Common Core Math By Any Other Name . . . Is Still In Springfield, Missouri

Mary Byrne, Ed.D.

for Missouri Coalition Against Common Core

February 12, 2019

Common Core Math By Any Other Name . . . Is Still In Springfield, Missouri

Appropriations for IM Implicitly Adopts CCSS for Mathematics

If there was any doubt that the Common Core State Standards (CCSS) were alive and well in Missouri, the <u>agenda</u> item for curriculum adoption by the Springfield Public School (SPS) presented at the Board's February 5, 2018 study meeting and <u>video</u> of the meeting should remove that doubt. The agenda item for curriculum adoption (Figure 1) shows that the curriculum team recommended board approval for over half a million dollars for LearnZillion and Open Up Resources (OUR). Both vendors are associated with <u>Illustrative Math (IM)</u> which is "dedicated to helping develop, teach and implement the Common Core Standards for mathematics."

Figure 1. Agenda Item from SPS February 5, 2019 Study Meeting

| Agenda Item Details | |
|---------------------|------------------------------|
| Meeting | Feb 05, 2019 - Study Session |
| Category | New Business |
| Subject | Curriculum Adoption |
| Туре | Information |
| | |

| Cengage | \$226,054.50 - Digital Bundles for Upper Level Math Courses |
|---|--|
| 2. LearnZillion 3. LearnZillion | \$506,462.00 - Mathematics Curriculum for Grades 6-8 \$33,488.00 - Mathematics Curriculum for Algebra I, Geometry, and Algebra II |
| 4. Open Up | \$19,705.00 - Illustrative Math Manipulatives for Grades 6-8 |
| 6. Heinemann 7. Learning A-Z 8. Pearson | \$1,000.00 - Computer Science Curriculum \$1,054,874.90 - Fountas and Pinnell K-5 Reader's Workshop Curriculum \$758,533.60 - K-5 Reading Supplemental Curriculum \$16,314.48 - DRA Benchmarking Kits |

The adoption of IM in 2019 would continue the implementation of curriculum and instruction of the CCSS adopted by the Missouri State Board Of Education in 2010, and formally incorporated in SPS curriculum and instruction in 2012 at the beginning of a seven-year curriculum and materials adoption cycle.

A cross-referencing document between SPS's current math curriculum aligned to Missouri's Learning Standards was not available at the time of this writing. However, curriculum team presenters at the February 5, 2019 study meeting iterated several times that the SPS curriculum and materials were typically refreshed on a seven-year cycle, and that the cycle would be

shortened to a six-year interval. Based on that information, the beginning of the current math curriculum and math program was 2012. At that time SPS had adopted math curricula and instruction materials aligned to CCSS. A <u>November 15, 2012 PowerPoint</u> developed <u>for SPS</u> <u>elementary math teachers</u> states, "Our curriculum, MIGS, benchmarks, math program (Everyday Math) and report card have all been aligned to the Common Core State Standards." A <u>November 12, 2012 PowerPoint developed for SPS secondary math teachers</u> described "... how to unpack Math CCSS's" The curriculum team presented to the board a plan that essentially continued the adopting of curriculum and materials aligned to the CCSS.

i-Ready Already Aligned to CCSS

At various points throughout the board meeting, SPS leadership referred to i-Ready as a source of formative assessment data that informed the classroom teacher of student-readiness for end-of-year assessments. A <u>cached Google page</u> described i-Ready as a component <u>of SPS's IGNiTE</u> <u>Initiative</u> -- "An initiative that provides the resources and support necessary for teachers and students to access and experience authentic engagement, personalized learning, relevance and *equity*" [emphasis added]. The Google page described i-Ready as:

Core Instruction: All students receive targeted literacy and numeracy instruction in all classrooms in Springfield Public Schools. The IGNiTE initiative helps teachers personalize instruction using the adaptive software platforms specific to subject area and grade-level. These software platforms include Lexia, Dreambox, ALEKS, iReady and Reading Plus. . . .

