

Working Group 3

College and Career Readiness Pathways

Chester Finn (Moderator)
Steve Waugh
Scott Dorsey
Anne Kaiser
Elizabeth Leight
Karen Salmon

Policy Area:

World class instructional system that includes a career and college ready standard set to global standards that most students are expected to meet by the end of grade 10 and all students are expected to meet by the end of high school

For all high school students who meet the CCR standard, access to (a) globally-recognized programs preparing students for admission to selective colleges, (b) college-level programs preparing students to receive an Associate's degree that will qualify them for transfer to the junior year of 4-year selective and non-selective colleges and (c) high school and community college career and technical education pathways [details under review by CTE subgroup.]

Element Detail 3a

Element: Develop a **fully aligned instructional system**, including curriculum frameworks, course syllabi and assessments with clear examples of standard-setting work and formative assessments to ensure that students stay on track

Design Assumptions:

An aligned instructional system includes:

1. **Standards, or curriculum frameworks with standards embedded**, in core subjects (English language arts, mathematics, sciences, social studies/history) that map out the core learning goals of each subject at each grade level, laid out in a logical development sequence reflecting the content standards that students have been exposed to previously and the latest developmental science on how students absorb new skills and ways of thinking
2. **Curriculum resources** for each subject at each grade level, built on the curriculum framework and standards. These should include, for each subject matter cluster:
 - a. State-developed course syllabi for each course at each grade level, with sample lessons for teachers to use as models.
 - b. State-approved units of curriculum for all subjects and grade levels, aligned with the curriculum frameworks (assembled from courses and units developed by teachers and others in and beyond Maryland, reviewed and approved for quality by MSDE or other State-approved authority)

Schools identified as low-performing by their scores on state-wide tests would be targeted for visits by inspection teams assembled and working under the supervision of MSDE; those inspection teams, depending on what they find, could recommend many courses of action for addressing the problems revealed by the inspection. Among those options is requiring the schools to use the State courses as designed until such time as its students are on track to meet the CCR standards by the end of 10th grade. In such cases, the inspection team would be obligated to recommend appropriate forms of training and technical assistance to the designated schools, including the option of pairing these schools with other schools serving similar student bodies with more success. Other schools (i.e.

those not low-performing) would be encouraged, but not obligated, to use the State approved units (3b above).

3. **An assessment system** designed to assess the qualities specified in the curriculum frameworks and standards and based on evidence of meeting the frameworks and standards. Assessments must include:
 - a. Summative assessments that meet federal assessment requirements
 - b. Summative assessments that provide means by which to judge whether students have met the State career-and-college-ready (CCR) standard
 - c. Evidence of meeting high school graduation standards in all subjects not covered by the CCR standard
 - d. Formative assessments available for all subjects at all grade levels for teachers to use to determine whether students are on track for success against the CCR standard and the high school graduation standards.

Implementation Considerations:

1. The work should start with an inventory of the current instructional system and then build on curriculum review processes already in place at MSDE to develop curriculum frameworks and lesson “seeds”, which are outlines of lessons for teachers to expand, but considerable work will be needed to accomplish this goal
2. **Curricula approved by MSDE must be designed as courses, which, when taken in sequence, will enable students to meet the CCR standard by the end of grade 10.** Designing this system would be a multi-year effort that will involve the development and piloting of each component by teachers and incorporating their feedback
3. The system would require an online platform to house this set of tools
4. The strongest teachers in each content area and grade level should play key roles in this work

Element Detail 3b

Element: Establish and implement a **CCR standard** set to global standards that most students should meet by the end of grade 10 and all students should meet by the time they leave high school. This standard will certify that students have the literacy and numeracy needed to succeed in first-year credit-bearing courses in open enrollment postsecondary institutions in the State. Review CCR standard periodically to ensure that it is internationally competitive.

