December 4, 2018

Maryland State Board of Education 200 West Baltimore Street Baltimore, MD. 21201

Re: Proposed changes to COMAR 13A.04.07

This letter is written on behalf of the Maryland State Gifted and Talented Advisory Council (GTAC). The GTAC, which is comprised of more than 40 individuals representing diverse districts and stakeholders from across Maryland, has long served as a voice of advocacy on behalf of Maryland's gifted students, their families, and those educators who work to meet their needs. In fact, the proposed changes to COMAR 13A.04.07 are rooted in the work and wishes of the council over the past several years. To that end, there should be little surprise that the council is thrilled to see the inclusion of universal screening (.02C), sustained identification beyond the targeted universal screening grade (.02D), state accountability of district plans for identification (.02F), the supplying of a vetted list of approved programs and services by the state (.03A), and the subtle yet powerful shift throughout the regulation from "shall consider" to "shall", as each of these changes reflect a staunch commitment to accountability and reliability on behalf of the state for its students.

Furthermore, the council applauds the spirit of these modifications as they are founded in the knowledge and research that there are gifted learners in ALL LEAs and in ALL schools and that there is a genuinely pro-active voice woven in the document seeking to find and serve those who have been historically underserved for far too long – our students of color, poverty, and those who are twice exceptional.

However, there is one mandate within the amended COMAR, as proposed, that gives pause to many within the council and there is a palpable fear that its inclusion, as currently drafted, may serve as a poison pill to many districts who might otherwise join in this seminal shift in the paradigm around serving our gifted learners. I am speaking of .02D which calls for all LEAs to identify at least 10 percent of students in EACH school as part of the universal screening process.

The GTAC recognizes the noble intentions of those who advocate for this language as it works to disabuse individuals of the notion that "we don't have gifted kids at this school." However, the nagging question prompted by this rigid approach to identification wonders if this logic would be widely acceptable if it were similarly applied to the bottom 10 percent of students at each school to find more students in need of special education services. Clearly, we are not advocating that position but for chiefly the same reason that we don't support doing so for gifted identification. We are not arguing what the research suggests and implies but rather caution that mandating this type of approach to identification fails the test of practicality on at least three fronts:

- Drilling into the data from a number of districts tell us that in a disconcerting number of cases, calling the top 10 percent of students at all schools gifted will sweep up students whose ability and achievement results place them firmly in the average range and for whom general education curricula are designed. These, state required, gifted learners would now be placed in gifted programming where the accelerated or compacted curricula expectations would not only not benefit these students but possibly serve to de-motivate and frustrate them as the pace and depth of learning drifts further and further from who they are as individuals.
- 2. An already limited allocation of resources, as there are currently no state funds designated for serving gifted learners, will subsequently be divided into even smaller pieces among a larger number of students now identified as gifted across districts, resulting in a diminished level of service in districts that are already championing the best practices envisioned by this updated version of COMAR.
- 3. The situational or school-based norming for this designation as gifted will further complicate the conversation around the state as to what it means to be gifted in Maryland as the answer will literally vary not just between LEAs, as it does currently, but now between schools within every LEA.

Because the GTAC earnestly wants every possible student to be meaningfully identified and served, we propose modifying the pending language to read:

"A universal screening process shall be used to identify students in every school (and at least 10% in each district), as early as possible but no later than Grade 3 ..."

This slight alteration still makes it clear that there are gifted learners in ALL of our schools and that LEAs must do a better job of finding them across the entirety of their districts while acknowledging the challenges and barriers to implementation addressed earlier in this letter. In other words, the perfect is the enemy of the good and there is so much good in this proposed version.

The GTAC recognizes that Maryland is poised to become a national leader in breaking down barriers to identifying and serving students who have long been excluded from the conversation and we desperately want to succeed on their behalf. Given that context, we ask that the board thoughtfully consider this recommendation as it greatly enhances the likelihood of faithful implementation of a significantly improved regulation designed to find, support, and serve Maryland's gifted children.

Sincerely,

D. D. Jatur

Dennis D. Jutras Co-Chair, Maryland Gifted and Talented Advisory Council



Live the life you want.