<u>Bright Bytes issued a press release</u> in November of 2015 described the goals of an SPS envisioning effort called "Imagine SPS" which included the IGNite Initiative and the deployment of nearly 25,000 mobile devices to teachers and students over the next three years as a means of achieving equity. Another November 2015 <u>press release about New i-Ready</u> <u>Standards Mastery</u> from Curriculum Associates (CA) described i-Ready as,

Built to cover Common Core standards for Reading, Language, and Mathematics, the new assessments complement the rich data offered by i-Ready Diagnostic by providing *detailed information on individual standards as they are covered in the classroom* [emphasis added].

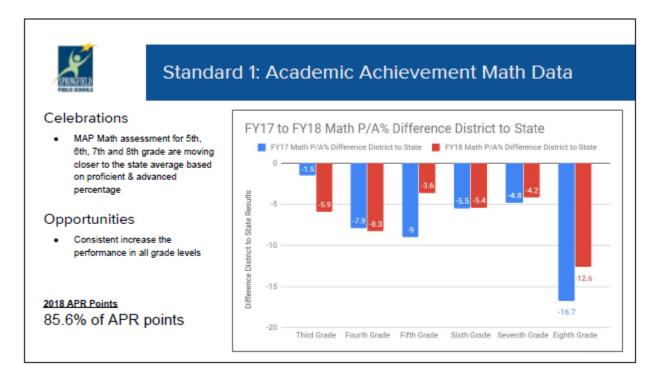
Built for the Common Core, i-Ready combines a valid and reliable measure and personalized instruction in a single online product.

CA's press release confirms that i-Ready is designed to allow "Schools and districts to get Justin-time information on student's mastery of the [CCSS] standards"; the implication being that the school board adopted the CCSS when it approved i-Ready for use in classrooms. A current SPS webpage identifies i-Ready as a diagnostic assessment tool used to identify students who are performing below grade level placement in reading or math to <u>Club Encore</u>, an elementary and middle school instructional support program. With the implementation of i-Ready If the district receives state funds from DESE, DESE may be operating in violation of HB 2.

Effects of SPS's CCSS Aligned Mathematics Program as Observed in 2017 and 2018 MAP Scores

Academic achievement math data presented in the 2017-2018 Annual Performance Report (APR) at the February 5, study meeting are shown in Figure 2.

Figure 2. Comparison of 2017 to 2018 SPS Math Scores for Grades 3-8 on the Missouri Assessment Program (MAP) Statewide Assessment.



The bar graph shows some improvement in the percentage of SPS students in grades 5-8 who scored *Proficient or Advanced* in math on the MAP in 2018 since the previous year. However, the percentages of SPS students whose scores were at least *Proficient* in math are below the state average in both 2017 and 2018. The percentage of students in grades 3 -4 whose scores were at least in the *Proficient* category decreased in 2018 – that is the percentage of students whose scores were *Basic* or *Below Basic* increased, even after <u>cut scores set in the fall under questionable circumstances</u>, likely reflected a process favorable to school districts. The APR presentation did not report how many of the SPS students tested participated in *Club Encore*, however, generally speaking, the implementation of CCSS-aligned math instruction using i-Ready as a component of the <u>SPS IGNiTE Initiative fully deployed in the 2017-2018 academic</u>

year has not been effective in raising student math performance to a level on par with the state average.

What State Legislators Intended in 2014

At their June 15, 2010 board meeting, the Missouri State Board Of Education adopted the CCSS in part, to qualify for U.S. Department of Education's <u>Race To The Top funds</u> -- ignoring the process for developing academic standards stipulated in Missouri's existing statute, SB 380 known as the <u>Outstanding Schools Act of 1993</u>. In response to the lack of transparency of actions taken by <u>Governor Nixon</u>, <u>DESE</u> and state board leadership to apply for Race To The Top money, the general assembly passed <u>HB 1490</u>, into law in 2014. HB 1490 instructed the state board of education to convene work groups composed of education professionals *to develop* [emphasis added] and recommend academic performance standards." HB 1490 Sec 160.514.7 allows local school districts to adopt their own education standards, *in addition to* those already adopted by the state, provided they "*are in public domain* [emphasis added]" Also, the standards resources the workgroups were to use in *developing* the Missouri Learning Standards should also have been in public domain.

