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TO: Members of the State Board of Education
FROM: Karen B. Salmon, Ph.D.
DATE: January 30, 2018
SUBJECT: Responses to SBOE Bridge and Graduation Questions

Below are the responses to the questions posted by the State Board of Education at the December 2017 meeting.

Bridge Items

What is the product from the Algebra Bridge?

The Algebra Bridge Project is comprised of 4 modules. Modules 1, 2 and 3 are designed to provide a student learning experiences that will improve their understanding of linear, quadratic and exponential functions which are the major function families studied in Algebra I. Success in later mathematics coursework is highly dependent on a student's depth of knowledge related to these functions. Modules 1, 2, and 3 all contain a pre assessment which students may take to show they possess a sufficient knowledge base of a particular function that will allow them to skip the Module. Module 4 blends all three functions together into one module. The fourth module is the only module that must be submitted to an external panel for grading. When a student's Module 4 is submitted for grading the packet submitted must include Module 4 along with completed Modules 1, 2 and 3. This work serves to show that the student was provided with "appropriate assistance" prior to their second attempt at taking the PARCC Algebra I assessment. Some districts are having students complete all 4 modules, then take the PARCC assessment for a second time and if the student still does not earn a passing score then they will submit Module 4 for grading. This process provides the "appropriate assistance" and the second attempt at the PARCC Algebra I assessment mandated by COMAR.

Bridge Tracking

Currently, the Office of Accountability collects student level information from each LEA on how each student has met the graduation assessment requirement for content areas as part of the High School Status and Completion (HSSC) Data Collection. The LEA determines if and how a student has met the assessment graduation requirement and provides a status code for each student. Students can meet the assessment requirement by passing an assessment, completing a Bridge Project, a waiver or combined score. There are additional options for transfer students such as course credit, and second semester transfer. A student who transfers from a nonpublic school or from out of state is exempt from one or more of the Maryland High School Assessments (MHSA) if it is consistent with the LEA policy. Permission from the superintendent is required to determine that the course taken is aligned with the relevant MHSA. A student who transfers from a nonpublic school or from out-of-state and has not received Algebra credit must have demonstrated mastery of the Maryland College and Career Ready Standards (MCCRS) for algebra in order to be exempt from the Algebra MHSA. This mastery can be achieved through examination or completion of subsequent math course work. Graduating students

meeting the assessment requirement through the completion of a Bridge would have a different status code than students passing the required content assessments. If a student meets the assessment graduation requirement, there is no requirement to include additional Bridge information.

Options for Future Data Collection Activities on Bridge

Options for collecting Bridge program information include the following:

Option A – Status option

The HSSC collection provides information on graduates and an additional flag indicating completion of a Bridge could be included regardless of whether or not a student met the assessment requirement or through another method. Bridge plan information would be limited and only available for graduates. Minimal cost to develop; however extensive report development or reporting would be limited.

Option B – Survey option

Create a survey and administer annually for the information. A robust Select Survey technology solution supported by the Department of Information Technology could be leveraged to collect the information. It may be possible to utilize this for student level information on an annual basis. There is no cost to the state to utilize the survey tool, however there would be significant staff time required to develop the survey, and to provide reporting and technical assistance to the LEAs.

Option C – New data collection

Create a new data collection, which would require development time and significant resources. Procurement would be required for staff augmentation. Development would require funding and management of the process. Additional staff time required managing the collection and providing support to the LEAs provided through the Office of Curriculum. The earliest data could be collected would be during the 2018-2019 school year, however it would be possible to collect 2017 or prior as available from the LEAs.

Option D – Online Bridge Program

MSDE is in the process of submitting a RFP for an online platform for the Bridge Program. The revised Bridge projects are extensive and LEAs are required to download and print the projects for each student. When the projects are to be scored, multiple copies of the projects are made for scoring purposes. An online platform would streamline the scoring process since the preliminary parts of the project would be scored using an artificial intelligence tool on the platform. The LEA scoring team would score only the final student project. The online platform would also allow MSDE to have access to all of the Bridge projects, therefore, randomly being able to choose projects for auditing purposes.

