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MEMORANDUM

To: Members of the Board of Elementary and Secondary Education
Members of the Board of Higher Education

From: Mitchell D. Chester, Ed.D., Commissioner of Elementary and Secondary Education

Date: January 13, 2017

Subject: Next-Generation MCAS: Plans for High School Assessments

At this month's joint meeting of the Board of Elementary and Secondary Education and Board of Higher Education, I will provide an up-to-date briefing on our work to develop a next-generation MCAS assessment, and in particular the decisions and work ahead of us with regard to the high school testing program.

Background

The MCAS tests have their origin in the landmark 1993 Education Reform Act (St. 1993, c.71). As part of the "grand bargain," local schools and districts were given a substantial increase in funding and additional autonomy and flexibility, in return for being held accountable for results. For the first time, the Commonwealth established curriculum standards for our public schools – the knowledge and skills that we expected each student to have in each subject and grade level – and administered state-wide tests to gauge student and school performance against those standards. These tests have four fundamental purposes:

- For parents, they can provide important feedback on whether students are progressing at a satisfactory pace and are prepared to succeed at the next grade level.
- For teachers and school administrators, they can provide feedback on areas of the curriculum where students as a whole are doing well, and areas where performance might be lagging and new instructional approaches might be needed.
- For the state, the tests support our mandated responsibility under the Constitution to provide additional support and intervention to underperforming schools and districts.
- For high school students, MCAS ensures a base level of academic attainment as a requirement for graduation.

Testing became a federal mandate in 2001 with the "No Child Left Behind" amendments to the Elementary and Secondary Education Act (ESEA). Last year's ESEA reauthorization, dubbed the "Every Student Succeeds Act," maintained the requirement for K-12 testing but provides some additional state flexibility for designing assessments. Today, MCAS is given in grades 3 through

8 and in grade 10, and it covers English language arts, mathematics, and science and technology/engineering. The tenth grade tests serve as the “competency determination” for most high school students. By law, students must satisfy the competency determination in order to receive a Massachusetts public high school diploma.

The MCAS tests have proven to be a useful and durable component of our education reform efforts, and have largely represented a high bar for achievement. At the high school level, however, MCAS was designed to assess knowledge and skills through the tenth grade level. As increasing proportions of students achieve “Proficient” or “Advanced” performance on the high school MCAS (80 percent in mathematics, 90 percent in English/language arts), it has become apparent that we have reached the point of diminishing returns. Despite the improving scores on the MCAS, the number of high school graduates who have passed the tenth grade MCAS tests but are unprepared for credit-bearing college courses remains above one-third of all students who matriculate in our public campuses, and remains two-thirds of students who matriculate in our community colleges. The students’ need to take non-credit bearing remedial classes greatly diminishes their probability of success. We need to raise the bar even higher if we want every student to receive accurate signals about their preparation for success after graduation, whether it be in college, in the workforce, or in the military.

To address these needs, the Department of Elementary and Secondary Education (DESE) began work on updating the MCAS tests. State funding for this effort dried up in the Great Recession, but at the same time the federal government made stimulus funds available to states that agreed to work with one another in developing new English language arts and mathematics tests. We joined a group of other states in the PARCC consortium and devoted several years to developing and pilot testing state-of-the-art tests that could be administered either on a computer or on paper. DESE staff, Massachusetts K-12 educators, and Massachusetts higher education faculty were very much involved in this effort; both Commissioner Freeland and I played leadership roles in the consortium. One of the key objectives was to develop a test that could be used in high school to certify readiness for credit-bearing college courses, potentially eliminating the need for the separate administration of Accuplacer tests.

We then spent the better part of a year analyzing the strengths and weaknesses of the PARCC test. We did extensive outreach to our K-12 educators, other stakeholders, and the public at large, soliciting their thoughts on the future of our state testing program. We concluded that PARCC provided a useful model of a next-generation test, with more opportunity for critical thinking, application of knowledge, research, and connections between reading and writing. But there was also a strong sentiment that the Commonwealth needed to remain in control of its state assessments. In November 2015, the Board of Elementary and Secondary Education authorized and directed DESE to begin developing a next-generation MCAS test, using the lessons learned in the PARCC development as a starting point and ensuring that all decisions on test design and test administration policies would be ours to make.