TO: Maryland State Board of Education

FROM: National Federation of the Blind of Maryland

DATE: December 4, 2018

SUBJECT: Braille Competency Test Requirement

The National Federation of the Blind of Maryland, the largest organization of blind people in the state, urges the Maryland State Board of Education to approve the recommendation that vision teachers, at the first five-year renewal period, be required to pass the National Certification in Unified English Braille (NCUEB) exam.

BACKGROUND

Vision teachers are responsible for working with blind and visually impaired students in the public school systems to ensure that the students have full access to the curriculum. Vision teachers serve all levels of students in grades K-12. The state must ensure that vision teachers maintain their skills in braille reading and writing because there are few options to evaluate a teacher's braille competency, as most school personnel will lack the knowledge of braille. Vision teachers must be able to teach braille reading and writing even if they have years where no students require that skill. Passing a national competency exam in braille reading and writing will assure employers, school administrators, colleagues, and families that the certificate holders possess updated and appropriate braille knowledge and skills.

DESCRIPTION OF THE EXAM

The NCUEB is a nationally recognized exam administered by the National Blindness Professional Certification Board. The examination consists of three sections:

- 1. Braille Writing: using a braillewriter
- 2. Proofreading: identifying embedded errors
- 3. Multiple Choice: answering questions about correct braille usage and rules.

STAKEHOLDER AGREEMENT

All of the stakeholders including the Maryland School for the Blind and the Maryland State Steering Committee for Programs Serving Students with Visual Impairments, agree about the need for a braille competency test. All of the stakeholders also agree that the appropriate exam is the National Certification in Unified English Braille (NCUEB). We have been discussing this issue since 2013 and came to an agreement in 2014 but the Division of Educator Certification and Program Approval never implemented the agreement; therefore, the time for debate is over. What we need today is action.

For questions or additional information, please contact Sharon Maneki, Director of Legislation and Advocacy, National Federation of the Blind of Maryland, at telephone number 410-715-9596 or by email at NFBMD@earthlink.net.

Exceptional Learning Results From Exceptionally Good Textbooks Singapore Yes! Finland No!

By Jerome Dancis, Ph.D. (math)

Associate Professor Emeritus, Department of Mathematics, University of Maryland, College Park, MD 20742-4015 email jnd@math.umd.edu

1. Useful International Comparisons (Singapore blows Finland and U.S. out of the water.)

2. Using The Exceptionally Good Singapore Mathematics Textbooks Results In Exceptional Learning.

3. Finland Beware – NOT Beware of Finland

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1. Useful International Comparisons: Singapore blows Finland and U.S. out of the water.

Scoring in top Level 6		Scoring Levels 5 and 6	Scoring Levels 4,5 and 6	
Americans	1%	5%	17%	
OECDers ⁱⁱ	2%	11%	27%	
Finland	2%	11%	34%	
Singaporeans	12%	35%	57%	

PISA's "Mathematics Literacy" Test ⁱ in 2015 for 15 year-old Students

The percentage of American scoring in the top two Levels 5ⁱⁱⁱ and 6 of the PISA "Mathematics literacy" test, **dropped in half** from 10% in 2012 to 5% in 2015.

Warning: PISA only purports to measure low-level Mathematics and science, what PISA calls "Mathematics literacy" and "science literacy" (not Mathematics or science). These PISA tests are **not rigorous** science and Mathematics or even Arithmetic tests. Scoring at Levels 4, 5 and 6 are necessary but not sufficient to be on track for learning in a rigorous high school physics course. Students scoring at Levels 6 may still to be on track to become at-risk students in a rigorous high school physics course; they may not know enough Arithmetic. The PISA "Mathematics literacy" test questions are largely straight-forward, multi-step Arithmetic word problems, requiring just simple Arithmetic calculations; no subtracting fractions.

American and Finnish Grade 8 Students Cannot Subtract Fractions.

Problem (TIMSS-2011 ^{iv}). Which shows a correct method for finding 1/3 - 1/4? A (1-1)/(4-3) B 1/(4-3) C (3-4)/3 D (4-3)/(3*4)

Percentage of correct answers (D) for Grade 8 students:U.S. students.29%,Finland16%Massachusett v44%Singapore83%

Sixth graders should be fluent in adding and subtracting fractions. Students *not* fluent in adding fractions, are *not* ready for a rigorous Pre-Algebra course.