A memo from the bill's sponsor, State Representative Kurt Bahr, distributed to work group members at the outset of their work referenced wording in the law (Sec.160.514.7):

HB 1490 states that all standards taken from other sources are in the Public Domain. That means you cannot use copyrighted standards in developing new standards for Missouri. To date, the only copyrighted standards this office is aware of is Common Core.

The <u>CCSS are copyrighted</u> to the Council of Chief State School Officers (CCSSO) and the National Governors Association (NGA). States can adopt the CCSS under a non-exclusive, royalty-free license. A September 29, 2014 memo from the Missouri School Board Association provided to the workgroups iterated permission from the National Governors Association "to copy, publish, distribute, and display the Common Core State Standards *for the purposes that support the Common Core State Standards Initiative.*" But, withdrawing support from the CCSS Initiative was precisely what the legislature intended; therefore, NGA permission to use the CCSS was irrelevant. The bill sponsor wasn't seeking permission to use the CCSS; he was excluding them from use as a reference for the development of new standards.

The NGA-CCSSO copyright assured that Missouri's education standards were tacitly controlled by Washington, DC-based non-governmental organizations (NGOs) and philanthropists that were also involved in the development of common assessments aligned to the CCSS. The copyright shielded them from any legal action arising from the use of the standards. Another NGO that orchestrated the development of the CCSS, Achieve, published a <u>CCSS</u> <u>implementation tool</u> that discouraged deviation from the copyrighted standards as shown in text found on pages 22-23 of the document:

... states who adopt the Common Core State standards (CCSS) are expected to adopt them in their entirety. While states will not be considered to have adopted the common core if any individual standard is left out, states are allowed to augment the standards with an additional 15% of content that a state feels is imperative....

If a state were to add several major topics throughout K-12 in English language arts and mathematics, it would . . . risk making their standards out of sync with those of other states adopting the CCSS. This would have many implications, particularly around the use of common assessments and instructional materials.

Entities outside of Missouri were not authorized to *develop* Missouri's academic standards in HB 1490, and standards copyrighted to such entities were expressly prohibited. If there was any doubt what the general assembly intended when it passed HB 1490, Missourians need only examine the general assembly's appropriations bill, HB 002 passed and signed into law every year since 2013, that is 2014, 2015, 2016, 2017, and 2018. Each year, legislators appropriated money for the expenses of the State Board of Education and the Department of Elementary and Secondary Education with the restriction that "no funds shall be used to implement or support the Common Core Standards."

Media Reports in 2016

In April 2016, after the state board of education adopted the standards submitted them to DESE as Missouri Learning Standards, <u>local</u> and <u>statewide news</u> outlets reported that "Missouri became the latest state to adopt *a new set of education benchmarks* to *replace the national Common Core standards* (emphasis added)." Missourians, including residents of Springfield and state legislators were led to believe by these sources that the CCSS were replaced, and that the <u>constitutional responsibility</u> to maintain free public schools for the purpose of preserving "the rights and liberties of the people" was restored to the people of Missouri.

Adoption of IM Program and Materials Circumvents the Intent of the State Legislature and Implements CCSS

As will be explained in more detail later, IM is a tightly controlled non-profit dedicated to the implementation of CCSS. If the board of education of Missouri's largest school district adopts the recommendations of the SPS curriculum team as per the agenda, the board will implicitly adopt the CCSS in mathematics as the framework for the design and will have relinquished control over the sequence of mathematics instruction to online course designers.

