **one or more credits in subsequent mathematics courses** for which Algebra I is a prerequisite, and **one with instruction in geometry** aligned with the content standards for geometry.

Rationale of the Task Force for Recommendations regarding Mathematics

1. Education Commission of the States – two states require two credits; 26 states require three credits; 16 states require four credits; one state has no standard diploma pathway/math credit requirements vary by pathway; and six states do not specify – credits are locally determined or competency based (January 2019 report).

2. The Task Force reviewed a number of rigorous research studies and found that greater exposure to math in high school is linked with better labor market outcomes including wages, increased financial literacy, and increased student engagement in high school. One recent study found that state changes to minimum high school math requirements is especially beneficial to students of color.

3. Beginning with the 9th grade class of 2015, each student was required to enroll in a mathematics course each year of high school. However, students were not required to obtain 4 credits in math, they only had to earn 3 credits. They did have to be enrolled each year they were in high school unless they were in high school for a 5th or 6th year. The recommendation of the Task Force aligns the credit requirement with the requirement to be enrolled in a mathematics course each year in high school.

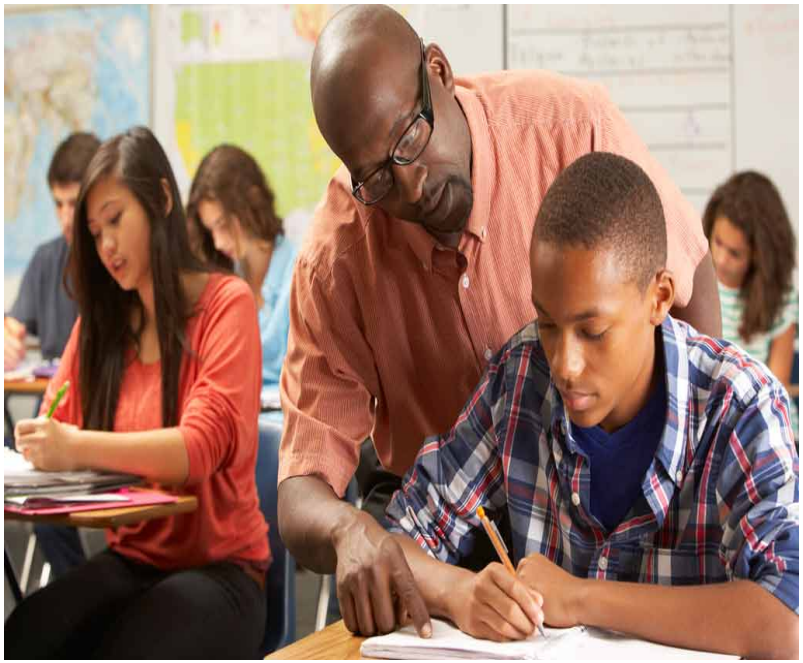
4. The Task Force supported courses being aligned to students' goals and pathway.

5. 15 local school systems already require 4 credits in mathematics for graduation.

6. University of Maryland requires four years of math, including Algebra I, Geometry, and Algebra II. Students who complete Algebra II prior to their final year must complete the four-year entrance mathematics requirement by taking a course or courses that utilize non-trivial algebra (Algebra II, Trigonometry, Precalculus, Calculus, Statistics, College Algebra, etc.)

Recommendation of the Task Force

- **Students must be enrolled in a math course each year in high school** and earn four math credits as part of their graduation requirements. This is an increase from three to four credits required in mathematics for graduation.
  - Students must earn credits in Algebra 1 and Geometry.
  - High school credits should match the academic pathway appropriate to the student's goals.



Credit and Program Regulatory Recommendations

Recommendation	State Board August 2019	State Board September 2019	State Board December 2019
1.2 Mathematics: Increase credit requirements from 3 to 4 credits;.	X approved		
1.5 Health Education: Increase credit requirement from .5 to 1.0.			X approved
1.8 Technology Education: Transition to one credit of computer science.			X approved
1.9 Graduation Pathway: Eliminate Advanced Technology option; require two pathways - Successful completion of a State-approved Career and Technical Education (CTE) program and/or completion of 4-year college or university requirements (two years of the same language, Algebra II, and two of three sciences as lab sciences).		X approved	
1.B Dual Enrollment: Dual Enrolled students who successfully complete a college course that is aligned with MD standards should receive high school (HS) credit.		X approved	

Health Education
Current regulation: COMAR 13A.03.02.03(B)(5)

Students are required to earn one-half credit in Health Education to graduate.

Legislative Requirements

- ☑ Boundaries and Consent 2018 – Age appropriate instruction in consent and personal boundaries
- ☑ Start Talking Maryland 2017 – Opioid prevention education
- ☑ Erin's Law 2016 – Sexual abuse and assault awareness and prevention
- ☑ Breanna's Law 2014 – Hands Only CPR and AED Instruction
- ☑ Student Health, Well Being, and Growth 2012 – Diabetes treatment and prevention lessons
- ☑ Oral Health Education Law 2012 – Oral disease prevention and dental health promotion

Rationale of the Task Force for Recommendation regarding Health Education

1. All students have to participate in a comprehensive health education instructional program that addresses mental and emotional health, nutrition and fitness, safety and injury prevention personal and consumer health disease prevention and control, and human life and sexuality.

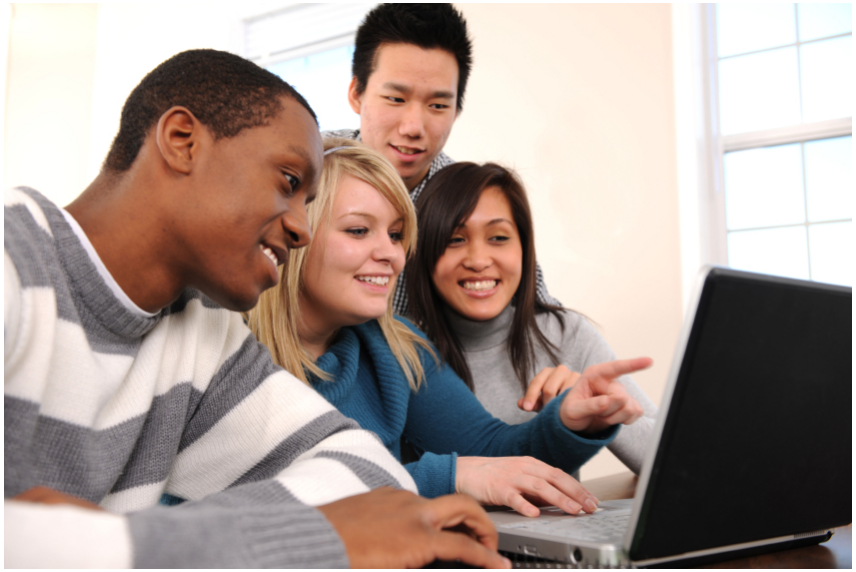
2. In response to opioid crisis, legislation was passed requiring drug addiction and prevention programs at the high school level.

3. Additional legislation mandated programs in sexual abuse and assault instruction.

4. Maryland Youth Risk Behavior/Youth Tobacco survey showed increasing trends in high school student engagement in risky behaviors such as alcohol and drug use, a decline in mental health, and decreased healthy eating and exercise practices.

5. The Maryland State School Health Council and the Health and Physical Education Advisory Board documented the need for increased health coursework to provide sufficient instruction in sexual abuse, drug prevention, suicide prevention, and mental health.

Recommendation of the Task Force



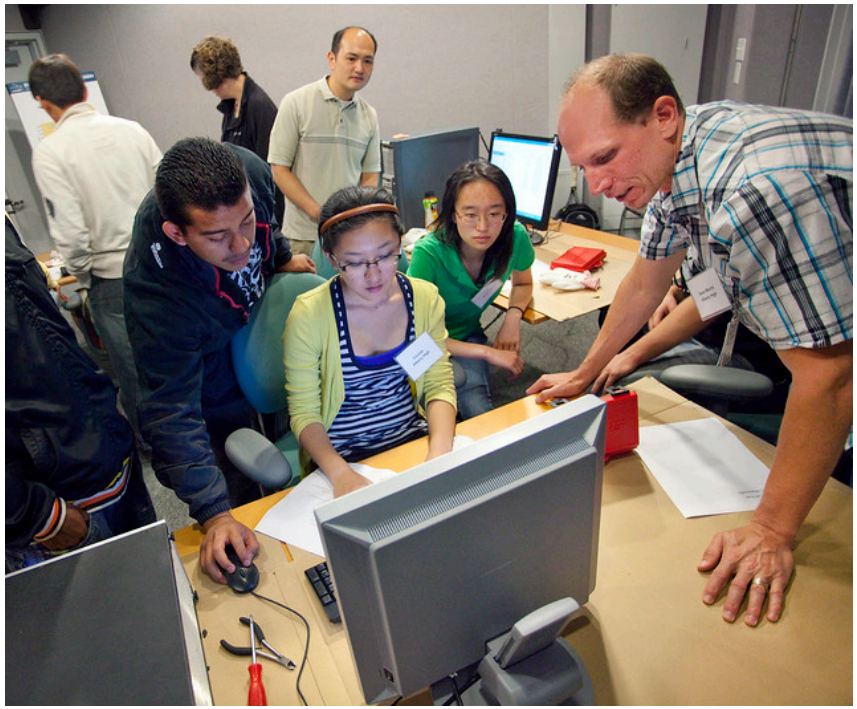
Increase graduation requirement to one full credit in health education.

Credit and Program Regulatory Recommendations

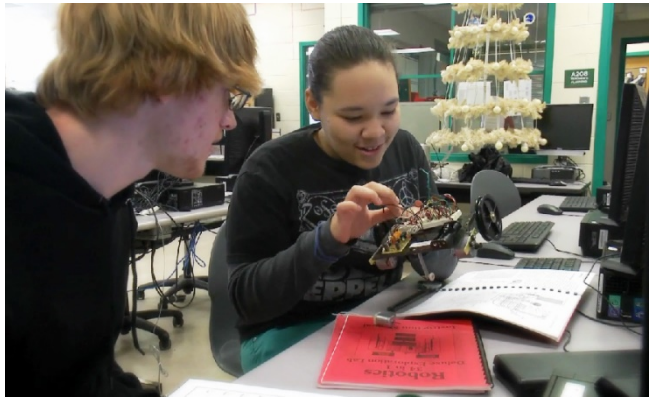
Recommendation	State Board August 2019	State Board September 2019	State Board October 2019
1.2 Mathematics: Increase credit requirements from 3 to 4 credits.	X approved		
1.5 Health Education: Increase credit requirement from .5 to 1.0.			X approved
1.8 Technology Education: Transition to one credit of Computer Science.			X approved
1.9 Graduation Pathway: Eliminate Advanced Technology option; require two pathways - Successful completion of a State-approved Career and Technical Education (CTE) program and/or completion of 4-year college or university requirements (two years of the same language, Algebra II, and two of three sciences as lab sciences).		X approved	
1.B Dual Enrollment: Dual Enrolled students who successfully complete a college course that is aligned with MD standards should receive high school (HS) credit.		X approved	

Technology Education
Current regulation: COMAR 13A.03.02.03(B)(8)

- Students are required to earn one credit that includes the application of knowledge, tools, and skills to solve practical problems and extend human capabilities



Expanding Options for Students to Fulfill the Technology Education Graduation Requirement



2015

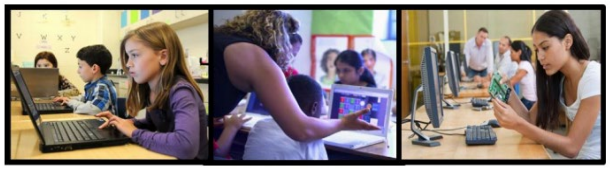
Computer Science and Engineering Courses are Allowed to Fulfill Technology Education Graduation Requirement

2020

All 24 School Systems Offer Computer Science and/or Engineering Courses as Technology Education Graduation Credit Options

Standards for Computer Science Courses

- Developed by a statewide design team consisting of representatives from local school systems, institutions of higher education, industry, and non-profit organizations
- Organized into Five Concepts:
  1. Computing Systems
  2. Networks and the Internet
  3. Data and Analysis
  4. Algorithms and Programming
  5. Impacts of Computing



Maryland's K-12 Computer Science Standards

MARYLAND STATE DEPARTMENT OF EDUCATION
EQUITY AND EXCELLENCE

September 2018

Rationale for Recommendation regarding transition from Technology Education to Computer Science

1. Maryland has high demand for computer science-educated workers, and low supply, especially women.

2. All stakeholders agree that computer science education is crucial.

3. K-12 exposure leads to post-secondary majors, especially for women and underrepresented minorities.

4. Allowing computer science to count towards a technology credit during the transition leads to more gender balance.

5. Transition from the state's one credit technology graduation requirement to one credit of computer science supports our nation's needs and the momentum in our State for computer science education.

Recommendation Regarding Technology Education Credit

Transition to Computer Science/Engineering.

Credit and Program Regulatory Recommendations

Recommendation	State Board August 2019	State Board September 2019	State Board October 2019
1.2 Mathematics: Increase credit requirements from 3 to 4 credits.	X approved		
1.5 Health Education: Increase credit requirement from .5 to 1.0.			X approved
1.8 Technology Education: Transition to one credit of Computer Science.			X approved
1.9 Graduation Pathway: Eliminate Advanced Technology option; require two pathways - Successful completion of a State-approved Career and Technical Education (CTE) program and/or completion of 4-year college or university requirements (two years of the same language, Algebra II, and two of three sciences as lab sciences).		X approved	
1.B Dual Enrollment: Dual Enrolled students who successfully complete a college course that is aligned with MD standards should receive high school (HS) credit.		X approved	

Current regulation: COMAR 13A.03.02.03(B)(9)

- **Requirements for graduation - One of the following:**
  - **World Language – Two credits of world language; may include American Sign Language**
  - **Advanced Technology –Two credits of advanced technology education; or**
  - **Career and Technology Program – Successfully complete a State-approved career and technology program**

Graduation Pathways

Aligned to one of the following:

Postsecondary preparedness:

4-year College or University requirements which include 2 years of the same language, Algebra II, and 2 of 3 sciences as lab sciences

OR

Workforce preparedness:

Career and Technology Education (CTE)

Rationale of the Task Force for Recommendations regarding graduation pathways

1. All pathways or options are tied to an outcome that has meaning for students, post-secondary education, and/or employers.

2. Students should be meaningfully prepared for a specific destination. Align the pathways portion of the graduation requirements to: (a) workforce preparedness, and/or (b) postsecondary preparedness (UMD).

3. CTE option requires successful completion of a State-approved CTE program. This refers specifically to the coursework requirements, which tend to be academically and/or technically-rigorous.

4. Requiring licensure or other certification should not be required for several reasons:
    a. Many students do not take exams until after high school, or sometimes until after they continue their studies at a post-secondary level;
    b. Exams are administered by multiple agencies and licensing boards and these organizations do not share the results with MSDE.
    c. Not all pathways have an exam.
    d. There is an equity issue as students pay for the exams out-of- pocket which means this is not accessible to all students.

Recommendation Regarding Graduation Pathway

- Eliminate the Advanced Technology option

- Require one or more of the following:
  - Successful completion of a 4-year college or university requirements, which include two years of the same world language, Algebra 2, and two of three sciences as lab sciences.

  - Successful completion of a State-approved Career and Technology Education (CTE) Program.

  - Further study of a possible third pathway.

Credit and Program Regulatory Recommendations

Recommendation	State Board August 2019	State Board September 2019	State Board October 2019
1.2 Mathematics: Increase credit requirements from 3 to 4 credits.	X approved		
1.5 Health Education: Increase credit requirement from .5 to 1.0.			X approved
1.8 Technology Education: Transition to one credit of computer science .			X approved
1.9 Graduation Pathway: Eliminate Advanced Technology option; require two pathways - Successful completion of a State-approved Career and Technical Education (CTE) program and/or completion of 4-year college or university requirements (two years of the same language, Algebra II, and two of three sciences as lab sciences).		X approved	
1.B Dual Enrollment: Dual Enrolled students who successfully complete a college course that is aligned with MD standards should receive high school (HS) credit.		X approved	

Current Status

Maryland Annotated Code:

The Md. Code, Ed. Art. §18-14A-01 defines dual enrollment. "Dually enrolled student" means a student who is dually enrolled in:

(i) A secondary school in the State; and

(ii) An institution of higher education in the State.

COMAR:

13A.02.06.03A(9) A student may be counted an one full-time equivalent if the student in under the supervision of the public school system for the purpose of: Planning the dual enrollment course work for the student.

13A.03.02.08 Each local school system shall develop a written policy on grading and reporting…that includes explanation of weights of honors, Advanced Placement, International Baccalaureate, and/or Dual Enrollment courses…

Rationale of the Task Force for Recommendations Regarding Dual Enrollment

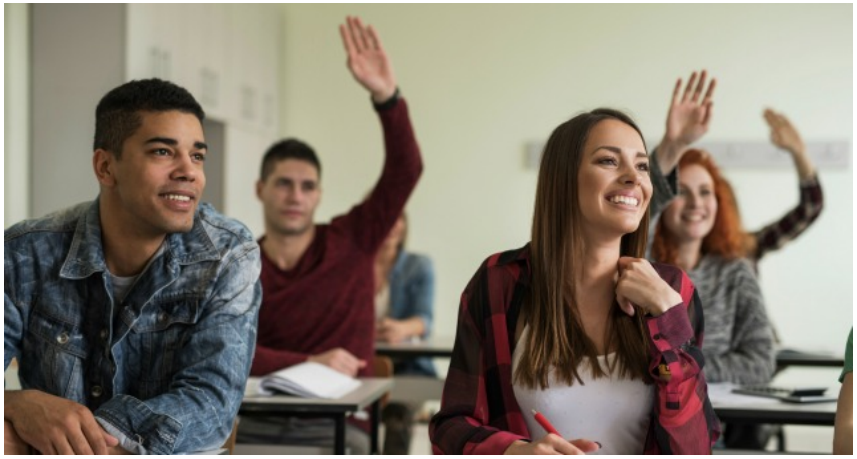
1. Research shows students who participate in dual enrollment are more likely to enroll in college, earn more college credits while enrolled, and are more likely to graduate college on time. Dual enrollment has also been found to offer an array of curricular options to high school students who might not otherwise have access to these options due to limited offerings at their high school. It may be particularly beneficial to CTE students as well.

2. Limited research also finds that dual enrollment is best employed strategically. It may not provide all students with improved outcomes, especially if it is required, but rather may be most effective when used for students who would not otherwise participate in the course. Depending on the cost structure of dual enrollment and other factors, there may be different participation rates for disadvantaged students. The Task Force, therefore, does not recommend requiring dual enrollment for all students.

3. The Task Force noted the need for community colleges to become more consistent in what is offered as a part of a designated course. If the course is to be used for a high school credit, the course should be aligned to the high school standards for the high school course it is replacing. (Dual enrollment in Maryland is currently addressed by an ad-hoc workgroup composed of postsecondary and K-12 stakeholders, managed by the Maryland Higher Education Commission)

Recommendations from High School Graduation Task Force Regarding Dual Enrollment

The Task Force recommends that high school students that successfully complete a college course aligned with the Maryland College and Career Ready Standards or an elective credit for graduation requirements, as determined by the MSDE, after consultation with the local school systems, receive the high school credit for the course.



Diplomas
Regulatory Recommendations

Recommendation	Previous State Board Discussions	State Board April 2020
2.1 Maintain a single MD HS diploma	April 23, 2019 State Board reached consensus to move forward	
2.2.1 Adopt definitions of seal, endorsement, and local award		X
2.2.2 and 2.2.3 Establish requirements and a process for seals, endorsements, and awards		X
2.2.4 Create a "College Ready" Endorsement effective for the graduating class of 2023 (1st time 9th grader 2019-2020)	April 23, 2019 State Board discussed	
2.2.5 Create a Career and Technical Education (CTE) Endorsement effective for the graduation class of 2023 (1st time 9th grader 2019-2020)		

Diplomas and Certificates
COMAR 13A.03.02.09(A-B)

A Maryland High School Diploma may be issued if the following items have been met:

- State enrollment, credit, and service requirements
- Local school system graduation requirements
- State assessment requirements

2.1: Maryland High School Diploma Recommendation:

Maintain a single Maryland high school diploma.

Rationale

1. Policy experts recommend that diplomas aligned with college and career ready standards should be the default diploma for all students.
2. Having a single diploma aligned to the same standards sets the same expectations for all students.
3. Research has found that states that require a college and career readiness diploma have smaller gaps between underserved and other student groups than states that only offer it as an option.
4. The single Maryland diploma succinctly conveys meaning to employers on the capabilities of high school students.
5. There is a historical precedent for a single diploma.