Grade 8 students, who *cannot* subtract fractions, will become at-risk students in a rigorous high school physics course. They are on track for remedial Algebra I, if not remedial Arithmetic, when they attend college.

Why do Singapore students excel in Math? It's the textbooks along with good teaching. Singapore Math textbooks are coherent and easy to understand; they were written in simple English for Singapore students for whom English was not their native language.

In sharp contrast, writers of American textbook have little training on how to write mathematics coherently, clearly, comprehensively, logically, accurately and precisely without being cryptic, vague, ambiguous, or obscure as well as how to distinguish a correct mathematical argument from an *incorrect or incomplete* mathematical argument. This is what jumped out at me when I was reviewing four Grades 4-7 Math textbooks series as a duly sworn official of the state of California.

2. Using The Exceptionally Good Singapore Mathematics Textbooks Results In Exceptional Learning.

Singapore Mathematics Texts & Guidance of a Mathematics Professor Jumped Scores at an Inner-city Title 1 School

Let's look at Ramona Elementary School's Grade 5 results on the California Standards Math Test for the three years before (2003-2005) and after (2006-2008) using Singapore Primary Mathematics Texts under the guidance of Mathematics Professor Yoram Sagher. (About three teachers in four chose to participate.): Ramona Elementary School is an inner-city school (in the Los Angeles Unified District). "Ramona easily qualifies for federal Title 1 funds, which are intended to alleviate the effects of poverty. Nine of every 10 students at the school are eligible for free or reducedprice meals (FARM). For the most part, these are the children of immigrants, the majority from Central America, some from Armenia. Nearly six in 10 students speak English as a second language." (The Los Angeles Times, March 9, 2008)

Scores at Ramona Elementary School (An Inner-City Title 1 School)

2003-2005: Percent of Students scoring Proficient and Advanced: 43%-56%
2006-2008: Percent of Students scoring Proficient and Advanced: 71%-76%

Before:Percent advanced:15%-26%Average Scaled scores (all students)349- 378After:Percent advanced:35%-43%Average Scaled scores395- 412

North Middlesex School District Had Phenomenal Achievement, Even For Massachusetts vi:

<u>C</u>	omparison of	North Middle	esex (NM) and	d State of Ma	assachusetts Results
	A	dvanced	Proficient		
	NM	State	NM	State	
1999	7%	9%	19%	15%	
2005	57%	35%	30%	27%	

The North Middlesex Regional School District ^{vii} credits its exceptional improvement on the Massachusetts Grade 10 Math test to its implementation and use of Singapore Mathematics textbooks in elementary and middle school, not to changes in its Grade 10 math program.

Credit goes to the use of Singapore Math together with Professional Development led by Richard Bisk, then Chair Mathematics Department at Worcester State College, who wrote: We were successful in North Middlesex because the teachers got Professional Development that improved their math understanding and they got to use good materials (Singapore Math) with their students.

Richard Bisk's view - start with a Professional Development course of 5-8 days that focuses on the math, with some discussion of implementation. Then provide follow-up support during the school year and in subsequent summers. Most teachers will say up front that they want the implementation knowledge and not the math as they don't

realize how their limited math background affects their ability to teach well. I've been fairly successful in convincing them that the math needs to come first.

3. Finland Beware – NOT Beware of Finland

Finland is wise enough to provide "daily hot meals; health and dental services; psychological counseling; and an array of services for families and children in need viii" Finland also closed most of its colleges of education, which channeled future teachers into the more effective programs. Yes, we should do all this because it makes good sense; not because Finland is doing it.

"Finnish engineering students [in college] have difficulty with fractions and simple algebraic expressions" is Section 5 of my report, **"What Does the International PISA Math Test Really Tell Us?" by Jerome Dancis** ix

in the American Association of School Administrators Journal of Scholarship and Practice.