If, however, the SPS board approves the recommendations of the curriculum team as presented in the February 5 agenda, the SPS board will implicitly adopt the copyrighted CCSS from which the IM curricula and thereby, the district board will be acting in violation of HB 1490.

IM, Student Achievement Partners and Common Core Math Standards

Lead author of the CCSS in mathematics, William McCallum, founded The Illustrative Mathematics Project at the University of Arizona in January 2011. The following year, IM's primary funder, the Bill & Melinda Gates Foundation funded IM's work with a grant of over \$3 million in June of 2012 (see Figure 3.) The expressed purpose of the grant was to produce "content to illustrate the Common Core State Standards for Mathematics."

Figure 3. June 2012 Grant from B&MGF to Illustrative Mathematics

| HOW WE WORK GRANT | | | | | | |
|---|---------|--|--|--|--|--|
| | | | | | | |
| Illustrative Mathematics | | | | | | |
| | | | | | | |
| Date: June 2012 | | | | | | |
| Purpose: to produce content to illustrate the Common Core State Standards for Mathe | ematics | | | | | |
| Amount: \$3,416,901 | | | | | | |
| Term: 36 | | | | | | |
| Topic: College Ready | | | | | | |
| | | | | | | |
| Program: United States | | | | | | |
| Program: United States Grantee Location: Oro Valley, Arizona | | | | | | |

Follow up B&MGF grants in 2017 and 2018 were funded to continue the work of content development launched in 2012. The William and Flora Hewlett Foundation awarded <u>smaller</u> grants for development of a strategic business plan (2014), general operating support (2017) and development of customization tools for teachers (2018). What neither the SPS board agenda nor the IM webpage reveal is that IM is classified as an *implementing NGO*, and an *advocacy NGO*, in contrast to an <u>education and research NGO</u> which might actually conduct research to measure the effects of IM-based instruction on student learning. As an advocacy NGO, IM's bias is clear.

With a strategic business plan and general operation funds secured, <u>a 2014 press release from</u> <u>Tech Launch Arizona</u> publicized that McCallum founded IM as a non-profit, "dedicated to helping develop, teach and implement the Common Core Standards for mathematics." <u>IM's</u> <u>advisory board</u> includes <u>Jason Zimba</u> and <u>Phil Daro</u>. <u>McCallum</u>, <u>Zimba</u>, <u>and Daro</u> were the <u>three-man team that wrote the CCSS in mathematics</u>. McCallum and Daro also serve as advisors to <u>Student Achievement Partners</u> a nonprofit co-founded by Jason Zimba. Student Achievement Partners became a 501c3 nonprofit in November 2011, the same year McCallum's Illustrative Mathematics Project was founded.

IM and LearnZillion

March 1, 2018, <u>IM announced</u> a new partnership with LearnZillion, making LearnZillion the first certified distribution partner of IM. As of <u>August 2018</u>, <u>LearnZillion was the only IM certified</u> <u>distribution partner</u>. An IM certified partner can only make changes to the curriculum if IM approves them and believes the changes meet the IM curriculum's goals. IM partners agree to follow IM's philosophy, *sequence*, *and pedagogy*. IM's restrictions for its partners are consistent with language in a 2010 B&MGF monograph, *Fewer, Clearer, Higher: Moving Forward with* <u>Consistent, Rigorous Standards for All Students</u> The monograph described the foundation's investment in "the development of new courses in . . . reinventing and realigning traditional courses like Algebra I and Geometry to the common core" (p. 4). Later, the monograph described "an entire system that it includes the standards, the assessments, and a course-taking sequence" (p. 10) – precisely, how IM is designed.