Recommendation

2.2. Seals, Endorsements, and Awards

- Develop a process for the adoption of national seals and the creation of state endorsements to ensure that seals and endorsements meet established requirements.
- Local Boards may create awards based on state-established requirements. (COMAR 13A.03.02.09.F)

Rationale

1. Direct signal to higher education and employers on students' accomplishments.
2. Signals identical accomplishments for all other students with that same seal or endorsement, because the standards are statewide.
3. Signals completion of activities or outcomes beyond the established minimums.
4. Preserves equity through common standards required by the Maryland High School Diploma that represents common standards that all students must meet.
5. Allows personalization by meeting skills above and beyond the common standards specific to their areas of interest, and recognizing exceptional skills.
6. Allows Maryland's local school systems to have the control and flexibility to meet the unique needs of their students and families.

Recommendation

2.2.4: College Ready Endorsement

- Awarded to students who meet the College and Career Readiness Assessment Options defined in the MOU between the MD Association of Community Colleges (MACC) and the Public School Superintendents' Association of Maryland (PSSAM)
- Students must meet assessment options in English/Language Arts (ELA) and Math
- Should earn by end of grade 11

Rationale

1. Analysts recommend aligning high school requirements with higher education admission standards, especially as a way to close the “preparation gap” for under-resourced students.
2. Supports the College and Career Readiness and College Completion Act of 2013 by clearly identifying students who have exceeded the Maryland high school graduation requirements and are college-ready.
3. A succinct signal on a student’s diploma of readiness to enter a four-year institution would be beneficial to students for whom four-year college is a goal.

Recommendation

2.2.5: Career and Technical Education(CTE) Endorsement

- Designed for students who successfully meet requirements determined by MSDE, Division of College and Career Readiness
- Must be above the minimum requirements for graduation and successful completion of the CTE pathway

Rationale

1. Encourages exposure to career and technical education, which has been shown to increase the likelihood of student graduation, two-year college entry, and employment (with higher wages).
2. Supports the College and Career Readiness and College Completion Act of 2013 by clearly identifying students who have exceeded the Maryland high school graduation requirements and are career-ready.
3. National precedent for similar CTE endorsements.
4. Provides a succinct signal on a student's diploma of readiness to enter the world of work.

Recommendation

2.3: Certificate of Program Completion

Convene a workgroup to evaluate and potentially modify the Maryland Certificate of Program Completion

Rationale

1. Based on expert stakeholder input, the Task Force believes the current Maryland Certificate of Program Completion does not clearly signal to the workforce the “appropriate skills” a student with disabilities acquired through a free and appropriate public education.
2. The Task Force believes that education professionals, parents, and students should be able to define more clearly “what” students with disabilities are capable of upon high school completion, just as the Maryland High School Diploma does.

Workgroup Summary

- Representative group of stakeholders met during March and April.
- Determined that requirements should not be revised at this time.
- Determined name should not be changed until Endorsements and Standards have been developed.
- Agreed language in COMAR should be revised once Endorsements and Standards are developed.

Workgroup Recommendation

- Develop endorsements that can be added to the current Certificate of Program Completion, as well as the Standards noted below to achieve any of the three Endorsements:
    - Post Secondary Education
    - Work-Ready/Employment/Career
    - Community Citizenship

Assessments
Regulatory Recommendations

Recommendation	State Board January 2020	State Board February 2020	State Board March 2020
3.1 Require Algebra, English, Government and Science Assessments to be end-of-course assessments that contribute to 20 percent of the final course grade/Remove requirements that students receive a certain assessment score for graduation as a stand alone requirement		X	
3.2 Require student to participate in the HS Maryland Integrated Science Assessment (MISA) until determination of an "end-of-course" assessment for science		Completed on February 25, 2020	

Current Regulation

COMAR 13A.03.02.06 Maryland High School Assessments

A student shall take the requisite Maryland High School Assessment during its next regular administration if the student received credit for taking, by the methods identified in Regulations .03 and .04 of this chapter, any of the following courses aligned with the Maryland High School Assessments:

- Algebra;
- English;
- Science; or
- Government

Assessment Requirements

- Students must meet end-of-course assessment requirements in the following content areas:
  - Algebra
  - Science
  - English
  - Government
- Students are to take the end-of-course assessment after completing the required course.
- School systems must provide appropriate assistance to students not meeting the assessment requirements.
- Bridge Plan For Academic Validation is one option for students who do not meet the requirements.
- Students may also re-test.
- Per COMAR, Local School Systems may report only *if* a student meets assessment requirements, but not *how*.

Rationale

1. Research shows that high stakes exit exams disproportionately and negatively impact minority and economically disadvantage students reducing their likelihood of graduation from high school.
2. Research shows that a student's course grade is a stronger predictor of college ad career success than standardized assessments.
3. Schools are being held accountable for student achievement in math and English language arts in MD's state accountability plan.
4. Many states have recently changed their high stakes assessments to be end-of-course exams instead of graduation requirements.
5. Many states count end-of-course exams as 20% of the respective course grade.

3.1 Recommendation for Algebra, English, Government, and Science Assessments

- Decouple high school exams from exit requirements
- Require the MD High School Assessments in Algebra, English, Government, and Science to be end-of-course assessments that contribute to 20% of the final grade.
- Revise COMAR to state that a student shall take the requisite Maryland High School Assessment during its next regular administration if the student received credit for taking … any of the following courses aligned with the High School Assessment: Algebra; Science; English; or Government.
- After 4 years of adoption of this recommendation, MSDE should study the correlation between final course grades and assessment scores.

Recommendation 3.3: Bridge Plan for Academic Validation

Maintain the Bridge Plan for Academic Validation where necessary as an alternative pathway for high school assessment completion. If State Board accepts Recommendation 3.1 and 3.2, the Bridge Plan may no longer be necessary; however, the Task Force recommends that MSDE must carefully consider all possible short and long term consequences before eliminating the Bridge Plan.

High School Task Force Timeline for Regulatory Recommendations

		April 2019	Aug 2019	Sept 2019	Oct 2019	Feb. 2020	Nov 2020	Jan 2021	March 2021	April 2021	May 2021 Through August 2021		
Credit and Program	1.2 Mathematics – Increase credit from 3 to 4		X										**Implementation Timeline for Students:** **Begin with fall 2021 for Incoming 9th Grade Students (graduation 2025)**
	1.5 Health Education – Increase credit from .5 to 1.0				X								
	1.8 Technology Education – Transition to Computer Science				X								
	1.9 Graduation Pathway – Eliminate Advanced Tech Option; Require two pathways including CTE and 4-year college or university			X									
	1.B Dual Enrollment: Dual Enrolled students who successfully complete a college course that is aligned with MD standards should receive high school (HS) credit.			X									
	2.1 Maintain a single Maryland diploma	X											
	2.2.2 Establish requirements for seals, endorsements, and awards	X											
	2.2.4 Create a College Ready Endorsement effective for the graduating class of 2025 (1st time 9th grader Fall 2021)	X											
	2.2.5 Create a Career and Technical Education (CTE) Endorsement effective for the graduation class of 2025 (1st time 9th grader Fall 2021)	X											
Assessments	3.1 Require Algebra, English, Science and Government Assessments to be end-of-course and contribute to 20 percent of final grade; Remove requirements that students receive a certain assessment score for graduation as a stand alone requirement							X					
	3.2 Require students to participate in HS MISA until 3-dimensional one course assessment developed					X							

MARYLAND STATE DEPARTMENT OF EDUCATION
EQUITY AND EXCELLENCE

Thank you.

Questions/Comments?

FINAL REPORT:

Maryland High School Graduation Task Force

October 25, 2018

Contents

Origin and Purpose

In summer and fall 2017, the Maryland State Board of Education raised a number of issues and questions related to individual pieces of the state's current graduation requirements. At the same time, the State Board was also wrestling with a larger question: what was the meaning of a Maryland diploma, and what did it signal to students, parents, colleges and universities, and employers about readiness for college or career? Additionally, the State Board and Superintendent were faced with legislation that affected what students were expected to learn in high school. The More Jobs for Marylanders Act of 2017 (SB 317) required that, by January 2025, 45 percent of high school graduates complete a career and technical education program, earn industry-recognized occupational or skill credentials, or complete a registered or other youth apprenticeship. The bill also required setting income earnings goals for high school graduates who do not earn a college degree.[1] Finally, the Commission on Innovation and Excellence in Education ("Kirwan Commission") had been assembled in the fall of 2016 to determine "how the State can better prepare students for postsecondary education and to be competitive in the workforce and with other high performing countries in the global economy" and "to enhance the adequacy and equity of State funding for prekindergarten through grade 12 public education in the State."[2]

State Superintendent Dr. Karen Salmon and then-board president Andy Smarick determined that a systemic, comprehensive review of the entire set of graduation requirements, and the associated Code of Maryland Regulations (COMAR, Section 13A.03.02, Graduation Requirements for Public High Schools in Maryland), was needed. They determined that requirements would be reviewed by a blue-ribbon Task Force of experts and stakeholders, with final recommendations to be made to the Superintendent and State Board.

Task Force members were presented with the following charge:

"To make recommendations to the State Superintendent and Maryland State Board of Education on:

- Credit and program requirements for graduation (number of credits, subject area(s), and other requirements)
- Assessment requirements for graduation
- Options for awarding high school diplomas

All recommendations will consider current research, data, and policies on the impact of credits, assessments, and diploma types on college and career readiness and other outcomes."

[1] Maryland SB0317 (CH0149). Retrieved from http://mgaleg.maryland.gov/webmga/frmMain.aspx?pid=billpage&stab=01&id=sb0317&tab=subject3&ys=2017rs

[2] "Charge of the Commission on Innovation and Excellence in Education" (N.D.) Retrieved from http://dls.maryland.gov/pubs/prod/NoPblTabMtg/CmsnInnovEduc/09-29-2016_Charge_of_Commission.pdf

More specifically, the Task Force would review the relevant COMAR and make recommendations on whether to retain, modify, or eliminate each portion. All recommendations would be evidence-based, meaning that they would be informed by rigorous research and academic literature, experts in education and workforce policy and practice, and timely and accurate data on current Maryland students and graduates.

Dr. Salmon appointed two staff members to co-chair the Task Force: Dr. Carol Williamson, Deputy Superintendent, Office of Teaching and Learning, and Dr. Dara Shaw, Executive Director, Office of Research.

Members

In December of 2017, Dr. Salmon invited a number of organizations to nominate a representative to serve on the Task Force. Board members also provided input on participants. Participants ultimately represented 24 organizations or groups:

Maryland Association of Boards of Education
Maryland Association of Community Colleges
Maryland Association of Elementary School Principals
Maryland Association of Secondary School Principals
Maryland Association of Student Councils
Maryland Business Roundtable for Education
Maryland Chamber of Commerce
Maryland Department of Human Services
Maryland Department of Labor, Licensing and Regulation
Maryland English Language Learning Family Involvement Network
Maryland Governor's Office
Maryland Higher Education Commission
Maryland Independent College and University Association
Maryland Parent-Teacher Association (PTA)
Maryland School Counselor Association
Maryland State Board of Education
Maryland State Department of Education
Maryland State Education Association
Maryland Teacher of the Year
Office of the Attorney General
Parent Representatives
Public School Superintendents Association of Maryland
Special Education State Advisory
University System of Maryland

Meeting Format and Structure

The Task Force held a total of 14 meetings during the period of January to September 2018. Each meeting was three hours, and all were open to the public. Task Force members served on one of three committees aligned to the three areas of study: credit and program requirements, assessments, and diplomas. These committees were facilitated by Maryland State Department of Education (MSDE) staff.

The Task Force began by establishing guiding principles for Maryland high school students (see next section). From the beginning, they were presented with two sources of information which guided their subsequent discussions and investigations. These sources were:

1. A "resource hub," which contained all the Task Force informational resources including research, policy reviews, "white papers," and data. Most of these resources were amassed by Task Force staff in response to specific issues and member questions that emerged during the course of the meetings. (For example, when discussing how many math courses to require, Task Force members reviewed the body of academic research on the impact of high school math course-taking on academic and post-secondary outcomes.) Other resources were submitted by Task Force members themselves or prepared at the request of Task Force staff by organizations such as the Maryland Longitudinal Data System Center and the Mid-Atlantic Comprehensive Center. The resource hub also served as a central location to store documents related to current Maryland policy, such as the current COMAR. Finally, any information submitted by members of the public was always available on the resource hub.

   Task Force members used the hub to prepare for each meeting—the resources tied to that week's agenda were posted in advance—and as a "reference library" for high-quality sources of information on a wide variety of topics. The information guided discussions and provided rationale for decision-making.

   The resource hub was available for any member of the public to view at any time.

2. Data on current Maryland students and workers, published by MSDE on the Maryland Report Card, by the Maryland Longitudinal Data System Center in a series of dashboards and reports, and by the Maryland Department of Labor, Licensing, and Regulation. While selected data were presented to Task Force members throughout the meetings, members were also able to explore these sites to inform their decision-making.

After the establishment of the guiding principles and the introduction of Task Force resources, the committees systematically worked through the existing graduation requirements. Committees created large "guiding questions" and smaller "micro questions," and then requested research, data, and additional information needed to turn their questions into recommendations. Each meeting, committees were given the requested information, organized thematically, to guide their discussions and answer their questions, building up to their recommendations. They also invited experts when there was no established research or data, or when their questions centered more around practice or experience.

While the Task Force spent a good deal of time working in committees, communal time was built into the schedule to allow committees to share their work up to that point. Opportunity was also provided for committees to consult with one another on areas of overlap, and for them to present challenging questions or points of contention to the larger group for additional input. In addition, during the course of the meetings the entire Task Force convened to hear from three expert panels, as requested by the members.

Meeting	Date	Major Agenda Item(s)
1	January 19, 2018	Review current COMAR and Maryland data; brainstorm guiding principles
2	January 26, 2018	Refine guiding principles; meet in committees to generate first set of guiding questions and topics for future discussion
3	February 9, 2018	Introduction to resource hub and available data; meet in committees to review and prioritize guiding questions and plan for upcoming work sessions
4	February 23, 2018	Expert panel: What knowledge and skills are required and valued by colleges and employers? (Representatives from University System of Maryland, Frederick Community College, Dixon Valve and Coupling Company, Perdue Farms Innovation Center, and Office of Workforce Development, Maryland Department of Labor, Licensing and Regulation) Committees convene to review research and data
5	March 16, 2018	Expert panel: Proficiency-based education (Representatives from KnowledgeWorks, American Institutes for Research, Rhode Island Department of Education Committees convene to discuss preliminary recommendations and answers to guiding questions
6	March 29, 2018	Committees convene to discuss recommendations and answers to guiding questions Whole-group discussion: Committees share work to date, remaining themes to explore, and areas of overlap, and ask for feedback
7	April 13, 2018	Committees convene to discuss recommendations and answers to guiding questions
8	April 27, 2018	Expert panel: Innovative school models (Representatives from Apprenticeship Maryland, Prince George's Community College Early College High School, the LYNX School at Frederick High School, and Allegany P-TECH) Committees convene to discuss recommendations and answers to guiding questions
9	May 11, 2018	Committees convene to discuss recommendations and answers to guiding questions
10	May 24, 2018	Whole-group discussion: Committees share work to date, remaining themes to explore, and areas of overlap, and ask for feedback Committees convene to integrate feedback from whole-group discussion and begin to finalize recommendations
11	June 1, 2018	Committees convene to finalize recommendations
12	June 15, 2018	Committees convene to finalize recommendations
13	June 29, 2018	Committees convene to finalize recommendations
14	September 13, 2018	Task Force votes to adopt recommendations and report

Guiding Principles

Before the committees began their work, the larger Task Force established a set of guiding principles that, along with carefully-considered evidence, drove its work. These principles are:

1. **Knowledge and skills**

Students should have the content knowledge and technical, cognitive, social, and emotional skills to prepare them for success after high school. Such knowledge and skills include:

- Content knowledge and job skills aligned to the current and emerging job market[3]
- Information about opportunities available in the current job market, and pathways into those opportunities
- "21st Century" skills such as creative thinking, collaboration, technological literacy, civic/community engagement, critical thinking, creativity, communication, engagement, self-awareness, problem-solving, flexibility, self-advocacy, and self-regulation

Such knowledge and skills should be imparted to students as part of a well-rounded high school education that gives students exposure to a wide variety of curricular areas, which is critical for preparing students for success after high school.

2. **Personalization**

Students' experiences and opportunities in high school should prepare them for a pathway of their choice after high school. Each student's high school experience should prepare him or her for the individual's desired outcomes, which might include:

- Four meaningful years of high school
- Experiences and learning in high school that matches each student's capacity and interest
- Careers that may or may not require postsecondary degrees (either two or four year)[4]
- Readiness for success in postsecondary education

[3] See, for example, Joint Economic Committee Democrats (January 2018). Expanding opportunities through middle-skills education. Retrieved from https://www.jec.senate.gov/public/_cache/files/25915db9-709b-4b09-87f5-768cc6fe8206/middle-skills-pathways.pdf

[4] Task Force members studied information pertaining to the growth of "middle skills" jobs in Maryland, or those that require more than a high school diploma but less than a four-year degree. See, for example, National Skills Coalition. (N.D). Middle-skill jobs state by state: Maryland. Retrieved from https://www.nationalskillscoalition.org/resources/publications/2017-middle-skills-fact-sheets/file/Maryland-MiddleSkills.PDF; Carnevale, A.P., Smith, N., & Strohl, J. (June 2010). Help wanted: Projections of jobs and education requirements through 2018. Georgetown University: Center on Education and the Workforce. Retrieved from https://cew.georgetown.edu/cew-reports/help-wanted/; U.S. Competitiveness Project. (November 2014). Bridge the gap: Rebuilding America's middle skills. Harvard Business School. Retrieved from https://www.hbs.edu/competitiveness/Documents/bridge-the-gap.pdf; and Center for Education and the Workforce. (2017). Good jobs that pay without a BA: A state-by-state analysis. Accessed from https://goodjobsdata.org/resource-categories/report/.

The guiding principle of personalization also includes the concept of developmentally-appropriate autonomy. A student should have adequate information and opportunity to assess his or her capacity and interest, and adequate time and maturity to obtain and process that information, so that he or she can choose a pathway accordingly. Students should not be directed by others into pathways that others have chosen to be "in the student's best interest" without regard to student autonomy and self-determination. (This does not preclude students from receiving guidance to "aim high," but the student is intended to be the driver of decision-making with others providing support, encouragement, and guidance.)

3. Equity

All students should be able to pursue their desired outcome and acquire the necessary knowledge and skills to attain it. Decisions related to graduation requirements should be made with careful consideration of intended and unintended consequences, and any recommendations should, at the very least, "do no harm" to Maryland students. This includes, but is not limited to, making recommendations that increase the likelihood of a student, and especially of students in particular disadvantaged student groups, of earning a high school diploma (or at least not decrease the likelihood). Research shows that students who fail to earn a high school diploma are more likely to be unemployed than those with even only a high school diploma.[5] For each youth aged 16-24 who is neither working nor in college, the estimated taxpayer loss is nearly $14,000, with a larger lifetime consequence of a quarter of a million dollars for health, social, and justice programs.[6] Those dropouts who do find jobs have significantly lower earnings than adults with only high school diplomas, and reduced health and other long-term outcomes as well, both in Maryland and nationally.[78] (Maryland data shows high school graduates earn $2,000 more in wages one year after high school than high school dropouts. Four years after high school, high school graduates earn $4,000 dollars more than high school dropouts. The data suggests

[5] United States Department of Labor, Bureau of Labor Statistics. (September 2018). Table A-4: Employment statis of the civilian population 25 years and over by educational attainment. Retrieved from https://www.bls.gov/news.release/empsit.t04.htm

[6] Belfield, C.R. & Levin, H.M. (2012). The economics of investing in opportunity youth. Retrieved from http://www.civicenterprises.net/MediaLibrary/Docs/Belfield-Levin%20Economics%20Investment%20OppYouth%20Sept%202012.pdf

[7] Alliance for Excellent Education. (2011). Education and the economy: Boosting the nation's economy by improving high school graduation rates. Retrieved from https://all4ed.org/reports-factsheets/education-and-the-economy-boosting-the-nations-economy-by-improving-high-school-graduation-rates/; United States Department of Labor, Bureau of Labor Statistics. (2017). Unemployment rates and earnings by educational attainment, 2017. Retrieved from https://www.bls.gov/emp/chart-unemployment-earnings-education.htm; Maynard, B.R., Salas-Wright, C.P., & Vaughn, M.G. (2015). High school dropouts in emerging adulthood: Substance use, mental health problems, and crime. *Community and Mental Health Journal, 51*(3), 289-99; Wong, M.D., Shapiro, M.F., Boscardin, W.J., & Ettner, S.L. (2002). Contribution of major diseases to disparities in mortality. *New England Journal of Medicine, 347*(20), 1585-92.