Design Assumptions:

1. Setting the standard:
 - a. At the outset, the CCR standard will be set where PARCC set it: a score of 4 on PARCC Algebra 1 and English 10 exams and a qualifying score on MISA
 - b. At such time as PARCC is no longer a viable option (and because PARCC's standard was not empirically set for success in Maryland), the State should base its CCR standard on an empirical study of the English and mathematics content that has to be mastered to give a student a high probability of success in the first year of credit-bearing courses at open-enrollment college programs in Maryland. The results of that empirical study will establish the CCR benchmark upon which the new State tests are designed.¹
 - c. The State should also conduct the research needed to establish whether the CCR literacy and numeracy standards set by the empirical study are comparable to the global standard in top performing countries for the same age cohort as in Maryland and whether they also align with the workforce needs of Maryland. This entails having a sample of Maryland students take the assessments of top-performing jurisdictions as well as Maryland assessments and comparing the results
2. Assessing student achievement against the standard:
 - a. The State will use PARCC and MISA until the State's new test, the Maryland Comprehensive Assessment Program, is ready in 2019
3. Maryland should participate in the OECD PISA survey so that it can compare its education system and student achievement to the best in the world

Implementation Considerations:

1. *Either* conduct an empirical study to determine the CCR standard in Maryland community colleges or consider using existing research. (Note: this needs to be done quickly as Maryland is committed to having the new tests ready in 2019) *or* use the data/analysis in NCEE's completed study (<http://ncee.org/college-and-work-ready/>)
2. Incorporate the findings from the empirical study into the design process for the new Maryland Comprehensive Assessment Program to ensure that students have the opportunity to meet the desired CCR standard by grade 10.
3. If teacher-scored exams are adopted, scoring of exams could be a strategy for professional development for teachers
4. Engage with open enrollment postsecondary institutions to discuss phasing

out of placement testing and the acceptance of MCAP proficiency as readiness for credit-bearing coursework in English and math

5. Engage with community colleges to discuss how high school students who have met the CCR standard can access college courses in grades 11 and 12
6. Develop a communication strategy to explain the new CCR standard, the new State testing system, and the implications for college entry [Other implementation considerations?]

Element Detail 3c

Element: Commission's Preliminary Report calls for the reorganization of schools so that teachers trained to diagnose and address students' learning needs can work collaboratively to monitor students and intervene when a student is struggling. Teachers would meet regularly to monitor student progress, decide on an intervention – academic or referral to services – and assign a single teacher to take responsibility for following the student until he or she is back on track. (See Working Group 2 elements)

As it will take several years to put this system in place, it will be necessary to develop a transitional program to address the needs of struggling learners. This will be a **tutoring program** for all students identified by their teachers as needing tutoring in reading. MSDE should develop guidelines for districts to use to assure that the districts use funds appropriated for this purpose for the highest priority students in the most efficient way possible. Over time, the roles of tutoring students will be assigned to regular teachers as their time is freed up to do this work and they are trained in diagnosing and addressing learning difficulties. [Note: Suggest to WG #2 that they include teacher PD and sufficient time in the school day for this purpose]

Just as the Commission's Interim Report proposed several measures to greatly reduce the proportion of students falling behind, it also proposed measures for enriching the curriculum for students who need and could benefit from challenges that go beyond the standard curriculum. MSDE will need additional funding to develop options for students who need opportunities for academic acceleration and enrichment.

Design Assumptions for Transitional Program:

1. All K-3rd grade students identified by teachers as needing literacy or numeracy support should be provided with tutoring in small groups of students
2. The aim of the tutoring is to get students to a proficient standard at each grade level
3. Students will transition out of tutoring support as soon as their teacher determines they are ready
4. Students in upper elementary school who continue to need tutoring should continue to get these services
5. Tutors should be trained reading and math specialists
6. As a new system is implemented, school leaders and teachers should be trained in new approaches to supporting students. This will involve three strands of training: training for school leaders on the system of supports; training for veteran teachers in schools; and training for new teachers in teacher prep institutions on the pedagogy as well as the new system.
7. The special education system would remain in place for students with disabilities, but as more students are supported early, fewer students will be referred for special education services