LearnZillion provides the online platform for IM instructional lessons and in August 2018 was given the <u>highest rating on EdRports</u>. According to the SPS February 5 board of education meeting video, that is when SPS mathematics teacher Lindsey Wright began implementing IM in her 8th grade math class. The sequencing of the curriculum and lessons administered online is important to Springfield Missourians because the adoption of IM products delivered online clearly means the sequence of concepts and content is not open for alignment to standards that are not CCCSS. This is problematic for education officials who insist that the Missouri Learning Standards in mathematics are not CCSS.

OUR, IM, and EdReports: Core Funders in "Common"

OUR is a nonprofit, just like IM and EdReports, and all three non-profits are funded by the same philanthropic supporters that funded the development of the CCSS, most notably, the Bill & Melinda Gates Foundation (B&MGF) and The William and Flora Hewlett Foundation. Much like the <u>CCSS were licensed to non-governmental organizations</u> (CCSSO and NGA), materials developed by OUR are published under <u>Creative Commons</u> license and <u>offered to districts at no cost</u>. Perhaps the similarity in the OUR and CCSSI Initiative business models comes from the fact that the same philanthropic supporters of the CCSS Initiative are supporters of Creative Commons Corporation. Most notably <u>B&MGF awarded over \$10 million</u> dollars to Creative Commons "to provide federal grantees support for quality development of interactive curricula, open licensing, technical interoperability, collaboration between like projects, and widespread adoption of open curricula by community colleges and states" (Figure 4). It is also be worth mentioning that the <u>same non-governmental organizations that orchestrated the CCSS</u>, that is Achieve and Jason Zimba's Student Achievement Partners, are the "pedagogical guides" for OUR.

A review of the OUR website touts, "JUST ANNOUNCED: Curriculum becomes highest-rated math program on EdReports." A visit to the <u>curriculum reviews webpage</u> boasts "Open Up Resources 6-8, *authored by Illustrative Mathematics* [emphasis added], is top-rated by Ed Reports . . . – it was their most-read review of a math curriculum in 2018." But then, OUR was just released in 2018 after <u>beta testing during the 2016-2017 school year</u>. Interestingly, the same philanthropist that launched OUR's Creative Commons is the philanthropist that launched EdReports.

—— Grantmakina – AWARDED GRANTS NOTE: The Awarded Grants page is currently undergoing system maintenance and, during this time, grants made after October 15, 2018 will not be reflected below. System maintenance will conclude in February. If you have any questions on awarded grants please contact us. Creative Commons Q SEARCH GRANTS Your search for Creative Commons 🛽 returned 3 results. GRANTEE YEAR 🔻 PROGRAM AMOUNT ISSUE Creative 2013 College Ready US \$500,000 Commons Program Corporation Creative 2011 College Ready US \$1,099,687 Commons Program Corporation Creative Postsecondary US 2011 \$8,501,764 Success Program Commons Corporation

Figure 4. Multiple Grants from B&MGF to Creative Commons

B&MGF launched EdReports in 2015. Since then, the foundation <u>awarded EdReports over \$15</u> <u>million</u> to generate reports rating curricula with respect to their alignment to the CCSS (Figure 5).

| AWARDED GRANTS | | | | | | | | | |
|--|--------------|--------------|---------------|--------------------------|--|--|--|--|--|
| TE: The Awarded Grants page is currently undergoing system maintenance and, during this time, grants made after October 15, 2018 will not be reflect ow. System maintenance will conclude in February. If you have any questions on awarded grants please contact us. | | | | | | | | | |
| EdReports | c | SEARCH GRANT | rs | | | | | | |
| ır search for EdReports 3 retu | ŭ | | | | | | | | |
| GRANTEE | YEAR 🔻 | ISSUE | PROGRAM | AMOUNT | | | | | |
| JKANTEE | | | | | | | | | |
| | 2018 | K-12 | US Program | \$7,000,00 | | | | | |
| EdReports.org, Inc. EdReports.org, Inc. | 2018 2016 | K-12 K-12 | | \$7,000,00 \$6,674,95 | | | | | |