Graduation

Comparability of GED and Composite Score options and related data

The GED modules for ELA, Science, Social Studies and Mathematics are aligned to MD State Standards. The GED option does not require anything other than sitting for the test (4 modules) - there are no other requirements in comparison to the graduation requirements for a MD high school diploma. It is unknown if the GED assessment is the same as receiving a 750 on PARCC as no GED/PARCC comparison/alignment studies have been done to date.

Curriculum

Listing of curriculum used for every district.

See attached sheets for K - 8 ELA and Math for each LEA.

LEA CURRICULUM - Math

LEA	K	1	2	3	4	5	6	7	8	
Allegany	Locally developed curriculum which includes <ul style="list-style-type: none"> • Envision Math • PARCC Like tasks for each unit • Electronic Benchmarks 	Locally developed curriculum which includes <ul style="list-style-type: none"> • Envision Math • PARCC Like tasks for each unit • Electronic Benchmarks 	Locally developed curriculum which includes <ul style="list-style-type: none"> • Envision Math • PARCC Like tasks for each unit • Electronic Benchmarks 	Locally developed curriculum which includes <ul style="list-style-type: none"> • Envision Math • PARCC Like tasks for each unit • Electronic Benchmarks 	Locally developed curriculum which includes <ul style="list-style-type: none"> • Envision Math • PARCC Like tasks for each unit • Electronic Benchmarks 	Locally developed curriculum which includes <ul style="list-style-type: none"> • Envision Math • PARCC Like tasks for each unit • Electronic Benchmarks 	Locally developed curriculum which includes <ul style="list-style-type: none"> • Envision Math • PARCC Like tasks for each unit • Electronic Benchmarks 	Locally developed curriculum which includes <ul style="list-style-type: none"> • Teacher developed & OER resources • Supplementary materials from Ready Common Core & Continental Press Finish Line 	Locally developed curriculum which includes <ul style="list-style-type: none"> • Teacher developed & OER resources • Supplementary materials from Ready Common Core & Continental Press Finish Line 	Locally developed curriculum which includes <ul style="list-style-type: none"> • Teacher developed & OER resources • Supplementary materials from Ready Common Core & Continental Press Finish Line
Anne Arundel	Locally developed curriculum	Locally developed curriculum which includes <ul style="list-style-type: none"> • Model lessons • Concept lessons • Lesson seeds • Support materials from enVision 2.0 	Locally developed curriculum which includes <ul style="list-style-type: none"> • Model lessons • Concept lessons • Lesson seeds • Support materials from enVision 2.0 	Locally developed curriculum which includes <ul style="list-style-type: none"> • Model lessons • Concept lessons • Lesson seeds • Support materials from enVision 2.0 						
Baltimore City	Eureka Math	Eureka Math	Eureka Math	Eureka Math						
Baltimore County	Locally developed curriculum & Investigations - Pearson	Locally developed curriculum & Investigations - Pearson	Locally developed curriculum & Investigations - Pearson	Locally developed curriculum & enVision 2.0	Locally developed curriculum & enVision 2.0	Locally developed curriculum & enVision 2.0	Locally developed curriculum & HMH Go Math as a resource	Locally developed curriculum & HMH Go Math as a resource	Locally developed curriculum & HMH Go Math as a resource	
Calvert	Dream Box and Locally developed curriculum which includes <ul style="list-style-type: none"> • Pacing guides • Modules • Benchmarks • OER and teacher created resources • PARCC PRC resources 	Dream Box and Locally developed curriculum which includes <ul style="list-style-type: none"> • Pacing guides • Modules • Benchmarks • OER and teacher created resources • PARCC PRC resources 	Dream Box and Locally developed curriculum which includes <ul style="list-style-type: none"> • Pacing guides • Modules • Benchmarks • OER and teacher created resources • PARCC PRC resources 	Dream Box and Locally developed curriculum which includes <ul style="list-style-type: none"> • Pacing guides • Modules • Benchmarks • OER and teacher created resources • PARCC PRC resources 	Dream Box and Locally developed curriculum which includes <ul style="list-style-type: none"> • Pacing guides • Modules • Benchmarks • OER and teacher created resources • PARCC PRC resources 	Dream Box and Locally developed curriculum which includes <ul style="list-style-type: none"> • Pacing guides • Modules • Benchmarks • OER and teacher created resources • PARCC PRC resources 	Agile Mind	Agile Mind	Agile Mind	