Current Activities

Following the BESE's November 2015 vote, we conducted a major competitive procurement to select a contractor to assist us with the development, administration, and scoring of the next-

generation test. The selected contractor was Measured Progress, Inc., of Dover, New Hampshire, which has been the contractor for the legacy MCAS tests for much of their existence. Pearson Education is a subcontractor to Measured Progress and will provide the computer testing platform. Pearson is the prime testing contractor on the PARCC project. We have also entered into an agreement with the PARCC consortium that allows us to incorporate some of PARCC's high-quality test items into the MCAS tests.

Work is now proceeding on the development of the next-generation English language arts and mathematics tests for grades 3 through 8, which will be given for the first time this spring.

Our Office of Digital Learning, in cooperation with MassIT, has been providing technical assistance and funding to assist K-12 schools in improving their technology infrastructure, an area in which Massachusetts lags many other states. Our immediate concern is to ensure that all schools are equipped to administer a computer-based MCAS test within the next several years. But the greater goal is to incorporate technology into day-to-day classroom instruction, to take advantage of richer curriculum resources, and to ensure that all of our high school graduates are technologically literate and prepared to use computers in college and in their careers.

All of the MCAS tests are based on the Massachusetts curriculum standards, which are periodically reviewed and updated by teams of educators and subject matter experts. We completed a revision of the science and technology standards last year. The English language arts and mathematics standards are currently under review. A draft of the proposed revisions has been published for public comment, with final adoption by the BESE expected this spring. We are just now starting the process to review and update our history and social sciences standards, with a direction from the BESE to ensure that they include a robust civics dimension.

High School Testing Issues

The planning for a high school testing program is in many ways more complex than for the elementary and middle school grades. Because of the competency determination, the high school tests are "high stakes" for students; we need to ensure that they have reasonable opportunities to retake the test if they do not pass it the first time. High school tests need to be aligned not only with the K-12 curriculum standards but with the expectations of higher education faculty and employers. And we need to be cognizant of the already existing time requirements of college admissions tests and other school activities unique to the high school years.

We formed a workgroup last spring to study these issues, under the leadership of then Senior Associate Commissioner Brooke Clenchy (who has since been appointed superintendent of the Nashoba Regional School District). The workgroup produced some valuable analyses but struggled to reach a consensus on the various trade-offs involved, leading me to believe that we were not yet prepared to make final decisions and that more consultation with the field was needed.

In October 2016, the BESE voted to extend the legacy tenth grade MCAS tests through the class of 2020. The class of 2021 will be the first to take the next-generation tenth grade tests, in the spring of 2019. This class will be taking the next-generation tests in the spring 2017 as eighth graders, which will help to prepare them for their competency determination two years hence. This delay also gives us additional time to thoughtfully identify and evaluate the options for a

high-quality high school testing program.

Based on the discussions to date, I presented six tentative policy recommendations regarding high school testing to the Board of Elementary and Secondary Education at its December 2016 meeting. We will spend the next several months discussing these recommendations with our key stakeholder groups, with the expectation that we will finalize and adopt them as policies sometime in the spring. I welcome feedback from the members of both Boards.

The recommendations are as follows:

- 1) *Provide clear and accurate signals to students about whether they are on track for the expectations of colleges, employers, and civic engagement.*

There is a need for us to do a better job at assessing students' readiness for success after high school, whether in higher education, the workforce, the military or other endeavors. Many students who score Proficient or Advanced on the current tenth grade MCAS tests subsequently learn that they need remediation in college. To provide students with the opportunity to bolster their readiness for college and career expectations, we need to provide students with accurate and clear indications of whether they are on track as they move through the middle and high school grades.

- 2) *Keep the high school competency determination for English language arts and mathematics at grade 10 for the near future.*

The competency determination (CD), which students must earn in order to receive a high school diploma, is set by law at the tenth grade level. This requirement, first enacted as part of the Education Reform Act of 1993, has helped ensure that our high school graduates meet minimum levels of literacy and numeracy. But as we have discussed at length over the past several years, there is a growing recognition that those tenth grade standards are insufficient to ensure that our graduates are well prepared for success after high school.

Moving the CD to the 11th or 12th grade, however, would be extremely challenging and, in my opinion, too disruptive to consider at this time. Schools and students are already dealing with the transition to the next-generation tests, computer-based testing, and, as discussed below, the possible addition of a history and social science test. The need to amend the law would also create uncertainty as to timing.