Figure 5. Multiple Grants from B&MGF to EdReports

Interestingly, EdReport reviewers are screened for their expertise and commitment to the Common Core State Standards. The rubrics comparing math curricula evaluated by EdReports teams include scores for alignment to CCSS for mathematics. Categories include Focus & Coherence, Rigor and Mathematical Practices, Alignment Rating, and Usability Rating, but no research data are provided to compare the effects of implementing any of the evaluated curricula on student learning, for example, student test performance after instruction. So it's safe to say, IM is Bill Gates's vehicle for employing lead CCSS mathematics writer, William McCullum, to develop curriculum and materials to implement the CCSS at the classroom level; and EdReports is his vehicle for a public relations campaign to promote the curriculum and materials he underwrote.

The fact that EdReports reviewed LearnZillion and OUR and gave each of them the highest rating possible suggests that the small cadre of CCSS writers and underwriters are not affected by the same voices repeating messages in the echo chamber in which they sit. Apparently, they are satisfied with pseudo-science passing as advocacy research, and don't believe they need validation outside of their cult-like circle of believers. Nor do they believe authentic, independent, external reviews of their standards, curricula and materials aligned to those standards is necessary; or, more importantly, that research comparing the effects of CCSS-aligned instruction delivered online with the effects of classical liberal arts instruction delivered without technology can contribute to achieving the goal of improving American education. Controlling the national narrative by funding advocacy research rather than intervention research calls into question the true agenda underlying Bill Gates's education reforms.

Though the <u>CCSS Initiative website</u> insists that the standards do not have data collection requirements associated with them, in a July 21, 2009 speech delivered at the <u>National</u> <u>Conference of State Legislatures</u>, Gates laid out his plans for an integrated, digitized education system linked together by a statewide longitudinal data system funded by the federal government At a 2012 Education Datapalooza, eScholar CEO Shawn Bay explained his role in working with big data in education including the statewide longitudinal data systems funded by the U.S. Department of Education <u>Statewide Longitudinal Data System Grant Program</u>. The purpose of the grants is to capture, analyze, and use student data from preschool through the workforce. Bay described the design and function of open data to track individual students and stated that <u>CCSS</u> was "the glue that actually ties everything together" (9:19 minute mark). Just recently, however, Erika Cheung, who was thrust into the national limelight as a whistleblower in the Theranos blood-testing fraud case warned, ""We don't know how to handle new technologies anymore, . . . and we don't know the consequences necessarily that they'll have."

Gates freely admitted that he had no evidence the CCSS Initiative would work. In a September 13, 2013 interview he gave at <u>Harvard University</u> (45:22 minute mark), Gates said, "It would be great if our education stuff worked, but that we won't know for probably a decade." Later, <u>at the Clinton Global Initiative</u>, Gates "argued that private philanthropists should be taking more risks than government or businesses. Private money, he explained, can afford to fail in ways that corporate and public money cannot." Gates was not concerned that his philanthropic failures would be absorbed by other people's children when he freely admitted that reforming American education was the riskiest project of the B&MGF and that "it might all go to waste. <u>Gates does not enroll his own children</u> in schools implementing CCSS.

CCSS: Propelled By Inertia

When CCSS architects David Coleman and Jason Zimba pitched their idea for "Math and Science Standards That Are Fewer, Clearer, Higher to Raise Achievement at All Levels," in a white paper they wrote for the Carnegie-IAS Commission entitled <u>The Opportunity Equation</u>, they explained the theoretical underpinnings of their ideas; they grounded their beliefs in a body of research on <u>expert performance</u>. The subjects in that body of work, however, are healthy, normal adults under controlled test conditions. Yet even the lead researcher of the studies cited, Anders Ericsson, admits,

It is hard to imagine better empirical evidence on maximal performance except for one critical flaw. As children, future international-level performers are not randomly assigned to their training condition. Hence one cannot rule out the possibility that there is something different about those individuals who ultimately reach expert-level performance.