[8] Shaw, T.V., Klumpner, S., & Henneberger, A.K. (2017). Workforce outcomes in Maryland for students who do not attend college: patterns among students who earn a high school diploma, certificate of completion, diploma via GED, and high school non-completers. Baltimore, MD: Maryland Longitudinal Data System Center. Retrieved from https://mldscenter.maryland.gov/egov/Publications/HS_to_Workforce_FinalMerged_May2017.pdf

that this gap will continue over lifetime earnings.)[9] And in Maryland, students who fail to complete high school are more likely to be African American, Hispanic, and low-income.[10]

A variety of studies have shown that changing existing graduation requirements not only have an impact on all students, but a disproportionate impact on certain student groups (especially low-income, low-achieving, and special education students).[11] This body of research was considered by the Task Force before making its recommendations, such that to the best of its ability the recommendations do not violate the guiding principle that these recommendations not decrease the likelihood of a student, and especially of students in particular disadvantaged student groups, from earning a high school diploma. Student groups to be considered include race/ethnicity groups (American Indian/Alaska Native, Asian, Black/African American, Hispanic, Hawaiian/Pacific Islander, white, and two or more races) and students receiving special services (students with disabilities, English language learners, and economically disadvantaged students).

Further, although ensuring equitable distribution of resources is outside the charge of the Task Force, the Task Force feels strongly that it is the duty of MSDE and the State Board of Education to ensure that school systems have adequate, equitable resources (including funding and staff) to ensure that graduation requirements are met by all students."

These principles could be summarized by the statement, **"All students should have the knowledge and skills to prepare them for success in the pathway of their choice after high school."**

Format of Recommendations

The recommendations of the Task Force are presented in three sections: credit and program, assessments, and diplomas. Each section contains *primary recommendations*, which refer only to COMAR, Section 13A.03.02, Graduation Requirements for Public High Schools in Maryland. For each primary recommendation, the relevant section of COMAR is cited, and then a recommendation is made as to retain, amend, or remove the requirement. Each section also contains *supporting recommendations,* which are outside the scope of COMAR, Section 13A.03.02 but still within the original charge of the Task Force. In both cases, for every recommendation in the Task Force report, also

[9] High school transitions to workforce for students who do not complete high school, compared to high school graduates. Maryland Longitudinal Data System Center Dashboard. Retrieved from https://mldscenter.maryland.gov/webcenter/faces/oracle/webcenter/page/scopedMD/sb3e45ed1_78e6_444d_ad7c_45287d460e8a/Page66.jspx?_afrLoop=2066755671020564#%40%3F_afrLoop%3D2066755671020564%26_adf.ctrl-state%3D5s8wyak82_4

[10] Maryland State Department of Education. (2018). Maryland state graduation rate. Retrieved from http://reportcard.msde.maryland.gov/CohortGradRate.aspx?PV=160:12:99:AAAA:1:N:0:14:1:1:0:1:1:1:3&SORT=1

[11] See, for example, Johnson, D.R., & Thurlow, M.L. (2003). A national study on graduation requirements and diploma options for youth with disabilities (NCEO Technical Report 36). National Center on Educational Outcomes. Retrieved from https://nceo.info/Resources/publications/OnlinePubs/Technical36.htm; Plunk, A.D., Tate, W.F., Bierut, L.J., & Grucza, R.A. (2014). Intended and unintended effects of state-mandated high school science and mathematics course graduation requirements on educational attainment. *Education Researcher, 43*(5), 230-241; Dee, T.S., & Jacob, B.A. (2006). Do high school exit exams influence educational attainment or labor market performance? (NBER Working Paper 12199). National Bureau of Economic Research. More sources are cited in the rationale of the recommendation to which they apply.

provided is an evidence-based rationale. The evidence primarily takes the form of rigorous research, although may also include descriptive data, policy analyses, and/or expert testimony. Where applicable, the Task Force's guiding principles are cited as well.

In the cases where the Task Force recommends further study and/or future action, it also advises that these future actions are conducted in accordance with Task Force guiding principles and in a manner consistent with the Task Force's deliberative, evidence-based process of meaningful stakeholder input.

Recommendations: Credit and Program Requirements

1.1: English Language Arts

Current regulations:

COMAR 13A.03.02.03(B)(1)

English — four credits of organized instruction in comprehension of literary and informational text, writing, speaking and listening, language, and literacy, of which one credit shall be aligned with the Maryland High School Assessment for English.

COMAR 13A.03.02.04(I)(2)

A student who would be eligible to graduate but for attaining credit in English 12 may obtain that credit by taking a State-approved examination and achieving a passing score as defined by the Maryland State Department of Education.

Task Force recommendation:

Maintain four credits of English in the sequence described in the current COMAR.

Rationale	Citation
Four years of English instruction is necessary to cover the standards contained in Maryland's College and Career Ready Standards, which for high school includes reading literature, reading informational text, writing, speaking and listening, and language, as well as disciplinary literacy (reading in history, social studies, science, and technology).	Maryland State Department of Education (n.d.). Maryland College and Career Ready Standards. Retrieved from http://marylandpublicschools.org/programs/pages/md-ccrs/index.aspx
Researchers argue, and Task Force members agree, that high school graduation standards should be aligned to college academic standards, where possible and reasonable. This should occur without an indirectly negative impact on students. The University of Maryland system requires four years of English in high school.	Jimenez, L. & Sargrad, S. (April 2018). *Are High School Diplomas Really a Ticket to College and Work? An Audit of State High School Graduation Requirements.* Washington, DC: Center for American Progress. Retrieved from https://www.americanprogress.org/issues/education-k-12/reports/2018/04/02/447717/high-school-diplomas/ University System of Maryland Board of Regents (2011). USM Bylaws, policies and procedures of the Board of Regents. Retrieved from

	https://president.umd.edu/sites/president.umd.edu/files/documents/policies/III-400.pdf
Forty-three states and the District of Columbia require four years of English in their high school graduation requirements. Maryland graduates should be on par with their peers nationally.	Education Commission of the States (ECS). (2018). *Standard High School Graduation Requirements (50-state).* Retrieved from: http://ecs.force.com/mbdata/mbprofall?Rep=HS01

1.2: Mathematics

Current regulations:

COMAR 13A.03.02.03(A)

Beginning with students entering the 9th grade class of 2014—2015 school year, each student shall enroll in a mathematics course in each year of high school that the student attends, up to a maximum of 4 years of attendance, unless in the 5th or 6th year a mathematics course is needed to meet a graduation requirement.

COMAR 13A.03.02.03(B)(3)

Mathematics — three credits, including one with instruction in algebra aligned with the Maryland High School Assessment for algebra or one or more credits in subsequent mathematics courses for which Algebra I is a prerequisite, and one with instruction in geometry aligned with the content standards for geometry.

Task Force recommendations:

Increase the requirement to four credits earned in high school. In order to graduate, students must take Algebra I and Geometry. (Students may complete one or both of these courses in middle school; in that case, the student still must earn four credits in high school.) The credits should match the academic pathway a student chooses, as described in Recommendation 1.9 (Graduation Pathways). Computer Science may be substituted for one credit of math. Students who have not demonstrated competency in Algebra I should continue to take courses that develop Algebra I competencies.

MSDE and the State Board should also consider adopting a process similar to the one available to students regarding English 12 (COMAR 13A.03.02.04(I)(2)), such that a student who would be eligible to graduate but for attaining the fourth math credit may either obtain the credit in alternate ways (such as demonstrating competency) or be waived from the credit requirement if it is aligned to a student's academic pathway.

Rationale	Citation
Research indicates that greater exposure to math in high school is linked with better labor market outcomes, increased financial literacy, and increased student engagement. One recent study found that state changes to minimum high school math requirements is especially beneficial to African American students.	Cole, S., Paulson, A., & Shastry, G.K. (2015). High school curriculum and financial outcomes: The impact of mandated personal finance and mathematics courses. *The Journal of Human Resources, 53*(3). Goodman, J. (2018). The labor of division: Returns to compulsory high school math coursework (NBER Working Paper No. 23063). National Bureau of Economic Research.

	James, J. (2013). The surprising impact of high school math on job market outcomes. Federal Reserve Bank of Cleveland (Economic Commentary). Retrieved from https://www.clevelandfed.org/newsroom-and-events/publications/economic-commentary/2013-economic-commentaries/ec-201314-the-surprising-impact-of-high-school-math-on-job-market-outcomes.aspx Joensen, J. & Neilsen, H. (2006). Is there a causal effect of high school math on labor market outcomes? *The Journal of Human Resources, 44*(1): 171-198. Levine, P. & Zimmerman, D. (1995). The benefit of additional high-school math and science classes for young men and women. *Journal of Business & Economic Statistics, 13*(2), 137-149. Rose, H. & Betts, J.R. (2004). The effect of high school courses on earnings. *The Review of Economics and Statistics, 86*(2), 497-513. Shernoff, D.J., Csikszentmihalyi, M., Schneider, B., & Steele Shernoff, E. (2003). Student Engagement in High School Classrooms from the Perspective of Flow Theory. *School Psychology Quarterly, 18*(2): 158-176.
Analysts recommend aligning high school requirements with higher education admission standards, especially as a way to close the "preparation gap" for under-resourced students. The University System of Maryland admissions policy requires four years of mathematics in high school.	Jimenez, L. & Sargrad, S. (April 2018). *Are High School Diplomas Really a Ticket to College and Work? An Audit of State High School Graduation Requirements.* Washington, DC: Center for American Progress. Retrieved from https://www.americanprogress.org/issues/education-k-12/reports/2018/04/02/447717/high-school-diplomas/ University System of Maryland Board of Regents (2011). USM Bylaws, policies and procedures of

	the Board of Regents. Retrieved from https://president.umd.edu/sites/president.umd.edu/files/documents/policies/III-400.pdf
While the reasons to require a fourth credit are compelling, reasons to require a specific course are not. Evidence suggests that strengthening graduation requirements may have both positive and unintended consequences with respect to high school graduation and college enrollment, and that higher math graduation requirements may decrease the likelihood of students attending a four-year college in the semester after high school. Further, requiring a specific course conflicts with the Task Force core value of personalization and preparation for the student's path after high school, since that path may not necessarily be a four-year college. However, students can choose to take Algebra II, and complete other University System of Maryland entrance requirements (see later recommendations on COMAR 13A.03.02.03(B)(9), in this section) and will be recognized (see recommendations in *Diplomas* section).	Plunk, A., Tate, W., Bierut, L., & Grucza, R. (2014). Intended and unintended effects of state-mandated high school science and mathematics course graduation requirements on educational attainment. *Educational Researcher, 43*(5): 230-241. Saw, G. (2017). The Impact of high school mathematics and science course graduation requirements: School structural, academic, and social organization factors. SREE Spring 2017 Conference.
29 states allow computer science credit to substitute for some mathematics credit, including Maryland (current COMAR states that AP Computer Science may fulfill a math credit towards graduation requirements). Four other states allow districts to determine if computer science will replace mathematics or science.	Versel, L. (January 2018). New Ohio law focuses on Computer Science, lets students avoid Algebra 2. Ed Week. Retrieved from https://blogs.edweek.org/edweek/DigitalEducation/2018/01/computer_science_algebra_2_ohio_law.html Zinth, J. (September 2016). Computer science in high school graduation requirements. Denver, CO: Education Commission of the States. Retrieved from https://www.ecs.org/wp-content/uploads/09.13.2016_Computer-Science-in-High-School-Graduation-Requirements.pdf Zinth, J. (January 2018). State information request: Math, science, and computer science in

	graduation requirements. Education Commission of the States. Retrieved from https://www.ecs.org/wp-content/uploads/State-Information-Request_Math-Science-Computer-Science-in-Graduation-Requirements.pdf

1.3: Fine Arts

Current regulation: COMAR 13A.03.02.03(B)(2)

Fine Arts (Performing Arts) — one credit in visual arts, music, theater, or dance, or a combination of these

Task Force recommendation:

Maintain one credit of fine arts.

Rationale	Citation
Research indicates the positive impact of arts education on academic performance, student engagement in school, cultural competency, and cognitive, behavioral, and social outcomes.	Burton, J., Horowitz, R., & Abeles, H. (1999). Learning in and through the arts: Curriculum implications. In E. B. Fiske (Ed.), Champions of Change: The Impact of the Arts in Learning (35-46). Washington, DC: Arts Education Partnership. Retrieved from http://artsedge.kennedy-center.org/champions/pdfs/champsreport.pdf. Elpus, K. (n.d.). Arts Education and Positive Youth Development: Cognitive, Behavioral, and Social Outcomes of Adolescents who Study the Arts. Retrieved from https://www.arts.gov/sites/default/files/Research-Art-Works-Maryland.pdf Ruppert, S. (2006). Critical Evidence: How the ARTS benefit student achievement. National Assembly of State Arts Agencies. Retrieved from https://files.eric.ed.gov/fulltext/ED529766.pdf Sabol, R.F. (2014). A Study of the Impact of Arts Education on the Educational Performances of Students in Indiana Public Secondary Schools and Institutions of Higher Education. Retrieved from https://www.in.gov/arts/files/2014_ArtsEd_Impact-on-Academic_Performance.pdf See, B.H. & Kokotsaki, D. (2015). Impact of arts education on the cognitive and non-cognitive outcomes of school-aged children: A review of evidence. Durham University Education

	Endowment Foundation. Retrieved from https://www.cem.org/attachments/publications/Arts_Education_Review.pdf
Creativity is an important 21st Century skill, both in arts-related fields and beyond. The World Economic Forum suggests that even "many formerly purely technical occupations are expected to show a new demand for creative and interpersonal skills," and more than half of all jobs expected to require higher order cognitive abilities such as creativity "as part of their core skill set in 2020 do not yet do so today, or only to a much smaller extent." Research supports that participation in fine arts encourages creativity.	Burton, J., Horowitz, R., & Abeles, H. (1999). Learning in and through the arts: Curriculum implications. In E. B. Fiske (Ed.), Champions of Change: The Impact of the Arts in Learning (35-46). Washington, DC: Arts Education Partnership. Retrieved from http://artsedge.kennedy-center.org/champions/pdfs/champsreport.pdf Winner, E., Goldstein, T. & Vincent-Lancrin, S. (2013). Art for Art's Sake? Overview. Organisation for Economic Co-operation and Development, Centre for Educational Research and Innovation. Paris: OECD Publishing. Retrieved from http://www.oecd.org/education/ceri/ART%20FOR%20ART%E2%80%99S%20SAKE%20OVERVIEW_EN_R3.pdf World Economic Forum. (2016). The future of jobs: Employment, skills and workforce strategy for the fourth industrial revolution. Geneva: Author. Retrieved from http://www3.weforum.org/docs/WEF_Future_of_Jobs.pdf

1.4: Physical Education

Current regulation: COMAR 13A.03.02.03(B)(4)

Physical Education — one-half credit

Task Force recommendations:

Maintain one-half credit in physical education.

The State Board should explore additional ways students may meet the physical education requirement.

Rationale	Citation
Research indicates that physical education classes have a positive relationship with academic achievement.	Centers for Disease Control and Prevention. (2010). *The association between school based physical activity, including physical education, and academic performance.* Atlanta, GA: U.S. Department of Health and Human Services. Retrieved from: https://www.cdc.gov/healthyyouth/health_and_academics/pdf/pa-pe_paper.pdf
Employers value teamwork and collaboration, which research shows physical education promotes.	Job Outlook Survey 2016. National Association of Colleges and Employers. Retrieved from: http://www.naceweb.org/career-development/trends-and-predictions/job-outlook-2016-attributes-employers-want-to-see-on-new-college-graduates-resumes/ Partnership for 21st Century Skills. (2006). Are they really ready to work? Employers' perspectives on the basic knowledge and applied skills of new entrants to the 21st Century U.S. workforce. Retrieved from http://www.p21.org/storage/documents/FINAL_REPORT_PDF09-29-06.pdf Bailey, R. (2006). Physical education and sport in schools: A review of benefits and outcomes. *Journal of School Health*, 76(8), 397-401.
Physical education class might be redundant for students who participate in athletics; a few other states allow sports participation to replace physical education coursework. However,	Sieck, B. (2015). Arizona school district approves class credit for sports participation. National Federation of State High School Associations. Retrieved from

athletics alone may not meet the physical education standards; a physical education class is expected to cover, for example, exercise physiology and motor learning principles in addition to physical and biomechanical skills.	https://www.nfhs.org/articles/arizona-school-district-approves-class-credit-for-sports-participation/ Maryland State Department of Education. (n.d.). Physical Education Standards (High School). http://mdk12.msde.maryland.gov/instruction/hsvsc/physical_education/standard1.html

1.5: Health Education

Current regulation: COMAR 13A.03.02.03(B)(5)

Health Education — one-half credit

Task Force recommendation:

Increase graduation requirement to one full credit in health education.

Rationale	Citation
Recommendations for increased health education in response to the opioid crisis have resulted in legislation requiring drug addiction and prevention programs at the high school level. Additional recent legislation has also mandated programs in sexual abuse and assault instruction. In response, the state has increased the content of its health standards for high school students and the Task Force recommends expanding the health coursework requirement accordingly. (All public school students are already required to participate in a comprehensive health education instructional program that also addresses mental and emotional health, nutrition and fitness, safety and injury prevention, personal and consumer health, disease prevention and control, and human life and sexuality.)	Maryland State Department of Education. (January 2009). Using the State Curriculum: Health Education, High School. Retrieved from http://mdk12.msde.maryland.gov/instruction/hsvsc/health/standard1.html Office of Lieutenant Governor, State of Maryland. (December 2015). Heroin & Opioid Emergency Task Force Final Report. Annapolis, MD: Author. Retrieved from https://governor.maryland.gov/ltgovernor/wp-content/uploads/sites/2/2015/12/Heroin-Opioid-Emergency-Task-Force-Final-Report.pdf Heroin and Opioid Education and Community Action Act of 2017 3 (Start Talking Maryland Act). Maryland Senate Bill 1060 (2017). Retrieved from http://mgaleg.maryland.gov/2017RS/bills/sb/sb1060E.pdf Office of Lieutenant Governor, State of Maryland. (December 2015). Heroin & Opioid Emergency Task Force Final Report. Annapolis, MD: Author. Retrieved from https://governor.maryland.gov/ltgovernor/wp-content/uploads/sites/2/2015/12/Heroin-Opioid-Emergency-Task-Force-Final-Report.pdf
The Maryland Youth Risk Behavior/Youth Tobacco survey has shown increasing trends in high school student engagement in risky behaviors such as alcohol and drug use, a decline in mental health,	Maryland Department of Health. 2016 High School Youth Risk Behavior Survey/Youth Tobacco Survey Trend Report. Retrieved from https://phpa.health.maryland.gov/ccdpc/Reports/

and decreased healthy eating and exercise practices.	Documents/2016%20YRBS%20YTS%20Reports/2016_HS_YRBS_YTS%20Trend%20Report.pdf
The Maryland State School Health Council and the Health and Physical Education Advisory Board documented the need for increased health coursework to provide sufficient instruction in sexual abuse, drug prevention, suicide prevention, and mental health.	Maryland State School Health Council. Statement of Support for Increasing the Health Education Requirement in Maryland High Schools. Submitted to the Task Force (April 2018), https://www.dropbox.com/s/e6p7r9nz7fwnl4o/Health%20Education_Final%2004_13_18.docx?dl=0 Health and Physical Education Advisory Board. Submitted to the Task Force (September 2018), https://www.dropbox.com/s/vas6s0yv8xysplj/Memo_HPE%20Advisory%20Board.docx?dl=0

1.6: Science

Current regulation: COMAR 13A.03.02.03(B)(6)

Science — three credits of organized instruction which includes a laboratory component engaging in the application of the science and engineering practices, the cross-cutting concepts, and disciplinary core ideas including Earth/space science, life science, physical science (chemistry and physics), engineering, and technology, aligned to the Maryland High School Assessment for science.

Task Force recommendation:

Maintain three credits in science as described in the current COMAR.

Rationale	Citation
The science standards adopted by the state of Maryland are comprehensive and require three years to teach. However, the standards were only recently adopted; Task Force members recommended taking time to evaluate whether three credits in science in the sequence described in the current COMAR is adequate for ensuring that all students meet the standards.	Maryland State Department of Education. (n.d.). Maryland Science Standards. http://mdk12.msde.maryland.gov/instruction/curriculum/science/index.html
Analysts recommend aligning high school requirements with higher education admission standards, especially as a way to close the "preparation gap" for under-resourced students.	Jimenez, L. & Sargrad, S. (April 2018). *Are High School Diplomas Really a Ticket to College and Work? An Audit of State High School Graduation Requirements.* Washington, DC: Center for American Progress. Retrieved from https://www.americanprogress.org/issues/education-k-12/reports/2018/04/02/447717/high-school-diplomas/ University System of Maryland Board of Regents (2011). USM Bylaws, policies and procedures of the Board of Regents. Retrieved from https://president.umd.edu/sites/president.umd.edu/files/documents/policies/III-400.pdf
Thirty states and the District of Columbia require three or more credits in science.	Education Commission of the States (ECS). (2018). *Standard High School Graduation Requirements (50-state).* Retrieved from: http://ecs.force.com/mbdata/mbprofall?Rep=HS01

1.7: Social Studies

Current regulation: COMAR 13A.03.02.03(B)(7)

Social Studies — three credits including one credit in United States history, one credit in world history, and one credit in local, State, and national government aligned with the Maryland High School Assessment for government.