Implementation Considerations:

1. HB 1415 (Chapter 361) authorizes funding for evidence-based early literacy intervention in grades K-8 with a priority for K-3rd graders in a school with a high concentration of students living in poverty. The bill mandates \$2.5 million in each of fiscal 2019 through 2022 for the program.
2. HB 1415 funding expires after fiscal 2022, with a requirement to evaluate the effectiveness of the program at that time. Because tutors are considered a transitional program, needed until teachers have time and capacity to provide this support themselves, it is not anticipated that funding will be renewed.

Other Options:

1. Current legislation (HB 1415) funds reading tutors; could expand to include math tutors as well
2. Many students should be able to transition from tutoring by 3rd grade
3. As expertise in diagnosing and supporting learning difficulties is added to teacher preparation and schools are organized in ways to allow teachers time to provide this support directly, this activity can be phased out.

Element: Develop an extended curriculum for students in middle school and early high school who are not likely to meet this CCR standard by the end of 10th grade that gives them extra time and more supports to help them meet it as soon thereafter as possible

Design Assumptions:

1. Starting in middle school, students likely not to meet the CCR standard by the end of 10th grade should be offered an option to work towards the CCR standard with more time and support, using differentiated instructional techniques customized for each student.
2. This would mean that there would be alternative, “extended” classes that work towards the *same standards*, but spend *more time* (and with more support) on the content in order to assure that students will succeed
3. Teachers would recommend students to take this option, informed by standardized assessments, formative assessments and based on their experience in the elementary curriculum. Parents can appeal this recommendation and request students not be placed in an “extended” curriculum, but students will be transferred back in if they are not succeeding in the standard curriculum
4. If any student moves more quickly than expected, he/she should be transferred into the standard stream of classes
5. Students can be placed in the differentiated option for specific subjects

Implementation Considerations:

1. There would be a development and start-up period to develop new curriculum materials and course syllabi.

Other Options:

1. Consider offering grants to districts to develop alternative curricula for middle school and early high school students, with additional strategies to teach the same materials

Element Detail 3e

Element: Require all local school systems to provide all high school students with access to a set of **post-CCR programs** that includes: 1) at least one of the following: an AP Diploma program (consisting of Advanced Placement courses specified by the College Board), the International Baccalaureate Diploma program or the Cambridge Examinations International General Certificate of Secondary Education in which students can earn an Associate’s Degree (at no cost to parents or student) upon

graduation from high school with the possibility of transfer to the junior year of a four-year college, and 3) access to CTE programs offered by Maryland high schools, community colleges, four-year institutions and training schools that allow students to explore various career options and acquire technical credentials with significant value in the labor market [details to be determined]. All such programs sited in Maryland high schools would include the opportunity to take the full range of courses now typically offered by Maryland high schools to the extent permitted by the student's calendar.

Design Assumptions:

1. Local school systems will ensure that all high schools that offer at least one of the selective college preparatory programs, will be certified by the organization that provides and scores their examinations, and will train staff to deliver the curriculum
2. Local school systems will partner with Maryland colleges and out-of-state institutions approved by the Maryland Higher Education Commission to offer programs leading towards Associate's degrees. Students can take college credit courses at their high school or at the college, depending on the specific agreements between districts and postsecondary institutions. Some courses can count for high school and college credit, under dual enrollment agreements.
3. Students can take CTE coursework before meeting the CCR standard but continuation into more advanced CTE courses requires success in meeting the academic standard [More on CTE path TBD]

Implementation Considerations:

1. MD will need to set a date by which all local school systems must offer students access to the upper division programs specified above
2. The community and 4-year colleges must work out partnership agreements with school districts to enable these districts to offer college credit courses and associate's degree programs at no cost to parents and students. The State will dictate the funding of these arrangements to avoid having the State pay both the community college system and the high schools for these offerings.
3. The associate's degree program could be offered on the community college campus and/or high school campus but preference should be given to providing it at the high school because the students would not need to travel to the community college, they can participate in high school extracurricular programs, and need not mix with older students if that is seen as a problem by their parents
4. MD will need to make "start-up" funds available for IB, AP and Cambridge programs in situations where these are not already available

Element Detail 3f.