Apparently, Coleman and Zimba selected a body of research using a sample population that is not representative of the population in normal K-12 classrooms to advance their position that

instruction of children should be designed to emulate the habits of expert performers, in so doing schools will "increase radically the number and diversity of our highest performers." They recommend that, "Additional research is needed to better document the scope of the phenomenon and evaluate the effectiveness of various interventions" but, intervention research is not something Bill Gates funds IM or EdReports to do. So, curriculum committees are really no better informed about the effects of the IM-CCSS philosophy, sequence, and pedagogy than they were when Coleman and Zimba pitched their mathematics standards idea to Carnegie-IAS in 2008.

In October 2017, Bill Gates blogged that the CCSS Initiative had not delivered as he had hoped; and shifting to a "consumer beware" position, he wrote,

If there is one thing I have learned, it is that no matter how enthusiastic we might be about one approach or another, *the decision to go from pilot to wide-scale usage is ultimately and always something that has to be decided by you* [emphasis added] and others the field.

Missouri's DESE <u>does not provide guidance</u> on instructional materials adoption; therefore, if the board chooses to appropriate half a million taxpayer dollars for IM products developed for implementing CCSS in mathematics online without any intervention research data to justify the expenditure, the onus of responsibility if SPS student learning as measured by metrics approved by the state board of education is on the district board of education.

National, State, and Local Mathematics Assessment Trends

That said, the results of two national assessments used by the Missouri state board of education to monitor student learning provide trend data associated with the effects of CCSS bundled with other Obama-era education reforms. *EducationNext* published a study in April 2018 of student performance on the National Assessment of Education Progress (NAEP) in mathematics and reading since the adoption of CCSS by 45 states at the outset of the Obama administration. The author, Paul Peterson, referred to the graphic shown in Figure 6 and commented that "Student gains registered over the Obama years were trivial at best, . . ."

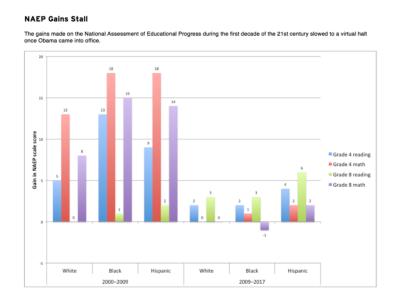


Figure 6. 2000-2017 NAEP Math and Reading Scores of Racial Groups

Similarly, trends in national and Missouri ACT scores indicate a drop in college readiness, especially in math. The <u>Dayton Daily News</u> reported the "Class of 2018 graduates' average ACT math score dropped to the lowest level in more than 20 years, at 20.5. An October 2018 <u>Wall</u> <u>Street Journal</u> article reported that only 40% of 2018 graduates taking the ACT met a benchmark indicating they could succeed in a first-year college algebra class. That is down from 41% in 2017 and a high of 46% in 2012. The article quoted ACT Chief Executive Marten Roords called the math scores a "red flag" saying, "Math specifically concerns me" A table comparing <u>Missouri's ACT</u> scores over the last 5 years (Figure 7) and the rows showing 2016 through 2018 ACT test results (the years in which Missouri reported a 100% participation), indicates that Missouri's graduating class of 2018 produced the lowest math scores were recorded in the last five years, and well below the national average. SPS district's ACT <u>mathematics composite</u> score was 19.5, lower than the state's 19.7.