Task Force recommendation:

Maintain three credits in social studies as described in the current COMAR.

Rationale	Citation
The social studies standards adopted by the state of Maryland are comprehensive and require three years to teach. The state frameworks cover United States History from 1890-present; Modern World History, 1300-Present, and American Government. The standards and frameworks for each of the required courses contain a strong civics emphasis. The civics emphasis is also supported by the presence of the High School Assessment in American Government which all Maryland students must pass.	Maryland State Department of Education. (n.d.). Maryland Social Studies Standards. http://mdk12.org/instruction/curriculum/social_studies/index.html
Analysts recommend aligning high school requirements with higher education admission standards, especially as a way to close the "preparation gap" for under-resourced students. The University System of Maryland's minimum qualifications for regular admissions requires 3 courses in social studies.	Jimenez, L. & Sargrad, S. (April 2018). *Are High School Diplomas Really a Ticket to College and Work? An Audit of State High School Graduation Requirements.* Washington, DC: Center for American Progress. Retrieved from https://www.americanprogress.org/issues/education-k-12/reports/2018/04/02/447717/high-school-diplomas/ University System of Maryland Board of Regents (2011). USM Bylaws, policies and procedures of the Board of Regents. Retrieved from https://president.umd.edu/sites/president.umd.edu/files/documents/policies/III-400.pdf
Thirty three states and the District of Columbia require three or more credits in social studies.	Education Commission of the States (ECS). (2018). *Standard High School Graduation Requirements (50-state).* Retrieved from: http://ecs.force.com/mbdata/mbprofall?Rep=HS01

1.8. Technology Education

Current regulation: COMAR 13A.03.02.03(B)(8)

Technology Education — one credit that includes the application of knowledge, tools, and skills to solve practical problems and extend human capabilities.

Task Force recommendation:

Require one-half credit in Technology Education aligned with technology education standards or computer science standards, while ensuring that technology education be infused across the entire curriculum at all grade levels.

Rationale	Citation
Technology is a key driver of change in the modern workforce. Many of the world's (and Maryland's) fastest-growing industries are in technological fields such as health care and professional and technical services.	Maryland Department of Labor, Licensing & Regulation. (n.d.) *Maryland Industry Projections – 2016-2026 – Workforce Information and Performance*. Retrieved from https://www.dllr.state.md.us/lmi/iandoproj/industry.shtml World Economic Forum. (2016). The future of jobs: Employment, skills and workforce strategy for the fourth industrial revolution. Geneva: Author. Retrieved from http://www3.weforum.org/docs/WEF_Future_of_Jobs.pdf
Employers cite that technological literacy is a key "soft skill" for potential employees, regardless of whether the actual field is considered "high tech" or not.	Lippman, L. Ryberg, R., Carney, R., & Moore, K. Workforce Connections: Key "soft skills" that foster youth workforce success: Toward a consensus across fields. (2015). Bethesda, MD: Child Trends. Retrieved from https://www.usaid.gov/sites/default/files/documents/1865/KeySoftSkills.pdf

1.9: Graduation Pathways

Current regulation: COMAR 13A.03.02.03(B)(9)

One of the following:

- World Language - Two credits of world language, which may include American Sign Language;
- Advanced Technology - Two credits of advanced technology education; or
- Career and Technology Programs - Successfully complete a State-approved career and technology program.

Task Force recommendation:

Eliminate the Advanced Technology option (students currently in the advanced technology education pathway will have the opportunity to complete the pathway before it is phased out as an option) and require one or more of the following:

- Successful completion of a State-approved Career and Technology Education (CTE) Program
- Successful completion of the University System of Maryland requirements, which include two years of same world language, Algebra II, and two of three sciences as lab sciences.

The Task Force recommends further study of a possible third pathway.

Rationale	Citation
One guiding principle of the Task Force was that all pathways or options are tied to an outcome that has meaning for students, post-secondary education, and/or employers. Students should be meaningfully prepared for a specific destination. The Task Force, therefore, recommends aligning the "pathways" portion of the graduation requirements to (a) workforce preparedness (the CTE option) and/or (b) postsecondary preparedness (the University System of Maryland option).	N/A
The "University System of Maryland" option retains the requirement of two years of a world language but aligns the requirement with USM standards for two years in the same language. It also recognizes students for selecting Algebra II as one of their required math courses, and for taking a second lab science.	Achieve. (n.d.) Graduating ready. Retrieved from https://highschool.achieve.org/ Jimenez, L. & Sargrad, S. (April 2018). *Are High School Diplomas Really a Ticket to College and Work? An Audit of State High School Graduation Requirements.* Washington, DC: Center for

This follows recommendations (a) that "all students deserve the opportunity to take courses that prepare them to enter the workforce, the military, or postsecondary education" (Achieve, n.d.) and specifically (b) at least one option for graduation requirements be aligned with postsecondary requirements.	American Progress. Retrieved from https://www.americanprogress.org/issues/education-k-12/reports/2018/04/02/447717/high-school-diplomas/ University System of Maryland Board of Regents (2011). USM Bylaws, policies and procedures of the Board of Regents. Retrieved from https://president.umd.edu/sites/president.umd.edu/files/documents/policies/III-400.pdf
The "CTE" option requires successful completion of a State-approved Career and Technology Education (CTE) Program. This refers specifically to the coursework requirements, which tend to be academically and/or technically-rigorous once a student reaches the later courses in his or her chosen program. While research supports the benefits of exposure to any career and technology coursework, it finds that there is particular benefit to students when courses are concentrated in a particular program of study. The Task Force specifically does not recommend requiring that students complete licensure or other certification. (To successfully complete a CTE program, students must complete coursework that prepares them for entry into college and a career pathway, but are not required to take or pass licensure exams.) The first reasons the Task Force does not recommend exams are practical. Many students do not take exams until after high school, or sometimes until after they continue their studies at the post-secondary level, and requiring students take or pass such exams in high school might delay their graduation. Second, exams are administered by multiple agencies and licensing boards, and these organizations do not share the results with MSDE. Third, not all pathways have an exam. The final reasons relate to equity. Students pay for exams out-of-pocket, which means they may not be accessible to all students	Dougherty, S.M. (2016). Career and technical education in high school: Does it improve student outcomes? Washington, DC: Thomas B. Fordham Institute. Retrieved from https://edexcellence.net/publications/career-and-technical-education-in-high-school-does-it-improve-student-outcomes White, D.O. (2015). The impact of career and technical education (CTE) on student academic achievement and graduation rates in the commonwealth of Virginia. (Doctoral dissertation). Retrieved from https://vtechworks.lib.vt.edu/bitstream/handle/10919/74382/White_DO_T_2015.pdf?sequence=1

immediately after completion of the CTE program. Many exams do not have accommodations for special education students equivalent to the ones they receive on state-standardized tests (nor are they required to). And licensure in some fields requires a social security number; if exams were required, students in these fields would effectively be required to have social security numbers in order to graduate which is not only inequitable but unlawful as well. (See Supporting Recommendation 3.B.)	
With the recommendation to remove advanced technology education as a graduation pathway, the committee agreed that a new, third option should be considered, particularly for the students who have taken this pathway in the past, which Maryland counselors indicate tend to be those who are struggling academically. In keeping with the guiding principle that students should be prepared for a specific destination, the Task Force acknowledges that some students may choose to go to a two-year or non-selective four-year institution, which does not have the entry requirements of the University System of Maryland option. Suggestions to consider include participation in apprenticeships, workforce training programs such as Job Corps, STEM readiness programs such as Freestate, military or ROTC participation, and advancement programs such as AVID. (Because the Apprenticeship Maryland Program is now a state-approved CTE program, an "apprenticeship" option is already folded in to the CTE pathway.) Achieve recommends "K-12, postsecondary systems, and business communities should work together to (re)define graduation options that prepare students for success in a valued destination." The Task Force	Achieve. (n.d.) College and career pathways. Retrieved from https://highschool.achieve.org/college-and-career-pathways Maryland Longitudinal Data System. (n.d.). College and employment outcomes of Maryland high school graduates one year following graduation. Retrieved from https://www.dropbox.com/s/thzqpbxrkhiw9qv/DATA%20HS%20Pathways%20College%20and%20Employment%20Outcomes.xlsx?dl=0

therefore recommends convening a panel for further study.	

1.10: Environmental Literacy

Current regulation: COMAR 13A.04.17.01(A)

Each local school system shall provide in public schools a comprehensive, multi-disciplinary environmental education program infused within current curricular offerings and aligned with the Maryland Environmental Literacy Curriculum.

Task Force recommendation:

Retain environmental literacy as a program designed by local school systems (which may be a stand-alone course, or may be content embedded in related courses), without requiring an environmental literacy course for high school graduation.

Rationale	Citation
There is currently no data available on the current LEA-determined programs. In the absence of data, the task force recommended to maintain requirements until more information is available on the outcomes of this method.	N/A

1.11: Financial Literacy

Current regulation: COMAR 13A.04.06.01

Financial Literacy— Each local school system shall provide in public schools an instructional program in personal financial literacy in the elementary, middle, and high school learning years. Each student shall have the opportunity to participate in the personal financial literacy program required by this chapter.

Task Force recommendation:

Retain financial literacy as a program designed by local school systems (which may be a stand-alone course, or may be content embedded in related courses), without requiring a financial literacy course.

Rationale	Citation
Research shows that American high school students have a "low level of ability to make age-appropriate financial decisions."	Mandell, L. (2008). Financial literacy of high school students. In J.J. Xiao (Ed.), Handbook of Consumer Finance Research (163-183). New York, NY: Springer. Retrieved from https://link.springer.com/chapter/10.1007/978-0-387-75734-6_10
While research indicates that high school courses in personal finance have not been proven effective in raising financial literacy, it also indicates that financial decision-making is improved by exposure to financial literacy concepts and additional mathematics training, rather than a required course in financial literacy. The Task Force therefore recommends that students be exposed to financial literacy concepts through locally-designed programs, without requiring a financial literacy course.	Cole, S., Paulson, A. and Shastry, G.K. (April 2014). High school curriculum and financial outcomes: The impact of mandated personal finance and mathematics courses. Harvard Business School Working Paper, No. 13-064, January 2013. Retrieved from http://www.hbs.edu/faculty/Publication%20Files/13-064_c7b52fa0-1242-4420-b9b6-73d32c639826.pdf Mandell, L. (2008). Financial literacy of high school students. In J.J. Xiao (Ed.), Handbook of Consumer Finance Research (163-183). New York, NY: Springer. Retrieved from https://link.springer.com/chapter/10.1007/978-0-387-75734-6_10, Mandell, L. (2009). The impact of financial education in high school and college on financial literacy and subsequent financial decision making. American Economic Association Conference, San Francisco, CA. Retrieved from

	https://www.aeaweb.org/conference/2009/retrieve.php?pdfid=507,

1.12: Student Service Learning

Current regulation: COMAR 13a.03.02.05

To graduate, students shall complete one of the following:

- 75 hours of student service that includes preparation, action, and reflection components and that, at the discretion of the local school system, may begin during the middle grades; or
- A locally designed program in student service that has been approved by the State Superintendent of Schools.

Task Force recommendations:

- Maintain the student service learning requirement currently described in COMAR.
- Convene a committee to refresh the implementation of student service learning to ensure civic and community engagement are included, to improve continuity of implementation across middle and high schools, and to ensure the programs are aligned with the original purpose of the requirement.

Rationale	Citation
Research supports continuing to require student service learning in some form. Specifically, there are statistically significant differences for students who participated in community service or service learning performing better in reading and language arts (Weiler, LaGoy, Crane, and Rovner, 1998; Akujobi and Simmons, 1997; Klute and Billig, 2002; and Kraft and Wheeler, 2003) and in mathematics, science, and history (Davila and Mora, 2007). One study also found that male students were more likely to graduate from college on time if they participated in service learning to fulfill a class requirement in high school (Davila and Mora, 2007).	(See references that follow)
Research also finds service learning has an impact on motivation toward school and attitudes towards learning. In a few quasi-experimental studies of service learning, students experienced increased motivation and more positive attitudes towards learning (Melchoir 1995; Melchior 1998; Laird and Black 1999; Brown, Kim, and Pinhas, 2005). In	(See references that follow)

addition to increased positive attitudes towards school, Scales et al. (2000) found students in service learning maintained a stronger pursuit of better grades. Finally, research finds that service learning has impacts on civic engagement, personal and social skills, and workforce preparation. Community-based service learning experiences increased students' knowledge and political efficacy (Hamilton and Zeldin, 1987) and increased rates of voting and volunteering in college and adulthood (Hart et al. 2007; Metz and Youniss, 2005; Smith, 1999; Kahne and Sporte, 2008). Service learning has been found to be effective for developing students' leadership skills (Ladewig and Thomas, 1987; Weiler et al., 1998; Boyd, 2001), self-esteem and self-efficacy (Yates and Youniss, 1996), and transition to adulthood (Martin et al., 2006). Service learning projects have been found to expose students to career choices and students gained a better understanding of the world of work (Astin, Vogelgesang, Ikeda, and Yee 2000), to provide preparation for the workforce (Yamauchi et al., 2006), and had to increase students' ability to apply skills learned through service learning to potential careers (Eyler, Giles, Stenson, & Gray, 2001).	
Despite the evidence for continuing the student service learning requirement, Task Force members with experience in Maryland high schools (especially student representatives) expressed the need to revisit the service learning requirement to ensure that it is a meaningful student experience so that students are likely to actually receive the benefits that research shows it can impart.	

References

Akujobi, C. & Simmons, R. (1997). An assessment of elementary school service learning teaching methods: Using service learning goals. *NSEE Quarterly, 23*(2), pp. 19-28.

Boyd, B. (2001). Bringing leadership experiences to inner-city youth. *Journal of Extension*, *39*(4).

Brown, S., Kim, W., & Pinhas, S. (2005). *Texas Title IV Service Learning Evaluation, 2004-05*. Denver, Co: RMC Research Corporation.

Davila, A. & Mora, M. (2007). *Civic engagement and high school academic progress: An analysis using NELS data.* College Park, MA: The Center for Information and Research on Civic Learning and Engagement.

Furco, A. (2013). A research agenda for K-12 school-based service-learning: Academic achievement and school success. *International Journal of Research on Service-Learning and Community Engagement, 1*(1).

Hamilton, S. & Zeldin. (1987). Learning civics in the community. *Curriculum Inquiry, 17*(3), pp. 407-420.

Hart, D., Donnelly, T., Youniss, J., & Atkins, R. (2007). High school community service as a predictor of adult voting and volunteering. *American Educational Research Journal, 44*(1), pp. 197-219.

Kahne, J. & Sporte, S. (2008). Developing citizen: The impact of civic learning opportunities on students' commitment to civic participation. *American Educational Research Journal, 45*(3), pp. 738-766.

Kahne, J. & Westheimer. (2006). The limits of political efficacy: Educating citizens for a democratic society. *PS: Political Science and Politics*, 39(2), pp. 289-296.

Klute, M. 7 Billig, S. (2002). *The impact of service learning on MEAP: A large-scale study of Michigan Learn and Serve grantees*. Denver, CO: RMC Research.

Kraft, N. & Wheeler, J. (2003). Service learning and resilience in disaffected uouth: Research exploring context, participation, and impacts In J. Eyler and S. H. Billig (Ed.), *Deconstructing service learning: Research exploring context, participation, and impacts* (pp. 213-238). Greenwich, CT: Information Age Publishing.

Ladewig, H. & Thomas, J. K. (1987). *Assessing the impact of 4-H on former members*. College Station, TX: Texas A&M University.

Laird, M. & Black, S. (1999). *Service learning evaluation project: Program effects for at-risk students*. San Francisco, CA: Quest International.

Martin, S., Neal, M., Kielsmeier, J. & Crossley, A. (2006). The impact of service learning on transitions to adulthood In (Ed.) *Growing to greatness: The state of service learning project* (pp. 4-24). Saint Paul, MN: National Youth Leadership Council.

Melchoir, A. (1995). *National evaluation of Serve-America: Final report*. Waltham, MA: Center for Human Resources, Brandeis University.

Melchoir, A. (1998). *National evaluation of Learn and Serve American School and Community-Based Program*. Waltham, MA: Center for Human Resources, Brandeis University.

Metz, E. & Youniss, J. (2005). Longitudinal gains in civic development through school-based required service. *Political Psychology, 26*(3), pp. 413-437.

National Coalition for Academic Service-Learning. (2012). Engaging students through academic service-learning: National guide to implementing quality academic service learning. Washington, DC: Author.

Scales, P., Blyth, D., Berkas, T. & Kielsmeier, J. (2000). The effects of service learning on middle school students' social responsibility and academic success. *Journal of Early Adolescence*, *20*, pp. 93-100.

Smith, E. (1999). The effects of investment in the social capital of youth on political and civic behavior in young adulthood: A longitudinal analysis. *Political Psychology, 20*(3), pp. 553-580.

Weiler, D., LaGoy, A., Crane, E., & Rovner, A. (1998). *An evaluation of K-12 service learning in California*. Emeryville, CA: RPP International.

Yamauchi, L., Billig, S., Meyer, S., & Hofschire, L. (2006). Student outcomes associated with service learning in a culturally relevant high school program. *Journal of Prevention and Intervention in the Community, 32*(1), pp. 149-164.

Yates, M. & Youniss, J. (1996). A developmental perspective on community service in adolescence. *Social Development, 5*(1), pp. 85-111.

Supporting Recommendation 1.A: Career Development

Task Force recommendation:

Convene a committee to study the implementation of the current career development framework and professional learning opportunities for elementary, middle, and high school teachers, which may include expanding the number of counselors in schools and developing strategies for involving parents in career development.

Rationale	Citation
Task Force members indicated the need to have a coordinated, concerted plan to embed career exploration in courses in elementary and middle school, continuing beyond that into high school. Maryland's Career Development Framework (MCDF) currently provides a structured, developmental approach for teaching students and adults about the world of work along with encouraging the development of positive personal characteristics and self-efficacy skills needed for making appropriate choices regarding their education and career paths. The National Career Development Association (NCDA) Guidelines support this Pre-K through adult career development framework. For educators, the MCDF is a guide for appropriate instruction at the elementary and middle school levels to help prepare students to create their academic and career plan for high school. Task Force members and MSDE staff (including those with expertise in Career and Technical Education, and in Counseling) indicated that, while Maryland has the MCDF, additional work is needed to implement them such that career development is integrated across grades and subject areas. Task Force members do not recommend placing required coursework in career development solely in high school, as experts indicated that exposure to the MCDF should begin in elementary school as students	Maryland State Department of Education. (2012). Maryland Career Development Framework. Retrieved from http://marylandpublicschools.org/programs/Documents/CTE/CDFrameworkAugustRevised2012.pdf

need multiple, early, and prolonged opportunities to explore career options and relate them to the subjects they are studying. At the high school level, career exploration and discussion should be integrated into most courses as a means of understanding how and where a particular content/skill area is used in the world of work.	
The recommended ratio of counselors to students is one counselor for every 250 students. The most recent Maryland data indicates that the ratio is approximately 1:360, with differences across school systems. Increasing the number of counselors would allow students to better explore and develop knowledge and aptitudes for potential careers.	American School Counselor Association. (2018). Press. https://www.schoolcounselor.org/press American School Counselor Association. (n.d.). Student-to-School-Counselor Ratio 2015-2016. https://www.schoolcounselor.org/asca/media/asca/home/Ratios15-16.pdf

Supporting Recommendation 1.B: Dual Enrollment

Task Force recommendation:

Dual Enrollment- The Task Force recommends that high school students that successfully complete a college course aligned with the Maryland College and Career Ready Standards or an elective credit for graduation requirements, as determined by the Maryland State Department of Education, after consultation with the LEAs, receive the high school credit for the course.