LEA CURRICULUM - Math

LEA	K	1	2	3	4	5	6	7	8
Caroline	Locally developed curriculum which includes resources from <ul style="list-style-type: none"> Eureka Math Van de Walle's Student Centered Learning Achieve the Core Illustrative Mathematics 	Locally developed curriculum which includes resources from <ul style="list-style-type: none"> Eureka Math Van de Walle's Student Centered Learning Achieve the Core Illustrative Mathematics 	Locally developed curriculum which includes resources from <ul style="list-style-type: none"> Eureka Math Van de Walle's Student Centered Learning Achieve the Core Illustrative Mathematics 	Locally developed curriculum which includes resources from <ul style="list-style-type: none"> Eureka Math Van de Walle's Student Centered Learning Achieve the Core Illustrative Mathematics 	Locally developed curriculum which includes resources from <ul style="list-style-type: none"> Eureka Math Van de Walle's Student Centered Learning Achieve the Core Illustrative Mathematics 	Locally developed curriculum which includes resources from <ul style="list-style-type: none"> Eureka Math Van de Walle's Student Centered Learning Achieve the Core Illustrative Mathematics 	Piloting Illustrative Math 6 th grade Curriculum	Locally developed curriculum which includes resources from <ul style="list-style-type: none"> Eureka Math Van de Walle's Student Centered Learning Achieve the Core Illustrative Mathematics 	Locally developed curriculum which includes resources from <ul style="list-style-type: none"> Eureka Math Van de Walle's Student Centered Learning Achieve the Core Illustrative Mathematics
Carroll	Locally developed curriculum	Locally developed curriculum	Locally developed curriculum	Locally developed curriculum					
Cecil	enVision 2.0	Locally developed curriculum & enVision 2.0	Locally developed curriculum & enVision 2.0	Locally developed curriculum & enVision 2.0					
Charles	Locally developed curriculum and Investigations	Locally developed curriculum and Investigations	Locally developed curriculum	Locally developed curriculum	Locally developed curriculum	Locally developed curriculum	Locally developed curriculum	Locally developed curriculum	Locally developed curriculum
Dorchester	Locally developed curriculum	Agile Mind	Agile Mind	Agile Mind					
Frederick	Locally developed curriculum	Locally developed curriculum	Locally developed curriculum	Locally developed curriculum					
Garrett	enVision 2.0	enVision 2.0	enVision 2.0	enVision 2.0					
Harford	enVision 2.0	enVision 2.0	enVision 2.0	Carnegie Learning Course 3					
Howard	Locally developed curriculum	Locally developed curriculum & enVision math 2.0, Discovery Math Techbook, GoMath!, Glencoe Math	Locally developed curriculum & enVision math 2.0 , Discovery Math Techbook, GoMath!, Glencoe Math	Locally developed curriculum & enVision math 2.0 , Discovery Math Techbook, GoMath!, Glencoe Math					