Revise State high school graduation requirements to allow students who meet the CCR standard and then move into one of the three pathways described in Element 3e to graduate high school, provided that, in addition to meeting the CCR standard, the student satisfies the course requirements set by the State Board for graduation. This includes the current expectation that students will complete four years of English and math, which is the admission standard for the University of Maryland System. These course requirements for graduation, including history, science and social studies, should be set in such a way as to make it possible for the student to satisfy the requirement for the upper division programs described in Element 3e and the graduation requirements by the end of the student's senior year. Students who take one of the upper division options offered by the high schools will be able to take as many of the courses now offered by their high school as their schedule will allow.

Design Assumptions:

1. Any additional high school graduation requirements that have not been met by the time a student is determined CCR will need to be met by the pathway on which the student progresses.
2. The high school remains responsible for the student until a high school diploma is awarded; this includes the panoply of services that a student may need, including advising and potentially strategic advice.
3. College courses meeting high school graduation requirements and approved by MSDE must count for high school credit.

Element Detail 3g

Element: Develop 11th grade programs for students who do not meet CCR standard by the end of 10th grade. These programs will be required for two groups of students. The first group is the students who, in the first few years of implementation, did not get the help that the new design is intended to provide and therefore arrive at the end of 10th grade far behind the CCR standard. This will, at first, be a very large group, but its size will diminish rapidly as the Commission reforms are implemented. Many, perhaps most, in the early years of implementation of the reforms, will require their entire junior and senior years to get to the CCR standard and some will not get to the standard even then. The second group of students are those who, when the reforms are fully

implemented, were thought by their middle school teachers, to be very likely to make it to the CCR standard by the end of the 10th grade, but did not do so. Unlike many in the first group, this group will likely be in need of only modest help to reach the CCR standard.

The first set of students will require individual assessments of their achievement relative to the CCR literacy standards in English and mathematics and the development of a curriculum for them which is highly applied in nature and very engaging. It could be occupationally focused, though it need not be, as long as it focuses on content that the student finds engaging. These programs should not be remedial in design, but they must be designed to contain the content that the student needs to reach the CCR standard by the end of the student's senior year. The student's program must also be designed to enable that student to satisfy all of the State Board of Education's graduation requirements by the end of the senior year, as well

The second set of students will require short programs designed to provide only those skills needed to address those topics on which the student did not meet the CCR standard. In many cases, the necessary instruction can be provided in the summer following the 10th grade and the student can go on to participate in one of the specified upper division pathways. In most other cases, the school will need to provide a program for the first semester of the student's 11th grade program that enables the student to retake and pass the sections of the CCR test on which the student was not successful on the previous attempt, while taking other high school courses needed to graduate.

1. Districts must make provision for students who have not met the CCR standard by 12th grade, permitting them to stay in school until age 21 as they are working toward that standard.

Implementation Considerations:

To develop cost estimates, we will need to :

1. Estimate the number of students who will not be able to meet the CCR standard when it is first used to determine eligibility for the high school upper division options, as well as how far they are from meeting the standard
2. Estimate the rate at which the reforms will reduce the number who do not meet the CCR standards and the average gap between their achievement and the standard with each passing years

3. Estimate the proportion of students who, after the reforms are implemented, will not meet the CCR standard and how long it will take for them to do so, at what cost
4. Estimate what it will cost to develop engaging curricula and appropriate materials for students who are behind the CCR standard at the end of grade 10, and to train teachers to use these materials and curricula well
5. Estimate the number of students who, in the early stages of implementation and then, in the steady state, who will not have reached the CCR standard by the end of grade 12, and the cost of getting those who choose to stay in school to the standard by the age of 21