Rationale	Citation
Research shows students who participate in dual enrollment are more likely to enroll in college, earn more college credits while enrolled, and are more likely to graduate college on time. Dual enrollment has also been found to offer an array of curricular options to high school students who might not otherwise have access to these options due to limited offerings at their high school. It may be particularly beneficial to CTE students as well.	Bailey, T.R., Hughes, K.L., & Karp, M.M. (2002). What role can dual enrollment programs play in easing the transition between high school and postsecondary education? Preparing America's Future: The High School Symposium, Washington, DC, April 4, 2002. https://files.eric.ed.gov/fulltext/ED465090.pdf Dougherty, S.M. (2016). Career and technical education in high school: Does it improve student outcomes? Washington, DC: Thomas B. Fordham Institute. Retrieved from https://edexcellence.net/publications/career-and-technical-education-in-high-school-does-it-improve-student-outcomes Henneberger, A.K., Witzen, H., & Preston, A. (2018). Dual enrollment in Maryland: What are the causal effects on college and workforce outcomes and do effects differ by student subgroup? Baltimore, MD: Maryland Longitudinal Data System Center. Retrieved from https://mldscenter.maryland.gov/egov/Publications/ResearchReports/DE_PSM_71718.pdf Karp, M.M., & Hughes, K.L. (2008). Study: dual enrollment can benefit a broad range of students. Techniques: Connecting Education and Careers, 83(7), 14-17. https://files.eric.ed.gov/fulltext/EJ815413.pdf
Limited research also finds that dual enrollment is best employed strategically. It may not provide all students with improved outcomes, especially if it is required, but rather may be most effective when used for students who would not otherwise participate in the course. Depending on the cost structure of dual enrollment and other factors,	Henneberger, A.K., Witzen, H., & Preston, A. (2018). Dual enrollment in Maryland: What are the causal effects on college and workforce outcomes and do effects differ by student subgroup? Baltimore, MD: Maryland Longitudinal Data System Center. Retrieved from

there may be different participation rates for disadvantaged students. The Task Force, therefore, does not recommend requiring dual enrollment for all students.	https://mldscenter.maryland.gov/egov/Publications/ResearchReports/DE_PSM_71718.pdf Pierson, A., Hodara, M., & Luke, J. (2017). Earning college credits in high school: Options, participation, and outcomes for Oregon students (REL 2 017-216). Washington, DC: U.S. Department of Education, Institute of Education Sciences, National Center for Education Evaluation and Regional Assistance, Regional Education Laboratory Northwest. Retrieved from https://ies.ed.gov/ncee/edlabs/regions/northwest/pdf/REL_2017216.pdf Speroni, C. (2011). High school dual enrollment programs: Are we fast-tracking students too fast? National Center for Postsecondary Research. Retrieved from https://files.eric.ed.gov/fulltext/ED527527.pdf Texas Higher Education Data. (n.d.). Dual Credit Data. Retrieved from http://www.txhighereddata.org/INTERACTIVE/HSCOLLLINK2.CFM Zinth, J. (2015). State approaches to funding dual enrollment. Denver, CO: Education Commission of the States. Retrieved from http://www.ecs.org/clearinghouse/01/18/92/11892.pdf
The Kirwan Commission Workgroup #3 supports students' opportunities to take dual enrollment courses at the high school or on the college campus as soon as students earn CCR designation. The Workgroup believes college level courses that are integral to the post-secondary options, taught by postsecondary instructional staff, should be awarded high school credit, as well as college credit.	Maryland Commission on Innovation & Excellence in Education. (January 2018). Preliminary Report. Retrieved from https://msa.maryland.gov/megafile/msa/speccol/sc5300/sc5339/000113/022600/022621/20180174e.pdf
The Task Force noted the need for community colleges to become more consistent in what is offered as a part of a designated course. If the course is to be used for a high school credit, the course should be aligned to the high school standards for the high school course it is replacing. (Dual enrollment in Maryland is currently addressed by an ad-hoc workgroup composed of postsecondary and K-12	Fielder, J.D. (n.d.). Dual enrollment: Academic, enrollment, and financial impact (MSAR #9762). Baltimore, MD: Maryland Higher Education Commission. Retrieved from https://www.dropbox.com/s/gmmmdmfhtdni3ij/Report%20%239762%20CCRCCA%20Dual%20Enrollment%20Report.pdf?dl=0

stakeholders, managed by the Maryland Higher Education Commission.)	

Recommendations: Diplomas

2.1: Maryland High School Diploma

Current regulation: COMAR 13A.03.02.09(A-B). Diplomas and Certificates.

A. The types of diplomas and certificates specified in §§B—D of this regulation shall be awarded to any student who meets the requirements for award.

B. Maryland High School Diploma. Except as provided in Regulation .12 of this chapter, and in §C of this regulation, to be awarded a Maryland high school diploma, a student shall:

(1) Complete the enrollment, credit, and service requirements as specified in this chapter;

(2) Complete local school system requirements; and

(3) Meet the graduation assessment requirements in the following ways:

(a) Achieve a passing score on the Maryland High School Assessments for Algebra I, science, government, and English 10;

(b) Achieve a combined score(s) as established by the Department on the Maryland High School Assessments;

(c) Achieve a passing score on an approved alternative assessment as established by the Department, such as Maryland High School Assessment for Algebra II, Advanced Placement examinations, SAT, ACT, or International Baccalaureate examinations; or

(d) Except for students described in Regulation .06F of this chapter, if a student is unable to meet the requirements in §B(3)(a)—(c) of this regulation, then the student shall satisfactorily complete the requirements of the Bridge Plan for Academic Validation as set forth in Regulation .06D of this chapter.

Task Force recommendation:

Current regulation states that the Maryland High School Diploma shall be awarded to any student who meets the requirements for that award. Maryland should retain the single Maryland High School Diploma. Maryland should not adopt multiple diploma options beyond the Maryland High School Diploma.

Rationale	Citation
Policy experts recommend that diplomas aligned with college and career ready standards should be the default diploma for all students. Having a single diploma aligned to these	Alliance for Excellent Education. (2017). Paper thin? Why all high school diplomas are not created equal. Washington, D.C.: Author. Retrieved from https://all4ed.org/wp-

standards sets the same expectations for all students.	content/uploads/2017/10/Diploma_Paper-UPDATE-10-17.pdf
Research has found that states that require a college and career readiness diploma have smaller gaps between underserved and other student groups than states that only offer it as an option.	Alliance for Excellent Education. (2017). Paper thin? Why all high school diplomas are not created equal. Washington, D.C.: Author. Retrieved from https://all4ed.org/wp-content/uploads/2017/10/Diploma_Paper-UPDATE-10-17.pdf
There is a historical precedent for a single diploma. Maryland has had a single diploma for over forty years.	N/A
The single Maryland diploma succinctly conveys meaning to employers on the capabilities of high school students.	At Meeting #4 on February 23, 2018, representatives from Maryland employers discussed with the Task Force the value and use of the Maryland High School Diploma in hiring practices. Sonja Whited with Perdue Farms Innovations, Inc. and others informed the Task Force that the high school diploma is the most important and first requirement for employment. Employers find the diploma critical and tend to see it as a "gateway." This gateway is whether or not the student has a diploma and is not contingent on the content of a student's transcript or on other indicators of what coursework the student has completed.
Many state and local programs are dependent on the single Maryland high school diploma. Multiple diplomas would compromise access to funds and opportunities for students.	At Meeting #4 on February 23, 2018, Christopher MacLarion of the Department of Labor, Licensing and Regulation, Maryland Apprenticeship and Training Program (MATP) - Division of Workforce Development and Adult Learning informed the Task Force that the first requirement to entering a Maryland Apprenticeship is a high school diploma.
These recommendations support the Task Force's guiding principle of equity. A single diploma does not separate or label students as "better" or "lesser" than others, and does not inadvertently limit student opportunities by presenting to potential employers or colleges that diplomas may not be equal. (Research from New York also supports maintaining a single	The Education Trust. (March 2018). Equity alert: Graduating to a bright future: Diplomas that lead to postsecondary success. Retrieved from https://newyork.edtrust.org/wp-content/uploads/sites/5/2018/03/Graduating-to-a-Bright-Future.pdf

diploma, as one analysis found that African American and low-income students are more likely to receive a less-rigorous diploma if more than one diploma is available.)	
Research shows that a high school diploma is the first signal in the workforce of a high school graduate's ability to perform the duties required.	Martorell, F. & Clark, D. (2010). The Signaling value of a high school diploma. RAND Working Paper. Retrieved from https://www.rand.org/content/dam/rand/pubs/working_papers/2010/RAND_WR780.pdf

2.2: Seals, Endorsements, and Awards

Current regulation:

COMAR 13A.03.02.09.F. Local Endorsements.

Consistent with procedures established by the Department, each local school system may add endorsements to the diploma as incentives for students to meet locally established requirements and outcomes in instruction beyond the minimums specified by the State.

2.2.1: Definitions

Task Force recommendations:

The Task Force recommends that the following terms be formally defined:

1. "Seal" means evidence as marked on the Maryland High School Diploma and the high school transcript for students who meet nationally established requirements or outcomes beyond the minimums specified by the State (for example, the Seal of Biliteracy).
2. "Endorsement" means evidence as marked on the Maryland High School Diploma and the high school transcript for students who meet state established requirements or outcomes beyond the minimums specified by the State.
3. "Local award" means locally established requirements presented to students in addition to the Maryland High School Diploma.

The Task force recommends that these definitions be included in COMAR, which requires the revision of COMAR 13A.03.02.09.F. to reflect the definition of local awards.

Rationale
These recommendations support the Task Force's guiding principles of equity and personalization. Students will have options of seals and the endorsements described in Recommendations 2.2.4 and 2.2.5, as well as any others established by the state. These seals and endorsements will appear directly on their diploma as a signal to higher education and employers. Further, since seals and endorsements are uniform statewide (being established at the national and state levels, respectively), a seal or endorsement on one student's diploma signals identical accomplishments for all other students with that same seal or endorsement. Additionally, seals, endorsements, and local awards are all for completion of activities or outcomes beyond the minimums established in Section 1 of this report (Credit and Program Requirements), which adheres to Recommendation 2.1 of maintaining a single Maryland diploma. The addition of seals, endorsements, and local awards in this way means that the Maryland High School Diploma represents common standards that all students must meet. The inclusion of uniform definitions preserves the common standards and maintains equity. The recommended honors allow students to personalize the diploma by meeting skills above and beyond the common standards specific to their areas of interest, and endorsements also allow students to receive recognition for exceptional skills, while all students who receive the diploma will meet the minimum standards.

While the Task Force is committed to providing equitable opportunities to all Maryland students, they recognize the uniqueness of Maryland's local school systems. The proposed structure of nationally recognized seals, state endorsements, and local awards allows Maryland's local school systems to have the control and flexibility to meet the unique needs of their students and families.

2.2.2: Requirements for Seals, Endorsements, and Awards

Task Force recommendations:

National seals and statewide endorsements should meet the following requirements:

1. National seals are set by nationally recognized organizations and adopted by the Department.
2. State endorsements are set by the Department of Education.
3. National seals and state endorsements must represent requirements above the minimum standards required for the Maryland High School Diploma.
4. National seals and state endorsements must be uniform across all Maryland local school systems.
5. National seals and state endorsements must include a performance measurement such as an assessment component to the best degree possible.
6. National seals and state endorsements must communicate a capability to employers, higher education, or both that is not clearly evident from the Maryland High School Graduation Requirements alone.
7. National seals and state endorsements must provide extrinsic incentives for students.
8. National seals and state endorsements must be included on the students' diploma and transcript.

Local awards should meet the following requirements:

1. Local awards are set by each local school system.
2. Local awards must represent requirements above the minimum standards required for the Maryland High School Diploma alone.
3. Local awards must be uniform across all schools within the local school system.
4. Local awards should communicate a capability to employers, higher education, or both that is not clearly evident from the local school system requirements alone and may be unique to the local school system.
5. Local awards cannot be included on the Maryland High School Diploma.
6. Local awards must be granted as a separate award from the Maryland High School Diploma.
7. Local awards may be included on the student's transcript.

Comparison of National Seals, State Endorsements, and Local Awards by Proposed Requirements and Definitions

National Seals	State Endorsements	Local Awards
Established by nationally recognized organization	Established by the State Board of Education	Established by the local school system
Contains requirements above the minimum standards for graduation	Contains requirements above the minimum standards for graduation	Contains requirements above the minimum standards for graduation
Is uniform across all Maryland school systems	Is uniform across all Maryland school systems	Is uniform across all schools within the local school system

Must include a performance measurement to the degree possible	Must include a performance measurement to the degree possible	
Must communicate a capability to either employers, higher education, or both	Must communicate a capability to either employers, higher education, or both	Should communicate a capability to either employers, higher education, or both that is unique to the local school system
Must provide extrinsic incentives for students	Must provide extrinsic incentives for students	
Must be included on the students' diploma and transcript	Must be included on the students' diploma and transcript	May be included on the student's transcript; cannot be included on the Maryland High School Diploma

Rationale
The Task Force's guiding principles support skills and personalization. While the single Maryland diploma succinctly conveys meaning to employers on the capabilities of high school students, the meaning is limited with no opportunity for students to convey unique or exceptional skills.
The Task Force's guiding principles support equity. Standard requirements across the state of Maryland for these three honors ensures that all students have equitable access regardless of the local school system in which they attend.
While the Task Force is committed to providing equitable opportunities to all Maryland students, they recognize the uniqueness of Maryland's local school systems. The proposed structure of nationally recognized seals, state endorsements, and local awards allows Maryland's local school systems to have the control and flexibility to meet the unique needs of their students and families.
The Task Force recognizes that Maryland's local school systems have specific geographic needs in preparing students for postsecondary success. Local awards allow Maryland's local school systems to recognize the specific needs of their geographic regions.

2.2.3: Process for Adopting Seals or Creating Endorsements and Awards

Task Force recommendation:

The State Board of Education and Department of Education should establish a process for adoption of national seals and the creation of state endorsements to ensure that seals and endorsements meet the requirements specified in recommendation 2.2.2. Local boards of education should be required to create local awards based on the requirements specified in recommendation 2.2.2.

Rationale
The Task Force's guiding principles support equity. A transparent process for the adoption or creation of seals, endorsements, and awards ensures that all students know and understand the requirements needed to earn them.
The Task Force's guiding principles support skills and personalization. A transparent process for the adoption or creation of honors ensures students know the benefits of earning seals, endorsements, and awards, and can choose the options that are most appropriate for their interests and goals.

2.2.4: College Ready Endorsement

Task Force recommendation:

Create a "College Ready" Endorsement effective for the graduating class of 2023 (first-time ninth graders in the 2019-2020 school year). The College Ready Endorsement may be awarded to students who meet the College and Career Readiness Assessment Options defined in the Memorandum of Understanding (MOU) between Maryland Association of Community Colleges (MACC) and Public School Superintendents Association of Maryland (PSSAM). Students must meet the assessment options in both ELA and mathematics prior to graduation to be eligible for the College Ready state endorsement. Functionally, and in line with the Memorandum of Understanding, students should meet these assessment options by the end of 11th grade or enter into "transition courses" for support and remediation in 12th grade.

Should this MOU be amended, the college ready endorsement should reflect the content of the amended MOU.

MACC and PSSAM of Memorandum of Understanding, 2018-2019

A high school junior and senior student to be deemed as college and career ready must meet one of the following criteria:

11th Grade								
	PARCC	SAT	ACT	AP	IB	ACCUPLACER	Dual enroll	GPA
English Language Arts (ELA)	English 10 score of Level 4 or 5 satisfies CCR determination English 11 score of Level 4 or 5 These scores are valid for the 2018-2019 school year as the PARCC test will no longer be administered.	Evidence-based Reading & Writing score of 480	Score of 21 or greater Average of English Test & Reading Test scores	English Language & Composition OR English literature & Composition: Exam score of 3, 4, or 5	Lang. A: Lit SL or HL OR Lang. A: Lang. & Lit. SL or HL Grade 4 or above on one or more	Reading 79+ Writing 6+ & Sentence Skills 90+	Admission to and enrollment in a Maryland IHE's appropriate ELA college credit-bearing course Existing local agreements between LEAs and community colleges or CCR are accepted	The verified cumulative unweighted high school GPA of 3.0 or better be used to signify the college-readiness of the applicant; the GPA will have an expiration date of no less than 5 years, regarding its utility as a metric for college readiness. As such, the applicant would not have to take the Accuplacer exam, or otherwise be restricted from registering for credit classes. This measure does not apply to grades earned in English as a Second Language (ESL) courses. The use of the recommended 3.0 or higher high school GPA as an alternative measure for College Readiness at all Maryland community colleges will be in place by Fall 2019. A review of the metric will occur within three years of the implementation of the new alternative measure.
Math*	Algebra II score of Level 4 or 5 For 11th graders enrolled in Geometry, a score of Level 4 or 5 on PARCC. Geometry satisfies the CCR determination	Mathematics score of 530	Score of 21 or greater on Mathematics Test	Calculus AB Calculus BC Statistics Exam score of 3, 4, or 5	Math Studies Math SL Math HL Further Math Grade of 4 or above on one or more	College level Mathematics test scores of 45+	Admission to and enrollment in a Maryland IHE's appropriate math college credit-bearing course Existing local agreements between LEAs and community colleges or CCR are accepted	

* The Geometry assessment may be used as a no-cost CCR assessment for eleventh grade students enrolled in Geometry. Eleventh grade students who earn a score of 4 or higher on the Geometry assessment are not required to take a mathematics transition course of senior year reassessment.

The College Ready endorsement meets the criteria for state endorsements defined in Recommendation 2.2.2:

State Endorsement Requirements	**College Endorsement**
Established by the State Board of Education	Will be adopted by the State Board of Education
Contains requirements above the minimum standards for graduation	Require students to meet the standards identified in the MACC/PSSAM MOU, which exceed the Maryland Graduation Requirements
Is uniform across all Maryland school systems	The same standard is applied across all Maryland local school systems
Must include a performance measurement to the degree possible	MACC/PSSAM MOU require students meet a standard on state or nationally recognized assessments
Must communicate a capability to either employers, higher education, or both	Conveys that the student is ready for college level credit-bearing coursework in English Language Arts, Literacy and Mathematics
Must provide extrinsic incentives for students	Provides incentives to students to ensure they are not placed in remedial courses upon entering Maryland institutions of higher education.
Must be included on the students' diploma and transcript	Will be included on transcripts and diplomas

Rationale	**Citation**
Analysts recommend aligning high school requirements with higher education admission standards, especially as a way to close the "preparation gap" for under-resourced students.	Jimenez, L. & Sargrad, S. (April 2018). *Are High School Diplomas Really a Ticket to College and Work? An Audit of State High School Graduation Requirements.* Washington, DC: Center for American Progress. Retrieved from https://www.americanprogress.org/issues/education-k-12/reports/2018/04/02/447717/high-school-diplomas/
The College and Career Readiness and College Completion Act of 2013 (CCR-CCA) established a number of requirements designed to increase college and career readiness as well as degree completion in Maryland. The intent of the Act is to reduce or eliminate the need for students to enroll in remedial courses in college. This recommendation supports the work of CCR-CCA	Annotated Code of Maryland, Education Article § 7-205 Tool Kit to Determine Students' College and Career Ready Designation under the College and Career Readiness and College Completion Act of 2013

by clearly identifying students who have exceeded the Maryland high school graduation requirements and are college-ready.	
More than a third of four-year college students and more than two-thirds of community college students take at least one remedial course. Such courses increase the cost and time of college, and are thus associated with a lower likelihood of completion.	Chen, X. (2016). Remedial Coursetaking at U.S. Public 2- and 4-Year Institutions: Scope, Experiences, and Outcomes (NCES 2016-405). U.S. Department of Education. Washington, DC: National Center for Education Statistics. Retrieved from http://nces.ed.gov/pubsearch. Ganga, E., Mazzariello, A., & Edgecombe, N. (2018). Developmental education: An introduction for policymakers. Denver, CO: Education Commission of the States. Retrieved from https://ccrc.tc.columbia.edu/media/k2/attachments/developmental-education-introduction-policymakers.pdf
Representatives from four-year institutions indicated that they utilize information from the student's transcript to determine entrance qualifications. It follows that a succinct signal on a student's diploma of readiness to enter a four-year institution would be beneficial to students for whom four-year college is a goal.	

2.2.5: Career and Technical Education Endorsement

Task Force recommendations:

Create a Career and Technical Education (CTE) state endorsement effective for the graduating class of 2023 (first time ninth graders in the 2019-2020 school year). The CTE endorsement is awarded to students who successfully meet requirements determined by the MSDE, Division of College and Career Readiness. Per Recommendation 2.2.2, the requirements must be above the minimum requirements for graduation, and thus successful completion of the CTE "pathway" (Recommendation 1.9) is insufficient. Requirements might include participation in a Work-Based Learning Opportunity or Career Technical Student Organization. Requirements should include a performance measurement such as qualifying for an industry recognized credential where appropriate and available.

Requirements for a performance assessment should not, however, hinder a student's ability to earn the CTE endorsement. The Task Force recommends that licensure exams not be required by the endorsement. Many students do not take exams until after high school, or sometimes after they continue their studies at the post-secondary level, and requiring students take or pass such exams in high school might delay receipt of their endorsement on their diploma. Second, exams are administered by multiple agencies and licensing boards, and these organizations do not share the results with MSDE. Third, not all CTE pathways have an exam. The final reasons relate to equity. Some students pay for exams out-of-pocket, which means they may not be accessible to all students immediately after completion of the CTE program, if at all. Exams may not have the same accommodations for special education students as those that they might receive on state-administered standardized tests. Finally, licensure in some fields requires a social security number, which again makes this option not viable for some Maryland students. See Supporting Recommendation 3.B.