LEA CURRICULUM - Math

LEA	K	1	2	3	4	5	6	7	8	
Kent	My Math (McGraw-Hill) Locally developed curriculum which includes <ul style="list-style-type: none"> • Online resources • Formative and Summative assessments • Student activities 	My Math (McGraw-Hill) Locally developed curriculum which includes <ul style="list-style-type: none"> • Online resources • Formative and Summative assessments • Student activities 	My Math (McGraw-Hill) Locally developed curriculum which includes <ul style="list-style-type: none"> • Online resources • Formative and Summative assessments • Student activities 	My Math (McGraw-Hill) Locally developed curriculum which includes <ul style="list-style-type: none"> • Online resources • Formative and Summative assessments • Student activities 	My Math (McGraw-Hill) Locally developed curriculum which includes <ul style="list-style-type: none"> • Online resources • Formative and Summative assessments • Student activities 	My Math (McGraw-Hill) Locally developed curriculum which includes <ul style="list-style-type: none"> • Online resources • Formative and Summative assessments • Student activities 	My Math (McGraw-Hill) Locally developed curriculum which includes <ul style="list-style-type: none"> • Online resources • Formative and Summative assessments • Student activities 	Math Techbook (Discovery) & Locally developed curriculum which includes <ul style="list-style-type: none"> • Online resources • Formative and Summative assessments • Student activities 	Math Techbook (Discovery) & Locally developed curriculum which includes <ul style="list-style-type: none"> • Online resources • Formative and Summative assessments • Student activities 	Math Techbook (Discovery) & Locally developed curriculum which includes <ul style="list-style-type: none"> • Online resources • Formative and Summative assessments • Student activities
Montgomery	Investigations - Pearson	Locally developed curriculum	Locally developed curriculum							
Prince George's	enVision math 2.0	Locally development curriculum and Big Ideas Mathematics as a supplemental resource	Locally development curriculum and Big Ideas Mathematics as a supplemental resource	Locally development curriculum and Big Ideas Mathematics as a supplemental resource						
Queen Anne's	Locally developed curriculum & enVision math	Locally developed curriculum & Agile Mind	Locally developed curriculum & Agile Mind	Locally developed curriculum & Agile Mind						
St. Mary's	Investigations 2008	Investigations 2008	Investigations 2008	Investigations 2008	Locally developed curriculum & Investigations 2008	Locally developed curriculum	Locally developed curriculum	Locally developed curriculum	Locally developed curriculum	
Somerset	Stepping Stones--Origo Education	Carnegie Learning	Carnegie Learning	Carnegie Learning						
Talbot	Eureka Math	Eureka Math								

LEA CURRICULUM - Math

LEA	K	1	2	3	4	5	6	7	8
Washington	Locally developed curriculum which includes <ul style="list-style-type: none"> • Online resources • At-A-Glance resources • Unit plans that include • Transfer goals • Enduring Understandings • Essential Questions • Formative and Summative Assessments • Learning Pathways 	Locally developed curriculum which includes <ul style="list-style-type: none"> • Online resources • At-A-Glance resources • Unit plans that include • Transfer goals • Enduring Understandings • Essential Questions • Formative and Summative Assessments • Learning Pathways 	Locally developed curriculum which includes <ul style="list-style-type: none"> • Online resources • At-A-Glance resources • Unit plans that include • Transfer goals • Enduring Understandings • Essential Questions • Formative and Summative Assessments • Learning Pathways 	Locally developed curriculum which includes <ul style="list-style-type: none"> • Online resources • At-A-Glance resources • Unit plans that include • Transfer goals • Enduring Understandings • Essential Questions • Formative and Summative Assessments • Learning Pathways 	Locally developed curriculum which includes <ul style="list-style-type: none"> • Online resources • At-A-Glance resources • Unit plans that include • Transfer goals • Enduring Understandings • Essential Questions • Formative and Summative Assessments • Learning Pathways 	Locally developed curriculum which includes <ul style="list-style-type: none"> • Online resources • At-A-Glance resources • Unit plans that include • Transfer goals • Enduring Understandings • Essential Questions • Formative and Summative Assessments • Learning Pathways 	Math Techbook (Discovery) & Locally developed curriculum which includes <ul style="list-style-type: none"> • Online resources • At-A-Glance resources • Unit plans that include • Transfer goals • Enduring Understandings • Essential Questions • Formative and Summative Assessments • Learning Pathways 	Math Techbook (Discovery) & Locally developed curriculum which includes <ul style="list-style-type: none"> • Online resources • At-A-Glance resources • Unit plans that include • Transfer goals • Enduring Understandings • Essential Questions • Formative and Summative Assessments • Learning Pathways 	Math Techbook (Discovery) & Locally developed curriculum which includes <ul style="list-style-type: none"> • Online resources • At-A-Glance resources • Unit plans that include • Transfer goals • Enduring Understandings • Essential Questions • Formative and Summative Assessments • Learning Pathways
Wicomico	Everyday Mathematics 4	Locally developed curriculum & Math Techbook (Discovery)	Locally developed curriculum & Math Techbook (Discovery)	Locally developed curriculum & Math Techbook (Discovery)					
Worcester	Locally developed curriculum & Origo Math	Locally developed curriculum & Math Techbook (Discovery)	Locally developed curriculum & Math Techbook (Discovery)						