Excerpts:

Finland had often scored number 1 on the PISA Math exam. The U.S. has scored much lower. This has misled U.S. education policy wonks to suggest that our Math instruction is inferior to that provided to Finnish students and hence we should copy some aspects of Finland's education system.

Not so fast.

The article, "**The PISA Survey Tells Only A Partial Truth Of Finnish Children's Mathematical Skills**" × signed by 207 mathematics teachers in Finnish universities and polytechnics (universities of applied sciences) notes:

"in order not to fail an unreasonably large amount of students in the [university's] matriculation exams, recently the board has been forced to lower the cut-off point alarmingly. Some years, 6 points out of 60 have been enough for passing."

The article, "**Severe Shortcomings In Finnish Mathematics Skills**" ^{xi} states: "The polytechnic teachers of professional subjects are astonished at how poorly students can handle algebraic expressions and solve equations. The decreased mathematical skills of the students have forced [the teachers] to reduce the teaching material in those engineering courses that most heavily rely on mathematics. This is a serious matter taking into account the importance of engineering knowledge to the Finnish economy and welfare."

ⁱ The **Programme for International Student Assessment** (**PISA**) is a worldwide study by the <u>Organisation for Economic Co-operation and Development</u> (**OECD**) intended to evaluate educational

systems by measuring 15-year-old school pupils' scholastic performance on mathematics, science, and reading.

ⁱⁱ The Organization for Economic Cooperation and Development [OECD] consists of largely Western European Countries.

ⁱⁱⁱ To get a sense of what PISA Level 5 requires, read this:

PISA QUESTION "Climbing Mount Fuji" (Level 5)

"The Gotemba walking trail up Mount Fuji is about 9 kilometres (km) long. Walkers need to return from the 18 km walk by 8 pm.

Toshi estimates that he can walk up the mountain at 1.5 kilometres per hour on average, and down at twice that speed. These speeds take into account meal breaks and rest times.

Using Toshi's estimated speeds, what is the latest time he can begin his walk so that he can return by 8 pm?"

The PISA description for this question is: "Calculate the start time for a trip given two different speeds, a total distance to travel and a finish time" ⁱⁱⁱ

Calculations:

 $\{\text{Speed down}\} = 2 \times \{\text{Speed up}\} = 2 \times 1.5 = 3 \text{ km/hour}$

{Return Travel time} = {distance} / {speed} = d/s = 9/3 = 3 hours.

Since {Speed down} = $2 \times \{\text{Speed up}\}$; {Time up} = $2 \times \{\text{Time down}\}$ = $2 \times 3 = 6$.

 $\{\text{Start time}\} = \{\text{finish time}\} - \{\text{total travel time}\} = 8 \text{ PM} - (6 + 3) = 11 \text{ AM}.$

^{iv} TIMSS is an international set of good tests on mathematics and science.

v Much credit for Massachusetts high scores goes to Sandra Stotsky

Wikipedia: "While serving as Senior Associate Commissioner in the <u>Massachusetts</u> Department of Education from 1999 to 2003, she directed complete revisions of the state's preK-12 standards for every major subject that have been judged among the best in the country by independent experts for the Thomas B. Fordham Institute in two decades of reviews of state standards." Stotsky had the Massachusetts Math standards written (largely) by Mathematicians.

^{vi} Data from presentation by North Middlesex to National Mathematics Advisory Panel
 http://www2.ed.gov/about/bdscomm/list/mathpanel/3rd-meeting/presentations/waight.mary.pdf
 ^{vii} North Middlesex Regional High School is the only high school in North Middlesex Regional School
 District

^{viii} Education policy expert, Richard Rothstein has advocated this for years. Several cities have starting doing these worthy things in poor neighborhoods. In my county, it is called "Wrap around services".
 ^{ix} Pages 31-42 at

http://www.aasa.org/uploadedFiles/Publications/Journals/AASA_Journal_of_Scholarship_and_Practice/JPS-Winter2014-FINAL.pdf

x Published in Helsingin Sanomat in February 17, 2005 Page 9 <u>http://www.matilde.mathematics.dk/arkiv/M29/M29tema.pdf</u>

xi http://matematiikkalehtisolmu.fi/2005/erik/KivTarEng.html