Figure 7. MO Graduating Class ACT Scores

| | Number o | of Students | | | | | Average ACT Scores | | | | | |
|------|----------|-------------|---------|----------|-------------|----------|--------------------|----------|---------|----------|-----------|----------|
| | Tested | | English | | Mathematics | | Reading | | Science | | Composite | |
| Year | State | National | State | National | State | National | State | National | State | National | State | National |
| 2014 | 48,865 | 1,845,787 | 21.6 | 20.3 | 21.1 | 20.9 | 22.3 | 21.3 | 21.7 | 20.8 | 21.8 | 21.0 |
| 2015 | 49,640 | 1,924,436 | 21.4 | 20.4 | 21.0 | 20.8 | 22.2 | 21.4 | 21.7 | 20.9 | 21.7 | 21.0 |
| 2016 | 68,446 | 2,090,342 | 19.7 | 20.1 | 19.8 | 20.6 | 20.6 | 21.3 | 20.4 | 20.8 | 20.2 | 20.8 |
| 2017 | 68,480 | 2,030,038 | 19.8 | 20.3 | 19.9 | 20.7 | 20.8 | 21.4 | 20.5 | 21.0 | 20.4 | 21.0 |
| 2018 | 68,424 | 1,914,817 | 19.5 | 20.2 | 19.7 | 20.5 | 20.5 | 21.3 | 20.0 | 20.7 | 20.0 | 20.8 |

Table 1.2. Five Year Trends—Average ACT Scores

Though the specific contribution of CCSS to the downward trend of student assessment performance in elementary through high school grades is not readily discernable, the temporal

relationship between the adoption of the CCSS throughout the country and the decline in student performance as reported by Education Next and ACT suggest that the implementation of the CCSS Initiative has not improved the education of American children as promised. Since launch of CCSS the achievement gap has not closed and students have <u>lost opportunity to learn</u>.

Summary

Though in the study meeting, the high numbers of SPS students identified as receiving Free and Reduced Lunch is offered as an explanation for SPS students' poor math performance as measured on national and statewide assessments, CCSS architects Coleman and Zimba grounded their design of Common Core math standards in a theory of learning that was supposed to eliminate differences in the math performance of students differentiated by family socio-economic level, race, and education background. SPS introduced 1:1 technology to make student opportunity to learn equitable, and math teachers underwent intensive professional development to faithfully implement lessons aligned to CCSS.

It was, and continues to be the intention of the general assembly representing the people of Missouri that CCSS not be implemented in this state. A Google search resulted in no hits when searching for intervention research conducted to provide an independent, external review of the effects of the CCSS Initiative on student learning. A small group of CCSS developers and funders, however, disseminate advocacy research to promote the implementation of CCSS standards, curriculum, and assessments deceptively incorporated into low-cost products to incentivize adoption by cash-strapped school districts. Evidence suggests that the clandestine purpose of CCSS to function as a component of a national data collection system for tracking student performance throughout an individual's school and work years.

Though the state board of education adopted Missouri Learning Standards in 2016, evidence suggests that, regardless of the content of the state standards, SPS has been implementing CCSS-aligned math programs including i-Ready in district classrooms, and providing additional support to students who qualify based on i-Ready assessment results, yet, SPS's 2018 MAP test results indicate students in third through eighth grades test below average in math.

The consistently downward trend of mathematics scores of elementary and high school students on multiple national assessments, including the NAEP and ACT, over time suggests that CCSS philosophy, sequence, and pedagogy have has not improved student performance on tests of mathematics regardless of what the standards are called in various states. The below-stateaverage mathematics scores of SPS elementary and middle school students on the MAP, despite implementation of CCSS-aligned formative assessment and intervention delivered in online programs, suggests SPS student math performance will not likely improve with the adoption of another CCSS-aligned online math program

Conclusion

IM curricula and materials are similar to the current SPS mathematics program in that they are designed to implement CCSS in an online format. National and statewide assessment data presented indicate that student learning has not improved under the current system. As an outgrowth of the CCSS Initiative dedicated to the implementation of the CCSS, IM violates Missouri appropriations legislation which prohibits DESE from expending funds for the implementation of CCSS. A Google search resulted in no hits when searching for intervention research involving CCSS indicating no data are available to recommend products aligned to CCSS than any other products.

Recommendation

The SPS board of education should not approve the agenda item lines 3-4 for purchase of products derived from IM and distributed by LearnZillion and Open Up Resources.