LEA CURRICULUM - ELA

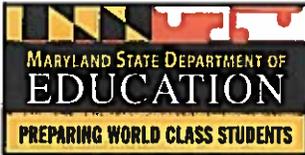
LEA	K	1	2	3	4	5	6	7	8
Allegany	Treasures	Treasures	Treasures	Treasures	Treasures	Treasures	Locally developed curriculum	Locally developed curriculum	Locally developed curriculum
Anne Arundel	Locally developed curriculum	Locally developed curriculum	Locally developed curriculum	Locally developed curriculum					
Baltimore City	Locally developed curriculum	Locally developed curriculum	Locally developed curriculum	Locally developed curriculum					
Baltimore County	Locally developed Curriculum, plus trade books and Wonders	Locally developed Curriculum, plus trade books and Wonders	Locally developed Curriculum, plus trade books and Wonders	Locally developed Curriculum, plus trade books and Wonders	Locally developed Curriculum, plus trade books and Wonders	Locally developed Curriculum, plus trade books and Wonders	Locally developed curriculum	Locally developed curriculum	Locally developed curriculum
Calvert	Locally developed curriculum	Locally developed curriculum	Locally developed curriculum	Locally developed curriculum					
Caroline	Locally developed curriculum, plus Vendor-American Reading Company	Locally developed curriculum, plus Vendor-McDougal Littell	Locally developed curriculum, plus Vendor-McDougal Littell	Locally developed curriculum, plus Vendor-McDougal Littell					
Carroll	Locally developed curriculum, plus Vendor-Treasures	Locally developed curriculum, plus Vendor- Wonders	Locally developed curriculum, plus Vendor-Wonders	Locally developed curriculum	Locally developed curriculum	Locally developed curriculum			
Cecil	Locally developed curriculum & Bookworms	Locally developed curriculum	Locally developed curriculum	Locally developed curriculum					

LEA CURRICULUM - ELA

LEA	K	1	2	3	4	5	6	7	8
Charles	Locally developed curriculum	Locally developed curriculum, plus Vendor-Springboard	Locally developed curriculum, plus Vendor-Springboard	Locally developed curriculum, plus Vendor-Springboard					
Dorchester	Locally developed curriculum	Locally developed curriculum	Locally developed curriculum	Locally developed curriculum					
Frederick	Locally developed curriculum	Locally developed curriculum	Locally developed curriculum	Locally developed curriculum					
Garrett	Orton Gillingham	Orton Gillingham	Locally developed curriculum & HMH Journeys	Locally developed curriculum	Locally developed curriculum	Locally developed curriculum			
Harford	Locally developed curriculum & Harcourt Storytown anthology series	Locally developed curriculum & Harcourt Storytown anthology series	Locally developed curriculum & Harcourt Storytown anthology series	Locally developed curriculum & Harcourt Storytown anthology series	Locally developed curriculum & Harcourt Storytown anthology series	Locally developed curriculum & Harcourt Storytown anthology series	Locally developed curriculum & Collections	Locally developed curriculum & Collections	Locally developed curriculum & Collections
Howard	Locally developed curriculum	Locally developed curriculum, plus Vendors-Read 180/System 44	Locally developed curriculum, plus Vendors-Read 180/System 44	Locally developed curriculum, plus Vendors-Read 180/System 44					
Kent	Wonders	Wonders	Wonders	Locally developed curriculum	Locally developed curriculum	Locally developed curriculum	Locally developed curriculum	Locally developed curriculum	Locally developed curriculum
Montgomery	Locally developed curriculum	Locally developed curriculum	Locally developed curriculum	Locally developed curriculum					