Most students will complete their CTE coursework during their senior year of high school. (Students will know prior to their senior year if they are on track to complete their CTE coursework, as the advanced courses in each pathway require significant preparation earlier in high school.)

The Task Force recommends that the MSDE further develop the requirements for the CTE state endorsement and provide guidance and support to local school systems for implementation.

Rationale	Citation
Exposure to career and technical education, especially coursework that is concentrated in a particular pathway, has been shown to increase the likelihood of student graduation, two-year college entry, and employment (with higher wages).	Dougherty, S.M. Career and technical education in high school: Does it improve student outcomes? Washington, DC: Thomas B. Fordham Institute. Retrieved from https://edexcellence.net/publications/career-and-technical-education-in-high-school-does-it-improve-student-outcomes White, D.O. (2015). The impact of career and technical education (CTE) on student academic

	achievement and graduation rates in the commonwealth of Virginia. (Doctoral dissertation). Retrieved from https://vtechworks.lib.vt.edu/bitstream/handle/10919/74382/White_DO_T_2015.pdf?sequence=1
Other states have implemented similar endorsements, so there is a precedent for a similar CTE endorsement in Maryland.	ACT. (n.d.). ACT WorkKeys and the ACT National Career Readiness Certificate: Questions and answers for state policymakers. Retrieved from https://www.act.org/content/dam/act/unsecured/documents/WK-NCRC-QAforStatePolicymakers.pdf
The College and Career Readiness and College Completion Act of 2013 (CCR-CCA) established a number of requirements designed to increase college and career readiness as well as degree completion in Maryland. This recommendation supports the work of CCR-CCA by clearly identifying students who have exceeded the Maryland high school graduation requirements and are career-ready.	Annotated Code of Maryland, Education Article § 7-205. Maryland State Department of Education. (December 2017). Tool kit to determine students' college and career ready designation under the college and career readiness and college completion act of 2013. Baltimore, MD: Author.

2.2.6: Receipt of Multiple Seals, Endorsements, and Awards

Task Force recommendation:

Individual students may qualify for and earn more than one national seal, state endorsement, or local award.

2.2.7: Timeline for Implementation of Endorsements

Task Force recommendation:

MSDE should lead the implementation of endorsements and provide supports to the local school systems. The Task Force recommends national seals and state endorsements be available to the graduating class of 2023, for first time ninth graders in 2019-2020.

Rationale	Citation
The graduating class of 2023 is the first graduating class exposed to Maryland College and Career Readiness Standards for their entire high school careers (grades 9-12).	Maryland State Department of Education. (n.d.). Maryland College and Career Readiness Standards. Retrieved from http://marylandpublicschools.org/programs/Pages/MD-CCRS/index.aspx

2.2.8: Public Reporting of Seals, Endorsements, and Awards

Task Force recommendation:

The Task Force encourages transparency in the outcomes of students awarded national seals, state endorsements, local awards, combinations of seals, endorsements, and local awards, or none. The Task Force recommends that data on receipt of these honors be reported publicly on the Maryland State Department of Education websites including MDReportCard.org.

Reporting should include disaggregated data by school, local school system, and student groups.

The Department should make publicly available the list of nationally recognized seals and state endorsements available in the state of Maryland.

Each local school system should make publicly available the list of local awards available in the local school system.

Rationale
The Task Force's guiding principles support this recommendation. Transparency increases equity and accountability.

2.2.9: Implementation Review of Seals, Endorsements, and Awards

Task Force recommendation:

The State Department of Education should review the implementation of seals, endorsements, and awards and produce a report for review by the State Board of Education by December 2027. The MSDE should ensure that the recommendations reflect the Task Force guiding principles of equity and personalization, such that certain students or student groups do not have disproportionate access to opportunities to earn these honors and that honors do truly communicate a capability to employers and higher education that is not otherwise indicated on students' diplomas. The MSDE report should also include information from students, teachers, and stakeholders (especially from the higher education and business communities) on the implementation and reception of the Recommendations.

2.3: Certificate of Program Completion

Current regulation: COMAR 13A.03.02.09(E)

E. Maryland High School Certificate of Program Completion.

(1) This certificate shall be awarded only to students with disabilities who cannot meet the requirements for a diploma but who meet the following standards:

(a) The student is enrolled in an education program for at least 4 years beyond grade 8 or its age equivalent, and is determined by an IEP team, with the agreement of the student and the parents of the student, to have developed appropriate skills for the individual to enter the world of work, act responsibly as a citizen, and enjoy a fulfilling life, with the world of work including but not limited to:

(i) Gainful employment;

(ii) Post-secondary education and training;

(iii) Supported employment; and

(iv) Other services that are integrated in the community; or

(b) The student has been enrolled in an education program for 4 years beyond grade 8 or its age equivalent and will have reached age 21 by the end of the student's current school year.

(2) The Maryland Summary of Performance that describes the student's skills shall accompany the Maryland High School Certificate of Program Completion.

(3) The final decision to award a student with disabilities a Maryland High School Certificate of Program Completion will not be made until after the beginning of the student's last year in high school.

(4) A student with significant cognitive disability may not meet high school graduation requirements, in accordance with §B [assessments] of this regulation, if a student:

(a) Participates in an Alternative Assessment based on Alternative Academic Achievement Standards (AA-AAAS); and

(b) Continues to receive instruction based on Alternative Academic Achievement Standards through high school.

(5) If a student participates in a graduation ceremony prior to the completion of the student's education program, at the ceremony the school system shall issue to the student a Certificate of Achievement or other similarly titled certificate in place of a diploma.

Task Force recommendations:

Convene a workgroup to evaluate and potentially modify the Maryland Certificate of Program Completion. COMAR 13A.03.02.09(E)(1)(a) requires students with disabilities "to have developed appropriate skills for the individual to enter the world of work, act responsibly as a citizen, and enjoy a fulfilling life." Based on expert stakeholder input, the Task Force believes the current Maryland Certificate of Program Completion does not clearly signal to the workforce the "appropriate skills" a student with disabilities acquired through a free and appropriate public education. The Task Force believes that education professionals, parents, and students should be able to define more clearly "what" students with disabilities are capable of upon high school completion, just as the Maryland High School Diploma does.

The Task Force recommends the State Board convene a workgroup with the following charge:

1. Review the requirements for the Maryland Certificate of Completion. Determine if the Maryland Certificate of Completion should include more specific or rigorous requirements. Explore expanding CTE pathways (including youth apprenticeships) for students with disabilities.
2. Determine if changes need to be made in COMAR regarding the name and description of the certificate of program completion and make recommendations on appropriate verbiage if changes are necessary.
3. Develop standards for endorsements that can be added to a Maryland Certificate of Program completion to include academic and/or work-based learning requirements—two endorsements that will mirror the endorsements proposed for the High School Diploma.

This workgroup should review available literature and research on credentials for students with disabilities, explore similar credentials from other states, engage with experts from workforce and the community and MSDE. This workgroup should also encourage study of the impact of receiving a Certificate of Program Completion on students' post-high-school outcomes.

The Certificate of Program Completion Workgroup may include the following members:

- Maryland Special Education State Advisory Committee, Chair or designee;
- A representative from Disability Rights Maryland;
- A representative from Maryland Association of Secondary School Principals;
- A representative from Maryland Association of Middle School Principals;
- A representative from Maryland Coalition for Inclusive Education;
- Maryland employers who employ persons with disabilities;
- A representative from Maryland Association of Community Colleges;
- A local school system secondary Transition Coordinator;
- Director of Employment Policy, Maryland Department of Disabilities;
- Department of Labor, Licensing and Regulation, Secretary or designee;
- Maryland Higher Education Commission, Secretary or designee;
- Maryland State Department of Education, Division of Early Intervention and Special Education Services, Assistant State Superintendent or designee;
- Maryland State Department of Education, Division of Career and College Readiness, Assistant State Superintendent or designee;
- Maryland State Department of Education, Division of Rehabilitation Services (DORS), Assistant State Superintendent or designee;

- Additional stakeholders that have expertise and experience with this very diverse, complex student group.

Rationale	Citation
Research shows the strongest predictors of successful transition from school to work for students with disabilities are high school employment experiences and parental expectations of a post-high school employment.	Wehman, P., Sima, A.P., Ketchum, J., West, M.D., Chan, F., Luecking, R. (2015). Predictors of successful transition from school to employment for youth with disabilities. Journal of Occupational Rehabilitation, 25(2), 323-334. Retrieved from https://link.springer.com/article/10.1007/s10926-014-9541-6
The purpose of special education is to ensure that all children with disabilities have available to them a free appropriate public education that emphasizes special education and related services designed to meet their unique needs and prepare them for further education, employment, and independent living.	Individuals with Disabilities Education Act, 20 U.S.C. Chapter 33.
Maryland employers stated that they cannot evaluate either the Maryland High School Certificate of Program Completion or the student's transcript to determine the student's potential for success in a particular position.	Task Force expert panel of employers, February 23, 2018
Maryland is an "Employment First" state, but Maryland High School Certificate of Program Completion does not include any requirements centered on supporting the Employment First framework.	State of Maryland Department of Disabilities. (n.d.). Employment First. Retrieved from http://mdod.maryland.gov/employment/Pages/employment-first.aspx
Representatives from the special education community reported to the Task Force that parents often report having different expectations for their student with disabilities than school staff do, especially when it comes to further education, employment and independent living. A revised Certificate of Program Completion would allow personalization for these students, to align their high school experience to their post-high-school goals just as it does for students earning the Maryland High School Diploma.	
Representatives from the special education community reported to the Task Force that parents fear that when school staff determine that their child will be receiving a Certificate of	

Program Completion rather than a Maryland High School Diploma, expectations for their child's learning and achievement plummet despite the directives from the State Department of Education Department of Special Education/Early Intervention Services that they expect otherwise.	

2.4: Stakeholder Engagement

Task Force recommendation:

MSDE and the State Board of Education should partner with the Maryland Higher Education Commission, the Department of Labor, Licensing and Regulations, the Maryland Chamber of Commerce, the Maryland Business Roundtable for Education, and additional potential stakeholders to engage with industry, higher education, community, parents, and media to communicate the meaning of seals, endorsements, and local awards.

Rationale
Representatives of the higher education and business community stressed to Task Force members that, while these honors contain valuable information about student knowledge and skills, there must be a concurrent effort to communicate that meaning across the wider stakeholder community.

2.5: Expanded Reporting on Post-High School Outcomes

Task Force recommendation:

The Department of Education should collaborate with the Maryland Longitudinal Data System Center to facilitate annual post-high school outcome reporting beginning in 2024 with the graduating class of 2023. This expanded reporting would include post-high school outcomes of all Maryland high school students who leave Maryland public schools for any reason, whether or not they earn a high school diploma.

Supporting Recommendation 2.A: Maryland High School Diploma by Examination

Current regulation and statute:

COMAR 13a.03.02.09(D)

D. Maryland High School Diploma by Examination.

(1) General Educational Development Testing Program. A Maryland High School Diploma by Examination may be awarded for satisfactory performance on approved general educational development tests if the student meets those requirements as defined in Labor and Employment Article, §11-808, Annotated Code of Maryland, and COMAR 09.37.01.04.

(2) Maryland Adult External High School Diploma Program. A Maryland High School Diploma by Examination may be awarded for demonstrating competencies in general life skills and individual skills on applied performance tests if the student meets those requirements as defined in COMAR 09.37.01.20.

COMAR 09.37.01.04. Applicant Eligibility.

An applicant is eligible to take the GED® Tests if the applicant:

A. Resides in the State of Maryland at the time of testing;

B. Is older than the age requirement for compulsory school attendance set by Education Article, §7-301, Annotated Code of Maryland; and

C. Either:

(1) Meets both of the following requirements:

(a) Has not obtained a Maryland high school diploma or a high school certificate or diploma issued by another state or non-U.S. or correspondence school; and

(b) Has been officially withdrawn from a regular full-time public or private school; or

(2) Has obtained a Maryland High School Certificate of Program Completion in accordance with COMAR 13A.03 .02.09D.

Annotated Code of Maryland, Labor and Employment Article, §11-808-High School Diploma by Examination - Eligibility Requirements - Exemption.

This statute grants exemption to the eligibility requirement for a high school diploma by examination that he/she is older than the age requirement for compulsory school attendance and has officially withdrawn from a regular full-time public or private school “if the individual participates in a GED option

program administered by the state department of education that creates a pathway to a high school diploma by examination for currently enrolled high school English language learner students under the age of 21 years who have experienced interrupted education and have a lower level of English proficiency than their peers."

Task Force recommendation:

Investigate and support ways students may earn a Maryland High School Diploma by Examination. Continue to support innovative options for earning a high school diploma by examination for Maryland students at-risk of dropping out of high school, such as the exemption provided to English language learner students.

Rationale	Citation
Research on individuals who pass the GED exam (formerly "General Equivalency Diploma") indicates that these individuals have lower earnings than those with a high school diploma, but higher earnings than high school dropouts. The same was found in Maryland: In 2014, high school diploma earners had median wages of approximately $15,500, whereas GED earners had wages of approximately $13,600. Individuals who did not complete high school had median wages of $10,000 five years after the 12th grade.	Ewert, S. (2012). GED recipients have lower earnings, are less likely to enter college (Census Blogs). Retrieved from https://www.census.gov/newsroom/blogs/random-samplings/2012/02/ged-recipients-have-lower-earnings-are-less-likely-to-enter-college.html Shaw, T.V., Klumpner, S., & Henneberger, A.K. (2017). Workforce outcomes in Maryland for students who do not attend college: patterns among students who earn a high school diploma, certificate of completion, diploma via GED, and high school non-completers. Baltimore, MD: Maryland Longitudinal Data System Center. Retrieved from https://mldscenter.maryland.gov/egov/Publications/HS_to_Workforce_FinalMerged_May2017.pdf
Task Force members and experts from within Maryland indicated that experiential learning/competency-based education should be an option for students to demonstrate competency of high school standards, without having to drop out of high school first. Further, they indicated timelines for achieving a diploma should reflect the diversity of the population and allow flexibility. Flexible options for experiential learning and competency-based education are being pursued to some degree within Maryland,	N/A

but further study is needed to determine if and how these options can be facilitated.	

Supporting Recommendation 2.B: Options for Successful Completion of High School

Current regulations:

COMAR 13A.03.02.10 Alternatives to 4-year Enrollment Requirement.

A. In recognition of the fact that 4-year enrollment in a public high school may not serve the best interests of some students, the alternatives in §§B and C of this regulation shall be made available.

B. Early College Admission Program. A student may receive a Maryland High School Diploma through acceptance in the early college admission program, if:

(1) The student is accepted for early admission to an accredited college before high school graduation;

(2) All Maryland High School Assessments and student service requirements have been met;

(3) A written request by the student and parent or guardian is made to and approved by the local superintendent of schools certifying the early admission acceptance;

(4) The student's program for the first year of college is approved by the local superintendent of schools if this program is included toward the issuance of a diploma; and

(5) At the conclusion of the program or after 1 year, a written request for a Maryland High School Diploma is submitted to the superintendent together with a transcript or letter from the college to the high school principal indicating that the student has successfully completed a year of college work.

C. Early Admission to Approved Vocational, Technical, or Other Postsecondary School Program. A student may receive a Maryland High School Diploma through acceptance in an early admission program of an approved vocational, technical, or postsecondary school program if:

(1) The student is accepted for early admission by an approved vocational, technical, or postsecondary school program before high school graduation;

(2) All Maryland High School Assessments and student service requirements have been met;

(3) A written request by the student and parent or guardian is made to and approved by the local superintendent of schools certifying the early admission acceptance;

(4) The student's program for the first year of the postsecondary program is approved by the local superintendent of schools if this program is included toward the issuance of a diploma; and

(5) At the conclusion of a full year of study, a written request for a Maryland High School Diploma is submitted to the superintendent together with a transcript or letter from the postsecondary school to the high school principal indicating that the student has successfully completed a year of postsecondary school work.

COMAR 13A.03.02.11 Alternatives for Structuring Programs.

A. Each local school system shall be permitted to develop alternative ways for individual or groups of students to fulfill graduation requirements.

B. An alternative plan may include a waiver of the fourth year enrollment requirement if all credit, assessments, and student service requirements are met and if the local superintendent of schools or designee determines that the waiver is in the best interest of the student.

C. Procedures for implementing these alternative programs leading to high school diplomas are as follows:

(1) Development and approval of a curricular plan which assures that the content of the specified credits is included and the standards for graduation are met pursuant to the requirements of this chapter with the plan containing a program description, performance requirements, and evaluation procedures; and

(2) The local superintendent of schools is responsible for approving any plan and shall notify the State Superintendent of Schools once approval has been given.

Task Force recommendations:

MSDE and the Board of Education should encourage and support innovative options for successful completion of high school for all students for whom these options might benefit. This includes encouraging and incentivizing schools to retain students who may take more than four years to successfully complete high school, and creating opportunities for students who want to complete high school in less than four years to do so. Options may include demonstrations of competency rather than traditional coursework structures.

Further, MDSE and the Board of Education should explore relief in federal accountability definitions of graduation rates such that schools are not penalized for students who take advantage of these options, especially students who will benefit from spending more than four years in high school.

Rationale	Citation
Current COMAR does not require 4-years of high school; students may earn credits outside of the regular school day and year.	Code of Maryland Regulations. 13A.03.02.09. Retrieved from http://www.dsd.state.md.us/comar/comarhtml/13a/13a.03.02.09.htm Code of Maryland Regulations. 13A.03.02.04. Retrieved from http://www.dsd.state.md.us/comar/comarhtml/13a/13a.03.02.04.htm
Maryland has taken some steps to create opportunities for students who do not take a traditional path through high school, including:	H.B. 1381, 2017 Reg. Sess. (Md. 2017).

the Adult High School Pilot Program and the Pathways in Technology Early College High School (P-TECH). The former offers an "alternative method for adults who did not graduate from high school to earn a high school diploma and potentially to earn postsecondary education credits and industry–recognized certification in an environment that meets the needs of the adult learner," and the latter a six-year combined high school and college experience. These programs should be encouraged and potentially expanded. There are also early college programs offered in some districts that allow students to earn their high school diploma, as well as their associate's (two-year) degree from the Community College all within the student's four years in high school. Opportunity for competency-based education is being piloted in the Linking Youth to New Experiences (LYNX) school in Frederick County. Through this program students have opportunities to demonstrate competency for a subject when they are ready. Flexible scheduling is also a part of the program.	

Recommendations: Assessments

Current regulations:

COMAR 13A.03.02.06. Maryland High School Assessments.

A. A student shall take the requisite Maryland High School Assessment during its next regular administration if the student received credit for taking, by the methods identified in Regulations .03 and .04 of this chapter, any of the following courses aligned with the Maryland High School Assessment:

(1) Algebra;

(2) Science;

(3) English; or

(4) Government.

B. To be awarded the Maryland High School Diploma, all students, including elementary and middle school students who take high school level courses, shall take the Maryland High School Assessment for algebra, science, English, and government after the student completes the required course or courses.

C. Each local school system shall provide appropriate assistance to strengthen areas of weaknesses for students who have not achieved satisfactory scores on the Maryland High School Assessments.

D. Bridge Plan for Academic Validation.

(1) Eligibility Criteria. A student is eligible to satisfy the graduation assessment requirement through the Bridge Plan for Academic Validation if the student has:

(a) Failed one or more Maryland High School Assessments;

(b) Received credit in the course or courses related to the assessment or assessments;

(c) Demonstrated overall satisfactory attendance in the most recent school year completed; and

(d) Demonstrated satisfactory progress toward achieving the high school diploma requirements specified in COMAR 13A.03.02.09B(1) and (2); and

(e) Participated successfully in appropriate assistance as defined in §C of this regulation after having failed one or more of the Maryland High School Assessments.

(2) A student may begin a Bridge Project after one failure of a Maryland High School Assessment.

(3) A student may use the score on the Bridge Project to meet the graduation requirement only after the student has taken the Maryland High School Assessment twice and failed twice.

(4) The Bridge Plan for Academic Validation shall consist of:

(a) Specific modules developed by the Department in each of the Maryland High School Assessments content areas;

(b) The assignment by the local school system of one or more modules for completion by each student meeting the eligibility criteria;

(c) Scoring by the local review panels of the completed modules according to State-developed, Statewide scoring protocols;

(d) A recommendation from the local review panels to the local superintendent as to the outcome of the scoring of each student's module or modules;

(e) Acceptance or rejection by the local superintendent of the local review panel's recommendations; and

(f) An opportunity for the student to appeal the local superintendent's decision to the State Superintendent of Schools.