My recommendation is that we move ahead with the development of high quality, next-generation MCAS tests in English language arts and mathematics for the tenth grade CD, and (as discussed below) at the same time explore and experiment with 11th and 12th grade options that are better aligned with college and career readiness standards. Only after we have had considerable experience with those options, and have clearly demonstrated their validity, should we begin a discussion of whether to phase out the tenth grade tests and move the CD to a later grade.

- 3) *Add history and social science to the competency determination.*

There appears to be considerable interest in our plans to update our history and social science

curriculum standards, including the addition of a robust civics education component, and to add this subject to the CD. The Board of Elementary and Secondary Education has statutory authority to include history and social science in the CD. In 2011, the Board amended its regulations on the CD to include this provision (603 CMR 30.03(4)): “Starting in the third consecutive year that the History and Social Science high school assessment is administered, in addition to meeting the requirements [for English language arts, mathematics, and science], students shall meet or exceed the passing standard on the History and Social Science high school assessment.”

The review of the curriculum standards for history and social science is just now starting, and in FY18 we expect to begin initial planning on the design of a next-generation MCAS assessment in this subject area. As part of this planning, we will take the opportunity to research and consider new and innovative assessment approaches. Assuming funding is obtained to develop and administer a new assessment, we would administer it for at least two years before adding it to the CD requirement. The class of 2023 is likely the earliest for whom this would become a graduation requirement.

4) *Phase out the high school chemistry and technology/engineering tests.*

The overwhelming majority of high school students satisfy the science and technology/engineering (STE) component of the CD through the biology and introductory physics tests; last year, only five percent of students took the chemistry or technology/engineering tests. The cost and effort required to maintain these two low-incidence tests is not an efficient use of our limited resources.

5) *Add an introductory physics re-testing opportunity in February.*

We currently offer a biology test in February, in addition to the regular end-of-year administration, to accommodate both those schools with block scheduling and those students who did not earn a passing score the first time and want an additional testing opportunity. With growing interest in physics as the foundational course in the high school science sequence, we recommend adding an introductory physics test to the February schedule.

6) *Convene a stakeholder workgroup to identify and recommend options for a grade 11/grade 12 assessment program to gauge students' readiness for success after high school.*

As noted above, there is a need for us to do a better job at assessing students' readiness for success after high school, whether in higher education, the workforce, the military or other endeavors. But the multiple paths that graduates pursue make it particularly challenging to assess preparation and readiness. The student applying to UMass-Lowell to study bioengineering and the student graduating from a vocational culinary arts program and looking for a job in the hospitality industry have very different needs and expectations. We are also aware of the many other scheduled activities in high school, and stakeholders have made clear that we need to minimize additional time devoted to standardized testing.

For these reasons, in looking at options for grade 11 and grade 12, I recommend that we take the time and opportunity to think creatively and not assume the answer is another one-size-fits-all standardized test. We should be thinking about multiple assessment pathways, that might make use of existing college entrance and advanced placement tests, performance-based assessments and portfolio work, participation in enrichment and out-of-school programs, and other emerging non-traditional forms of assessment. The U.S. Department of Education is providing funding to a number of states to develop innovative assessment models, and we need to investigate and learn from those efforts. By keeping the CD at grade 10, as recommended earlier, we gain additional time to be thoughtful about the college and career readiness standard.

Engagement with Higher Education

Since the inception of MCAS, faculty from our institutions of higher education have been key partners in our test development efforts, bringing valuable subject matter and pedagogical expertise to the table. We are grateful for the time and effort that they have provided over the years. As we begin the design of a next-generation high school testing program, this collaboration will be even more important, as we seek to align our high school teaching with the skills and knowledge expected of incoming college students.

I would like to particularly acknowledge the contributions of Dr. Sue Lane, who recently retired from her position in the Department of Higher Education. Sue was an invaluable partner in helping us think through the connections between the K-12 and higher education sectors and in facilitating the engagement of faculty from across the state college and university spectrum. Dr. Patricia Marshall, DHE's Deputy Commissioner for Academic Affairs & Student Success, will be assuming Sue's coordinating role, and we very much look forward to working with her.

The next-generation MCAS project is being led at DESE by Deputy Commissioner Jeff Wulfson and Associate Commissioner for Student Assessment Services Michol Stapel. Jeff and Michol will join us at the January 24 meeting to answer any questions you may have.

c: Commissioner Carlos Santiago