LEA CURRICULUM - ELA

LEA	K	1	2	3	4	5	6	7	8
Prince George's	Locally developed curriculum, plus Wonders	Locally developed curriculum, plus Wonders	Locally developed curriculum, plus Wonders	Locally developed curriculum, plus Reading Street	Locally developed curriculum, plus Reading Street	Locally developed curriculum, plus Reading Street	Locally developed curriculum	Locally developed curriculum	Locally developed curriculum
Queen Anne's	Wonders - McGraw Hill ; Grasonville ES (Title I), uses Success for All	Wonders - McGraw Hill ; Grasonville ES (Title I), uses Success for All	Wonders - McGraw Hill ; Grasonville ES (Title I), uses Success for All	Wonders - McGraw Hill ; Grasonville ES (Title I), uses Success for All	Wonders - McGraw Hill ; Grasonville ES (Title I), uses Success for All	Wonders - McGraw Hill ; Grasonville ES (Title I), uses Success for All	Locally developed curriculum	Locally developed curriculum	Locally developed curriculum
St. Mary's	McGraw Wonders	McGraw Wonders	McGraw Wonders	Houghton Mifflin Harcourt Journeys	Houghton Mifflin Harcourt Journeys	Houghton Mifflin Harcourt Journeys	Pearson My Perspectives and Springboard	Pearson My Perspectives and Springboard	Pearson My Perspectives and Springboard
Somerset	McGraw Wonders	Locally developed curriculum	Locally developed curriculum	Locally developed curriculum					
Talbot	Reading Wonders 2017	Locally developed curriculum	Locally developed curriculum	Locally developed curriculum					
Washington	Locally developed curriculum	Locally developed curriculum	Locally developed curriculum	Locally developed curriculum					
Wicomico	Locally developed curriculum, plus HM Reading 2003	Locally developed curriculum, plus HM Reading 2003	Locally developed curriculum, plus HM Reading 2003	Locally developed curriculum, plus HM Reading 2005	Locally developed curriculum, plus HM Reading 2006	Locally developed curriculum, plus HM Reading 2006	Locally developed curriculum, plus LLI	Locally developed curriculum, plus LLI	Locally developed curriculum, plus LLI
Worcester	Locally developed curriculum	Locally developed curriculum	Locally developed curriculum	Locally developed curriculum					



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State Superintendent of Schools

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TO: Members of the State Board of Education
FROM: Karen B. Salmon, Ph.D. *KBS*
DATE: January 30, 2018
SUBJECT: Responses to SBOE Bridge Questions

(1) Can the Maryland Longitudinal Data System Center track Bridge students after graduation?

Currently, the Maryland Longitudinal Data System Center (MLDSC) cannot describe or predict the postsecondary outcomes of students who complete a Bridge project to meet their graduation requirements. This is because MLDSC does not have the “flag” indicating that a student earned their diploma via Bridge loaded into their data system. Under state statute, the types of data elements that MLDS is allowed to include must be approved by the MLDS Governing Board. It is not clear whether the Bridge data element is an allowable data point in the current [MLDS Data Inventory](#) of approved data elements. MLDSC staff are currently reviewing the Bridge information to determine if it is an approved data element. MLDS Staff are examining whether they can load the Bridge data element.

Further, prior to requesting that the data element be loaded into the MLDSC system, we must seek legal advice to carefully consider Maryland COMAR 13A.03.02.06(F)(1) which states “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.”

If it is determined permissible and legal, it would take approximately 2 months to load the data and run descriptive statistics on the post-high-school outcomes of these students. This would be descriptive only: for example, what percent of students who graduated by completing a Bridge project enrolled in postsecondary education, compared to what percent of students who graduated using the “traditional” route enrolled in postsecondary education? This analysis would *not* be able to determine whether completing a Bridge project had any *impact* on a student’s likelihood of enrolling in postsecondary education. A causal analysis would require additional resources, and likely an external research partner, with an estimated timeline of a year or more. For both the descriptive and causal analysis, we would have to be careful to ensure that students who completed the “version” of the Bridge project we wished to study had time to matriculate to, and through, postsecondary education.

(2) How many students in other states graduate using alternative pathways?

There is no public source for any state on how many students graduate using a Bridge-type program, waiver from a standard diploma, alternative pathway to a standard diploma, locally-determined diploma, or other “alternative” or “non-standard” option. Although many states either offer multiple pathways to a single diploma, or multiple certificates or diplomas, there is virtually no publicly available data on the rates of students who achieve even these “standard” options.