E. Reporting Student Performance.

(1) A school system shall state on the student's performance record card only that the student has or has not met all assessment requirements and shall not describe the option used to meet the requirement.

(2) For the purpose of this section, except for students identified in §F of this regulation, "met all assessment requirements" means achieving a passing score on all Maryland High School Assessments, or meeting the requirements of the combined score option, or successfully completing a Bridge Project in those assessment areas that the student did not pass.

F. If a student is graduating in the school year 2017—2018, and is a first-time test taker of Algebra I and/or English 10 in that school year, and has passed the course(s) but failed the Maryland High School Assessment aligned with those course(s), that student is exempt from completing a Bridge Project and will have met the assessment requirement for Algebra I and/or English 10.

State Board of Education action, January 24, 2018

"The Board approved a passing score of 750 for the cohort that is expected to graduate from high school in 2023-24 [first time 6th graders in 2017-18] and subsequent cohorts, and a passing score of 725 for the students currently in the 7th grade and above."

3.1: Algebra, English, and Government Assessments

Task Force recommendations:

Require the Maryland High School Assessments in Algebra, English, and Government to be end-of-course assessments that contribute to 20% of the final course grade.

Revise COMAR to state that a student shall take the requisite Maryland High School Assessment during its next regular administration if the student received credit for taking, by the methods identified in Regulations .03 and .04 of this chapter, any of the following courses aligned with the Maryland High School Assessment:

(1) Algebra;

(2) science;

(3) English; or

(4) Government.

To be awarded the Maryland High School Diploma, all students must take the Maryland High School Assessment end-of-course assessments in Algebra 1, English 10, and government as the student completes the required course(s). These three tests would therefore become end-of-course assessments. These assessments must count for 20% of a final course grade for each respective course, for all of which a student must earn credit in order to graduate. This change should apply to all students enrolled in high school level courses, including elementary and middle school students.

MSDE must ensure that assessment results are delivered in such a way that the results can be included in students' course grades.

Finally, the Task Force recommends that, after four years of adoption of this recommendation, MSDE study the correlation between final course grades and assessment scores.

Rationale	Citation
Research shows that high stakes exit exams disproportionately and negatively impact minority and economically disadvantaged students, reducing their likelihood of graduation from high school. (For example, one seminal study found that exit exams significantly reduced the probability of completing high school, particularly for African American students and students in urban and high-poverty districts, while lowering the dropout rate in low-poverty and suburban districts.)	Center on Education Policy. (2012). State high school exit exams: A policy in transition. Washington, DC: The George Washington University. Dee, T.S., & Jacob, B.A. (2006). Do high school exit exams influence educational attainment or labor market performance? (NBER Working Paper 12199). National Bureau of Economic Research.

	Dounay Zinth, J. (2012). End-of-Course-Exams. Education Commission of the States. Retrieved from http://www.ecs.org/clearinghouse/01/01/27/10127.pdf Hemelt, S.W. & Marcotte, D.E. (2013). High school exit exams and dropout in an area of increased accountability. Journal of Policy Analysis and Management, 32, 323-349. Hyslop, A. (2014). The case against exit exams. Washington, DC: New America Education. Retrieved from https://www.newamerica.org/education-policy/policy-papers/the-case-against-exit-exams/ Jellison Holme, J., Richard, M. P., Jimerson, J.B., & Cohen, R.W. (2010). Assessing the effects of high school exit examinations. Review of Educational Research, 80(4). Papay, J.P., Murnane, R.J., & Willet, J.B. (2010). The consequences of high school exit examinations for low-performing urban students: Evidence from Massachusetts. Educational Evaluation and Policy Analysis, 32, 5-23.
Research shows that a student's course grade is a stronger predictor of college and career success than standardized assessments.	Achieve. (2008). Transforming statewide high school assessment systems: A guide for state policymakers. Retrieved from https://www.achieve.org/files/TransformingStatewideHighSchoolAssessmentSystems.pdf Easton, J.Q., Johnson, E., & Sartain, L. (2017). The predictive power of ninth-grade GPA. Chicago: UChicago Consortium on School Research. Retrieved from https://consortium.uchicago.edu/publications/predictive-power-ninth-grade-gpa
Task Force members discussed the potential negative impact of removing "satisfactorily passing" exams as a graduation requirement, in	Hanushek, E., & Raymond, M. (2004). The effect of school accountability systems on the level and distribution of student achievement. *Journal of*

terms of both student and school incentives for learning. However, schools are now being held directly accountable for student achievement in math and English language arts in Maryland's state accountability plan for the Every Student Succeeds Act (ESSA). Research on accountability suggests that it does improve achievement for all students. The Task Force is therefore confident that its recommendation to shift tests to end-of-course exams will still maintain school accountability and student achievement, without the negative and disproportionate effects associated with high school exit exams.	*the European Economic Association, 2*(2-3), 406-415. Retrieved from https://cepa.stanford.edu/sites/default/files/Accountability_Handbook.pdf Rockoff, J., & Turner, L. (2008). Short run impacts of accountability on school quality. National Bureau of Economic Research Working Paper Series. Retrieved from http://www.nber.org/papers/w14564.pdf
Many states have recently changed their high stakes assessments to be end-of-course exams instead of graduation requirements.	Georgia Department of Education. (2018). End-of-grade (EOG) interpretive guide for score reports for spring and summer 2017. Retrieved from https://www.gadoe.org/Curriculum-Instruction-and-Assessment/Assessment/Documents/Milestones/EOG-Resources/EOG_2017_Score_Interpretation_Guide.pdf Kentucky Department of Education. (June 2018). End-of course. Retrieved from https://education.ky.gov/AA/Assessments/Pages/EOC.aspx Louisiana Department of Education. (n.d.). High school assessments. Retrieved from (https://www.louisianabelieves.com/measuringresults/assessments-for-high-schools State of Nevada Department of Education. (n.d.). Grades 7-13: End of course examinations (EOC). Retrieved from http://www.doe.nv.gov/Assessments/End_of_Course_Exams/ New Mexico Public Education Department. (2016). Frequently asked questions related to end of course exams. Retrieved from https://webnew.ped.state.nm.us/wp-content/uploads/2018/01/2016-17-FAQ-Document-for-End-of-Course-Exams.pdf Tennessee State Board of Education. (2015). Legislative Update. Retrieved from

	https://www.tn.gov/content/dam/tn/stateboardofeducation/documents/massivemeetingsfolder/meetingfiles5/6-9-15-WorkshopLegislativeUpdate.pdf Washington State Legislature. (n.d.). Statewide end-of-course assessments for high school mathematics. Retrieved from http://app.leg.wa.gov/rcw/default.aspx?cite=28A.655.066
Many states who use end-of-course exams count them as 20% of the respective course grade. Therefore, this recommendation aligns with most states that have moved away from exit exams. Final exams typically count as 20% of a course grade; therefore, 20% makes the exam proportional to instruction over the course of the year. A higher percentage would be disproportional and would make this a higher stakes assessment which is contrary to the intent of this recommendation.	Georgia Department of Education. (2018). End-of-grade (EOG) interpretive guide for score reports for spring and summer 2017. Retrieved from https://www.gadoe.org/Curriculum-Instruction-and-Assessment/Assessment/Documents/Milestones/EOG-Resources/EOG_2017_Score_Interpretation_Guide.pdf or http://www.gael.org/uploads/conference_presentation/1475604201-1b8540e33e36b7df4 Kentucky Department of Education. (June 2018). End-of course. Retrieved from https://education.ky.gov/AA/Assessments/Pages/EOC.aspx Louisiana Department of Education. (n.d.). High school assessments. Retrieved from https://www.louisianabelieves.com/measuringresults/assessments-for-high-schools State of Nevada Department of Education. (n.d.). Grades 7-13: End of course examinations (EOC). Retrieved from http://www.doe.nv.gov/Assessments/End_of_Course_Exams/ New Mexico Public Education Department. (2016). Frequently asked questions related to end of course exams. Retrieved from https://webnew.ped.state.nm.us/wp-content/uploads/2018/01/2016-17-FAQ-Document-for-End-of-Course-Exams.pdf Tennessee State Board of Education. (2015). Legislative Update. Retrieved from https://www.tn.gov/content/dam/tn/stateboard

	ofeducation/documents/massivemeetingsfolder/meetingfiles5/6-9-15-WorkshopLegislativeUpdate.pdf Washington State Legislature. (n.d.). Statewide end-of-course assessments for high school mathematics. Retrieved from http://app.leg.wa.gov/rcw/default.aspx?cite=28A.655.066

3.2: Science Assessment

Task Force recommendations:

Require all students to participate in the High School Integrated Science Assessment (HS MISA) until it can be determined by MSDE how to create an "end-of-course" assessment for science when the HS MISA is not actually tied to a particular course in the way that algebra, English, and government are. (Unlike those three exams, HS MISA is an integrated assessment designed to cover all the high school science standards. Local school systems are not required to offer specific courses such as "biology," "chemistry," and "physics," but rather must ensure that the standards are covered in whatever series and sequence of science courses students have taken in high school.) Current students would need to participate in the HS MISA but would not be required to pass HS MISA to graduate.

The Task Force further recommends that after four years of the HS MISA assessment implementation, MSDE conduct a study on student assessment and course-taking data to determine if there is an appropriate way to consider the HS MISA as an end of course exam. The Task Force then recommends MSDE and the State Board re-evaluate the decision to include HS MISA as a participation-only requirement.

Finally, The Task Force recommends Maryland should add the HS MISA as a high school science accountability measured for schools to the state's Every Student Succeeds Act (ESSA) plan.

Rationale	Citation
Maryland education experts recommend that the HS MISA be incorporated into the state's ESSA plan in order to be an accountability measure to ensure local education agencies continue to be held accountable for high quality integrated science instruction.	Maryland State Department of Education. (2018). Maryland Every Student Succeeds Act (ESSA) Consolidated State Plan. Retrieved from http://marylandpublicschools.org/about/Documents/ESSA/MarylandSubmissionConsolidatedStatePlan052318rev.pdf

3.3: Bridge Plan for Academic Validation

Task Force recommendation:

Maintain the Bridge Plan for Academic Validation where necessary as an alternative pathway for high school assessment completion. If the State Board adopts Recommendation 3.1 (algebra, English, and government end-of-course exams) and Recommendation 3.2 (science participation requirement), the Bridge Plan may no longer be necessary; however, the Task Force recommends that MSDE must carefully consider all possible short- and long-term consequences before eliminating the Bridge Plan.

More generally, the Task Force fully supports the concept of the Bridge Plan as a performance-based assessment, but recognizes that it may not be necessary, if and only if, the other Task Force recommendations are adopted as state regulation.

In the interim, the Task Force recommends MSDE should continue to evaluate the implementation of the Bridge Plan and the outcomes of students who meet the assessment requirements through the Bridge Plan. Further, after implementation of the new Bridge Plan for Academic Validation in 2023, a task force should be convened to review the comparability of the Bridge Plan to core assessments as measurement tools. Again, the Task Force fully supports the concept of performance-based assessments (see Recommendation 3.4), and it is possible that the Bridge Plan and/or a similar concept may well serve certain students, such as those who are unable to pass their required courses in algebra, English, and/or government due to low scores on state standardized tests in those subjects.

Finally, the Task Force recommends that, should the State Board not adopt Recommendations 3.1 and 3.2, that the Bridge Plan for Academic Validation be available to all eligible students as currently defined in COMAR.

Rationale
The Task Force guiding principles of equity and personalization support opportunities for students to demonstrate knowledge in core content areas tied to graduation. The Bridge Plan for Academic Validation offers one such remediation opportunity, especially for students who may not be able to demonstrate proficiency on state standardized tests despite being proficient in the content standards covered by those tests.

Supporting Recommendation 3.A: Competency- and Performance-Based Assessments

Task Force recommendation:

MSDE should encourage local school systems and schools to use a blended model of competency- and performance-based assessments for a variety of purposes. This may include graduation requirements (see Recommendation 3.3), as well as throughout the Maryland College and Career Readiness state standards in all subject areas. Continue to allow the use of competency- and performance-based assessments as part of CTE programs of study. Continue to provide opportunities for innovative programs to use these assessments as well.

Rationale	Citation
While federal accountability requires high school students are tested using state standardized tests once in high school in mathematics, English, and science, this is the only requirement for standardization. Performance based assessments (PBA) used as capstones as a graduation requirement may be included in addition to the current standardized tests required under ESSA.	Code of Maryland Regulations. 12A.03.02.09. Retrieved from http://www.dsd.state.md.us/comar/comarhtml/13a/13a.03.02.09.htm Every Student Succeeds Act of 2015, Pub. L. No. 114-95 114 Stat. 1177 (2015-2016).
Policy experts indicate that competency- and performance-based assessments administered in a state the size of Maryland would encounter issues with ensuring scoring consistency across local school systems, additional scoring burdens for teachers, and delayed reporting due to locally graded projects. The Task Force recommends using these assessments to provide students with opportunities to demonstrate proficiency and mastery of subject matter in Maryland schools, but does not recommend using them as a high-stakes measure of student learning for all students.	Barnum, M. (2016, June 12). The Exit Exam Paradox: Did States Raise Standards So High They Then Had to Lower the Bar to Graduate? The 74. Retrieved from https://www.the74million.org/article/the-exit-exam-paradox-did-states-raise-standards-so-high-they-then-had-to-lower-the-bar-to-graduate/ Larsen McClarty, K. & Gaertner, M.N. (2015). Measuring mastery: Best practices for assessment in competency-based education. Washington, DC: American Enterprise Institute. Maryland State Department of Education. (May 2018). Maryland Report Card. http://reportcard.msde.maryland.gov/ Maryland State Department of Education. (2018). Maryland Every Student Succeeds Act (ESSA) Consolidated State Plan. Retrieved from http://marylandpublicschools.org/about/Documents/ESSA/MarylandSubmissionConsolidatedStatePlan052318rev.pdf

	Phillips, K. & Schneider, C. (2016). Policy, pilots and the path to competency-based education: A tale of three states. Washington, DC: Excel in Ed.
Maryland's local school systems already have the ability under state and local regulations to include competency- and performance-based assessments in the Maryland College and Career Readiness standards. The Task Force recommends encouraging local school systems to utilize these assessments, without standardizing them or requiring that all students use them.	Annotated Code of Maryland, Education Article, §7-1701 through 7-1705, Public School Opportunities Enhancement Program. Expert Panel, April 27, 2018.

Supporting Recommendation 3.B: Career and Technical Education Technical Skills Assessments

Task Force recommendations:

3.B.1: Accommodations for Technical Skills Assessments

Career and Technical Education technical skills assessments that fall under the Americans With Disabilities Act should provide all accommodations to students available with other state assessments such as those in the Maryland Assessment Program, unless they invalidate the construct of the assessment. The Task Force recommends that the MSDE develop agreements with licensing boards to see currently available accommodations; to ensure that test-takers receive appropriate accommodations to students with disabilities; and to remove the burden of testing for students who require accommodations by allowing students' Individualized Education Plans (IEPs) to automatically trigger availability, without the student needing to apply for the accommodation.

3.B.2: Data Sharing Agreements

The Task Force further recommends MSDE develop agreements with licensing boards to share student data and to prevent student self-reporting of scores to MSDE.

3.B.3: Administration Costs

Finally, the Task Force recommends MSDE either assume the cost of the administration of technical skills assessments for industry-recognized credentials earned in high school (at a minimum for students with demonstrated financial need), or investigate other potential options to relieve the students of such costs. This should apply only where there is evidence of validation and utility of the specific credential, as evidenced by alignment to current labor market information and a state industry or sector advisory council, workforce development group and/or statewide agency such as the Department of Labor, Licensing, and Regulation has validated and attested to the value of the credential.

Rationale	Citation
The Task Force's guiding principle of equity and parity speaks to the need for accommodations across assessments in Maryland. While licensing boards and their exams do not fall under the direct purview of MSDE, students are entitled to accommodations and accessibility under ADA and IDEA; MSDE should do all it can to ensure students receive these accommodations. (MSDE is disseminating a guide to Technical Skill Assessments that includes relevant information on securing testing accommodations which are required by ADA for any assessment leading to a certificate, license, or other credential, as well as contact information for students who need to secure accommodations.)	Americans with Disabilities Act of 1990. 42 U.S. C. § 12101. Individuals with Disabilities Education Act, 20 U.S.C. Chapter 33. Maryland State Department of Education. (2018). Improving outcomes for students with disabilities: Curriculum, instruction, and assessment. (Technical Assistance Bulletin). Baltimore, MD: Author. Retrieved from http://www.marylandpublicschools.org/programs/Documents/Special-Ed/TAB/MarylandTABImprovingOutcomesforSWD.pdf

Maryland's CCR Toolkit documents the list of accommodations provided on each CTE licensing exam. After researching the accommodations available on CTE licensing exams, the Task Force determined that they are inconsistent in the level, number of accommodations they provide, and application process for their licensing exams.	Maryland State Department of Education. (2017). Tool kit to determine students' college and career ready designation under the College and Career Readiness Completion Act of 2013. Baltimore, MD: Author. Retrieved from: http://www.marylandpublicschools.org/about/Documents/DCAA/DCAA/CCRToolkit2017.pdf
Per the ADA publication regulating testing accommodations, CTE licensing exams must support individuals with disabilities.	U.S. Department of Justice Civil Rights Division. (n.d.). ADA Requirements: Testing Accommodations. Retrieved from https://www.ada.gov/regs2014/testing_accommodations.html Maryland State Department of Education. (2017). Maryland Assessment, Accessibility, & Accommodations Policy Manual. Baltimore, MD: Author.

APPENDIX: Maryland COMAR Chapter 13A.03.02 Graduation Requirements for Public High Schools in Maryland

13A.03.02.00

Title 13A STATE BOARD OF EDUCATION

Subtitle 03 GENERAL INSTRUCTIONAL PROGRAMS

Chapter 02 Graduation Requirements for Public High Schools in Maryland

Authority: Education Article, §§2-205, 4-110, 4-111, 7-203, 7-205, 7-205.1, 7-206, and 8-404, Annotated Code of Maryland

13A.03.02.01 Scope

A. This chapter sets out the enrollment, credit, student service, and State assessment requirements for graduation from a public high school in Maryland.

B. It is the expectation of the State Board that each student enrolled in a public school system in Maryland shall earn a Maryland High School Diploma in accordance with the requirements set forth in this chapter.

C. Upon notifying the State Superintendent of Schools, each local school system may establish graduation requirements beyond the minimum requirements established by the State Board.

13A.03.02.02 Definitions

A. In this chapter, the following terms have the meanings indicated.

B. Terms Defined.

(1) "Combined score" means the sum of specific scores as established by the Department on the Maryland High School Assessments for algebra, science, English, and government.

(2) "Credit" means successful demonstration of a specified unit of study.

(3) "Department" means the State Department of Education.

(4) “HSA” means the high school assessments in science and government aligned with the Maryland Standards.

(5) "Individualized education program (IEP)" means a written description for a student with a disability that is developed, reviewed, and revised in accordance with 20 U.S.C. §1414 and COMAR 13A.05.01.

(6) "Maryland High School Assessments" means the HSA, PARCC, or other assessments in algebra, science, English, and government developed or adopted by the Department that are aligned with and measure a student's skills and knowledge as set forth in the Maryland Standards for those subjects.

(7) "Minimum score" means an acceptable score established by the Department below the passing score on a Maryland High School Assessment that may be used by a student to satisfy the combined score option.

(8) “PARCC Assessment” means the assessments in algebra and English aligned with the Maryland Standards.

13A.03.02.03 Enrollment and Credit Requirements

A. Beginning with students entering the 9th grade class of 2014—2015 school year, each student shall enroll in a mathematics course in each year of high school that the student attends, up to a maximum of 4 years of attendance, unless in the 5th or 6th year a mathematics course is needed to meet a graduation requirement.

B. To be awarded a diploma, a student shall be enrolled in a Maryland public school system and shall have earned a minimum of 21 credits that include the following specified credits:

(1) English — four credits of organized instruction in comprehension of literary and informational text, writing, speaking and listening, language, and literacy, of which one credit shall be aligned with the Maryland High School Assessment for English;

(2) Fine arts — one credit in visual arts, music, theater, or dance, or a combination of these;

(3) Mathematics — three credits, including one with instruction in algebra aligned with the Maryland High School Assessment for algebra or one or more credits in subsequent mathematics courses for which Algebra I is a prerequisite, and one with instruction in geometry aligned with the content standards for geometry;

(4) Physical education — one-half credit;

(5) Health education — one-half credit;

(6) Science — three credits of organized instruction which includes a laboratory component engaging in the application of the science and engineering practices, the crosscutting concepts, and disciplinary core ideas including Earth/space science, life science, physical science (chemistry and physics), engineering, and technology, aligned to the Maryland High School Assessment for science;

(7) Social studies — three credits including one credit in United States history, one credit in world history, and one credit in local, State, and national government aligned with the Maryland High School Assessment for government;

(8) Technology education — one credit that includes the application of knowledge, tools, and skills to solve practical problems and extend human capabilities; and

(9) One of the following:

(a) Two credits of world language, which may include American Sign Language;

(b) Two credits of advanced technology education; or

(c) Successfully complete a State-approved career and technology program.

C. Elective programs and instruction shall be developed at the discretion of the local school system, open to enrollment for all students, and shall focus on in-depth study in required subject areas, exploration, or application and integration of what has been learned.

D. All students must complete a locally designed high school program of environmental literacy as set forth in COMAR 13A.04.17 that is approved by the State Superintendent of Schools.

13A.03.02.04 Other Provisions for Earning Credit

A. In addition to earning credits during the regular school day and year, credits may be earned, at the discretion of the local school system, through the means specified in §§B—I of this regulation.

B. Summer School.

(1) Each local school system may provide summer school programs for original and review credit as determined by the needs of students.

(2) Credit instruction shall meet the aggregate time requirements specified by the local school system.

(3) Consistent with local school system policy and procedure, credit may be given for acceptable summer study offered by approved public and nonpublic institutions in or outside of Maryland.

C. Evening School. A local school system may provide evening school programs for credit as an extension of the regular school day as determined by the needs of students.

D. Online Courses.

(1) Consistent with local school system policy and procedure, credit may be given for Department-approved online courses.

(2) If credit is to be applied toward minimum graduation requirements, the Department-approved online course shall be provided by the local school system.

E. Tutoring.

(1) Tutoring may be considered only after all the resources of the school system have been used fully and when it is determined that the best interests of the students are being served.

(2) If tutoring is recommended by the school and approved by the local school system for credit to be applied toward minimum graduation requirements, then the tutor, the program of study, and examination shall be provided by the local school system.

F. Work Study Programs, Job Entry Training Programs, or Experience Outside the School.

(1) Consistent with local school system policy and procedure, actual time spent in work study, job entry training, or other experience may be counted for credit when identified as an integrated part of a planned study program.

(2) For work or experience outside the school which is approved and supervised by the local school system, not more than nine elective credits toward meeting graduation requirements may be granted to a student.

G. College Courses. Consistent with the payment requirement of Education Article, §§ 18-14A-04 and 18-14A-05, Annotated Code of Maryland, local school system policies and procedures and with prior approval of the local superintendent of schools or the superintendent's designee, credit toward high school graduation may be given for courses offered by accredited colleges.

H. Independent Study/Internship. Consistent with local school system policy and procedure, credit toward high school graduation may be earned for independent study or internships in which a student successfully demonstrates preestablished curricular objectives.

I. Credit through Examination.

(1) Credit toward high school graduation may be earned by passing an examination that assesses student demonstration of local school system curricular objectives.

(2) A student who would be eligible to graduate but for attaining credit in English 12 may obtain that credit by taking a State-approved examination and achieving a passing score as defined by the Maryland State Department of Education.

(3) Notwithstanding any other provision of law, a county board shall award credit to a middle school student for any course for which a high school student would be awarded credit if the middle school student meets the same requirements as the high school student.

13A.03.02.05 Student Service

To graduate, students shall complete one of the following:

A. 75 hours of student service that includes preparation, action, and reflection components and that, at the discretion of the local school system, may begin during the middle grades; or

B. A locally designed program in student service that has been approved by the State Superintendent of Schools.

13A.03.02.06 Maryland High School Assessments

A. A student shall take the requisite Maryland High School Assessment during its next regular administration if the student received credit for taking, by the methods identified in Regulations .03 and .04 of this chapter, any of the following courses aligned with the Maryland High School Assessment:

(1) Algebra;

(2) Science;

(3) English; or

(4) Government.

B. To be awarded the Maryland High School Diploma, all students, including elementary and middle school students who take high school level courses, shall take the Maryland High School Assessment for algebra, science, English, and government after the student completes the required course or courses.

C. Each local school system shall provide appropriate assistance to strengthen areas of weaknesses for students who have not achieved satisfactory scores on the Maryland High School Assessments.

D. Bridge Plan for Academic Validation.

(1) Eligibility Criteria. A student is eligible to satisfy the graduation assessment requirement through the Bridge Plan for Academic Validation if the student has:

(a) Failed one or more Maryland High School Assessments;

(b) Received credit in the course or courses related to the assessment or assessments;

(c) Demonstrated overall satisfactory attendance in the most recent school year completed; and

(d) Demonstrated satisfactory progress toward achieving the high school diploma requirements specified in COMAR 13A.03.02.09B(1) and (2); and

(e) Participated successfully in appropriate assistance as defined in §C of this regulation after having failed one or more of the Maryland High School Assessments.

(2) A student may begin a Bridge Project after one failure of a Maryland High School Assessment.

(3) A student may use the score on the Bridge Project to meet the graduation requirement only after the student has taken the Maryland High School Assessment twice and failed twice.

(4) The Bridge Plan for Academic Validation shall consist of:

(a) Specific modules developed by the Department in each of the Maryland High School Assessments content areas;

(b) The assignment by the local school system of one or more modules for completion by each student meeting the eligibility criteria;

(c) Scoring by the local review panels of the completed modules according to State-developed, Statewide scoring protocols;

(d) A recommendation from the local review panels to the local superintendent as to the outcome of the scoring of each student's module or modules;

(e) Acceptance or rejection by the local superintendent of the local review panel's recommendations; and

(f) An opportunity for the student to appeal the local superintendent's decision to the State Superintendent of Schools.

E. Reporting Student Performance.

(1) A school system shall state on the student's performance record card only that the student has or has not met all assessment requirements and shall not describe the option used to meet the requirement.

(2) For the purpose of this section, except for students identified in §F of this regulation, "met all assessment requirements" means achieving a passing score on all Maryland High School Assessments, or meeting the requirements of the combined score option, or successfully completing a Bridge Project in those assessment areas that the student did not pass.

F. If a student is graduating in the school year 2017—2018, and is a first-time test taker of Algebra I and/or English 10 in that school year, and has passed the course(s) but failed the Maryland High School Assessment aligned with those course(s), that student is exempt from completing a Bridge Project and will have met the assessment requirement for Algebra I and/or English 10.

13A.03.02.07 Notice to Parents or Guardians and Students

Each principal shall inform all students and their parents or guardians annually at a minimum of the following:

A. Maryland's graduation requirements;

B. The student's progress on fulfilling the credit, Maryland High School Assessment, service, and applicable IEP requirements for graduation;

C. The results of each Maryland High School Assessment taken or Bridge Project completed by the student;

D. A plan for appropriate assistance, if applicable; and

E. The Department's schedule for the Maryland High School Assessment administration.

13A.03.02.08 Grading and Reporting

A. Each local school system shall develop a written policy on grading and reporting that complies with the student record requirements as set forth in COMAR 13.A.08.02.

B. On October 1 of each school year, each local school system shall file its policies on grading and reporting with State Superintendent of Schools.

13A.03.02.09 Diplomas and Certificates

A. The types of diplomas and certificates specified in §§B—D of this regulation shall be awarded to any student who meets the requirements for award.

B. Maryland High School Diploma. Except as provided in Regulation .12 of this chapter, and in §C of this regulation, to be awarded a Maryland high school diploma, a student shall:

(1) Complete the enrollment, credit, and service requirements as specified in this chapter;

(2) Complete local school system requirements; and

(3) Meet the graduation assessment requirements in the following ways:

(a) Achieve a passing score on the Maryland High School Assessments for Algebra I, science, government, and English 10;

(b) Achieve a combined score(s) as established by the Department on the Maryland High School Assessments;

(c) Achieve a passing score on an approved alternative assessment as established by the Department, such as Maryland High School Assessment for Algebra II, Advanced Placement examinations, SAT, ACT, or International Baccalaureate examinations; or

(d) Except for students described in Regulation .06F of this chapter, if a student is unable to meet the requirements in §B(3)(a)—(c) of this regulation, then the student shall satisfactorily complete the requirements of the Bridge Plan for Academic Validation as set forth in Regulation .06D of this chapter.

C. Exception To Passing Score Requirement.

(1) For students who are graduating in school years 2016—2017 and 2017—2018 and who are first-time test takers during those school years of the Maryland High School Assessment in Algebra I and/or English 10, the requirements set forth in §B(3)(a) of this regulation do not apply. For those students only, taking the Algebra I and/or English 10 Maryland High School Assessment for the first time will meet the graduation assessment requirement for Algebra I and English 10.

(2) For all students taking the HSA biology assessment in the 2016—2017 school year, taking the HSA biology assessment will meet the graduation assessment requirement for biology.

(3) For all students taking the Maryland Integrated Science Assessment in the 2017—2018 and 2018—2019 school years, taking the Maryland Integrated Science Assessment will meet the graduation assessment requirement for science.

D. Maryland High School Diploma by Examination.

(1) General Educational Development Testing Program. A Maryland High School Diploma by Examination may be awarded for satisfactory performance on approved general educational development tests if the student meets those requirements as defined in Labor and Employment Article, §11-808, Annotated Code of Maryland, and COMAR 09.37.01.04.

(2) Maryland Adult External High School Diploma Program. A Maryland High School Diploma by Examination may be awarded for demonstrating competencies in general life skills and individual skills on applied performance tests if the student meets those requirements as defined in COMAR 09.37.01.20.

E. Maryland High School Certificate of Program Completion.

(1) This certificate shall be awarded only to students with disabilities who cannot meet the requirements for a diploma but who meet the following standards:

(a) The student is enrolled in an education program for at least 4 years beyond grade 8 or its age equivalent, and is determined by an IEP team, with the agreement of the student and the parents of the student, to have developed appropriate skills for the individual to enter the world of work, act responsibly as a citizen, and enjoy a fulfilling life, with the world of work including but not limited to:

(i) Gainful employment;

(ii) Post-secondary education and training;

(iii) Supported employment; and

(iv) Other services that are integrated in the community; or

(b) The student has been enrolled in an education program for 4 years beyond grade 8 or its age equivalent and will have reached age 21 by the end of the student's current school year.

(2) The Maryland Summary of Performance that describes the student's skills shall accompany the Maryland High School Certificate of Program Completion.

(3) The final decision to award a student with disabilities a Maryland High School Certificate of Program Completion will not be made until after the beginning of the student's last year in high school.

(4) A student with significant cognitive disability may not meet high school graduation requirements, in accordance with §B of this regulation, if a student:

(a) Participates in an Alternative Assessment based on Alternative Academic Achievement Standards (AA-AAAS); and

(b) Continues to receive instruction based on Alternative Academic Achievement Standards through high school.

(5) If a student participates in a graduation ceremony prior to the completion of the student's education program, at the ceremony the school system shall issue to the student a Certificate of Achievement or other similarly titled certificate in place of a diploma.

F. Local Endorsements. Consistent with procedures established by the Department, each local school system may add endorsements to the diploma as incentives for students to meet locally established requirements and outcomes in instruction beyond the minimums specified by the State.

G. At least yearly, through the end of the implementation, the State Board will review and assess updated information on the graduation assessment requirements and scores.

13A.03.02.09-1 Appeal of Denial of Diploma for Failure to Meet Maryland High School Assessment Requirement.

A. A school system shall notify each senior and the senior's parents or guardians on or before the end of February of the senior year if a student may not graduate. The notice shall explain:

(1) The reasons the student may not graduate;

(2) The options available to meet all graduation requirements;

(3) That a waiver of the Maryland High School Assessment graduation requirement may be one of the options, if the student meets the criteria set forth in §§C and E of this regulation;

(4) The waiver process and timeline; and

(5) That parents or guardians may submit information in writing to the principal concerning eligibility of their child for the waiver.

B. On or before the end of February, the principal shall report to the local superintendent the name and student identification number of each student identified in the February notice.

C. On or before April 1, the school system shall identify each student who may fail to graduate because:

(1) The student has taken none of the required Maryland High School Assessments; or

(2) The student has taken some or all of the Maryland High School Assessments and failed some or all of them.

D. On or before April 1, the principal shall report to the local superintendent the name and student identification number of each student identified as meeting the criteria in §C of this regulation.

E. By April 1, for each senior identified in §C of this regulation, the school principal shall consider whether to recommend to the local superintendent a waiver of the Maryland High School Assessment graduation requirements that the student has not fulfilled to date if:

(1) The student meets the following criteria:

(a) The student has or will meet all other graduation requirements;

(b) The student has or will take all required Maryland High School Assessments before the graduation date; and

(c) If the student had an opportunity to participate in one or more interventions, or remediation opportunities, including the Bridge Plan, the student participated in them; and

(2) The student is prevented from meeting the Maryland High School Assessment graduation requirements because:

(a) Of a decision made by the local school system concerning the provision of appropriate assistance as required by Regulation .06C of this chapter;

(b) The student experienced a special, extraordinary, or extenuating circumstance or combination of circumstances preceding the administration of the most recent Maryland High School Assessment, such as a recent death in the immediate family, a serious or prolonged illness or pregnancy with medical complications, an accident causing serious injury, or a destructive house fire;

(c) The student moved to the United States in the junior or senior year and the student is literate in the student's native language but not literate in English; or

(d) The student moved to Maryland in the senior year, has passed all the Maryland High School Assessment courses, but has failed the related Maryland High School Assessment, and has had no adequate opportunity for intervention.

F. On or about April 1, the principal shall notify the student and the student's parents or guardians that the student is being considered for a waiver of the Maryland High School Assessment graduation requirements that the student has not fulfilled to date. The notice shall explain the waiver decision-making process.

G. On or before May 1, the principal of the high school shall make an Maryland High School Assessmentwaiver recommendation to the local superintendent for each student who meets the criteria set forth in §E of this regulation with the participation of:

(1) The student's IEP team, if the student is a student with disabilities;

(2) The English Language Learner staff, if the student is an English Language Learner;

(3) Other school personnel; or

(4) One or more of them.

H. The principal shall explain the reason for each recommendation under §G of this regulation, whether the recommendation is to grant or deny the waiver.

I. The local superintendent shall review each recommendation and shall:

(1) Grant or deny the waiver;

(2) Promptly notify the student and the student's parent or guardian of the decision; and

(3) If the waiver is granted, include in the notification the local procedures and requirements that must be met for a diploma to be awarded.

J. The superintendent's decision in this matter is not appealable to the local board of education, but may be appealed to the State Superintendent of Schools.

K. A student or the student's parents or guardians may appeal the waiver denial to the State Superintendent by sending a written appeal letter explaining why the waiver denial was an arbitrary or unreasonable decision. The State Superintendent may affirm or reverse the local superintendent's decision and shall inform the student, the student's parents or guardians, the local superintendent, and the State Board in writing of the decision.

L. The decision of the State Superintendent may be appealed to the circuit court pursuant to Maryland Rules 7-201, et seq. On appeal:

(1) If the State Superintendent has reversed the local superintendent's decision to deny the Maryland High School Assessment waiver and the local school system appeals that decision, the State Superintendent shall defend the decision on appeal; or

(2) If the State Superintendent has affirmed the local superintendent's decision and the aggrieved student appeals, the local superintendent shall defend the State Superintendent's decision on appeal.

M. By August 1, the local superintendent shall send a report to the State Superintendent or the State Superintendent's designee on waiver decisions rendered under this regulation.

N. Nothing in this regulation is intended to establish any right to participate in the graduation ceremony while an appeal is pending. Participation in the graduation ceremony remains at the discretion of the local superintendent.

13A.03.02.10 Alternatives to 4-year Enrollment Requirement

A. In recognition of the fact that 4-year enrollment in a public high school may not serve the best interests of some students, the alternatives in §§B and C of this regulation shall be made available.

B. Early College Admission Program. A student may receive a Maryland High School Diploma through acceptance in the early college admission program, if:

(1) The student is accepted for early admission to an accredited college before high school graduation;

(2) All Maryland High School Assessments and student service requirements have been met;

(3) A written request by the student and parent or guardian is made to and approved by the local superintendent of schools certifying the early admission acceptance;

(4) The student's program for the first year of college is approved by the local superintendent of schools if this program is included toward the issuance of a diploma; and

(5) At the conclusion of the program or after 1 year, a written request for a Maryland High School Diploma is submitted to the superintendent together with a transcript or letter from the college to the high school principal indicating that the student has successfully completed a year of college work.

C. Early Admission to Approved Vocational, Technical, or Other Postsecondary School Program. A student may receive a Maryland High School Diploma through acceptance in an early admission program of an approved vocational, technical, or postsecondary school program if:

(1) The student is accepted for early admission by an approved vocational, technical, or postsecondary school program before high school graduation;

(2) All Maryland High School Assessments and student service requirements have been met;

(3) A written request by the student and parent or guardian is made to and approved by the local superintendent of schools certifying the early admission acceptance;

(4) The student's program for the first year of the postsecondary program is approved by the local superintendent of schools if this program is included toward the issuance of a diploma; and

(5) At the conclusion of a full year of study, a written request for a Maryland High School Diploma is submitted to the superintendent together with a transcript or letter from the postsecondary school to the high school principal indicating that the student has successfully completed a year of postsecondary school work.

13A.03.02.11 Alternatives for Structuring Programs

A. Each local school system shall be permitted to develop alternative ways for individual or groups of students to fulfill graduation requirements.

B. An alternative plan may include a waiver of the fourth year enrollment requirement if all credit, assessments, and student service requirements are met and if the local superintendent of schools or designee determines that the waiver is in the best interest of the student.

C. Procedures for implementing these alternative programs leading to high school diplomas are as follows:

(1) Development and approval of a curricular plan which assures that the content of the specified credits is included and the standards for graduation are met pursuant to the requirements of this chapter with the plan containing a program description, performance requirements, and evaluation procedures; and

(2) The local superintendent of schools is responsible for approving any plan and shall notify the State Superintendent of Schools once approval has been given.

13A.03.02.12 General Provisions

A. Length of School Year. Maryland public high schools shall be open for at least 180 school days and a minimum of 1,170 school hours during a 10-month period in each school year.

B. Graduation Requirements for Transfer Students.

(1) Attendance Requirements.

(a) To receive a diploma, a student shall be in attendance at a Maryland public high school one full semester immediately preceding graduation in addition to meeting the other diploma requirements.

(b) In cases where this requirement creates an undue hardship for a student transferring to or from a Maryland nonpublic school or from an out-of-State school and wishing to receive a Maryland high school diploma, the local superintendent of schools may waive the one full semester attendance requirement.

(c) Exception shall be made for a student with disabilities in a State-approved nonpublic program.

(d) Students transferring from one Maryland public high school to another during the second semester of their senior year and meeting all requirements for graduation shall be given the option of graduating from either high school by agreement of the local superintendent of schools or the respective local superintendents when more than one local school system is involved.

(2) Maryland High School Assessment Exemption Requirements.

(a) A student who transfers from a nonpublic school or a school out of State is exempt from one or more of the Maryland High School Assessments if, consistent with local school system policy and procedure, the local superintendent determines that the course taken is aligned with the relevant Maryland High School Assessment and awards the student credit for taking any of the courses aligned with the Maryland High School Assessments, that is, algebra, science, English, or government, or all of these, in accordance with the principles set forth in §B(2)(c) of this regulation.

(b) A student who transfers from a nonpublic school or a school out of State and has not received credit for algebra but has demonstrated mastery of the Maryland College and Career Ready Standards for algebra either through an evaluation or successful completion of subsequent mathematics courses for which algebra is a prerequisite is exempt from the Maryland High School Assessment for algebra.

(c) To award credit for taking any of the courses aligned with the Maryland High School Assessments, that is, algebra, science, English, or government, a principal shall determine through the following considerations whether the transfer student demonstrates subject matter knowledge aligned with the content standards for the subject:

(i) Administration of standardized tests and examinations;

(ii) Observation of the student in the classroom;

(iii) Use of interviews that are focused around the student's demonstration of course content knowledge and performance levels; and

(iv) Inspection of transcripts, report cards, and other documentation.

(d) A student who transfers from a nonpublic school or from a school out of State into a local school system after the first semester of his or her senior year is exempt from the Maryland High School Assessment Requirements.

(e) The exemption provided in §B(2)(d) of this regulation does not apply to a student with disabilities in a State-approved nonpublic program.

(3) Local Graduation Requirements. A student who enters a local school system in his or her senior year shall be granted a waiver from locally established graduation requirements unless the student chooses to fulfill the requirements.

(4) Unavailability of Official Transcript. If the transcript of record is not available, a local superintendent of schools or designee shall determine the appropriate placement of the student within the high school program by an evaluation of the student that shall include one or more of the following:

(a) Administration of standardized tests and examination;

(b) Observation of the student in a classroom setting;

(c) Use of interviews that are focused around the student's demonstration of course content knowledge and performance levels;

(d) Inspection of report cards and other documentation.