



Connecticut State Department of Education
Mastery Examination Committee

MINORITY REPORT

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INTRODUCTION

The Connecticut Education Association (CEA), joined by AFT Connecticut (AFT CT), has prepared the following Minority Report of the Connecticut Mastery Examination Committee as an alternative to the report drafted by the Connecticut State Department of Education (CSDE).

CEA and AFT CT appreciate the work of the CSDE and the commissioner, as well as the participation of other Mastery Examination Committee members. CEA and AFT CT respectfully disagree, however, with many of the findings in the report prepared by the CSDE and note that those areas of disagreement, and significant research and information that was presented to and discussed by the committee, are not reflected in CSDE's report.

Connecticut is a governing member of the Smarter Balanced Assessment Consortium (SBAC), with a seat on SBAC's executive committee. CSDE has remained committed to using the SBAC examination even as most other states have selected alternatives. Despite requests that the Mastery Examination Committee hear from testing experts representing a diversity of views, including those critical of SBAC, presentations to the

Committee regarding SBAC were made primarily by CSDE employees and those affiliated with Connecticut's use of SBAC. While those presentations were useful, they did not provide insight as to why the majority of states have rejected SBAC.

CEA and AFT CT submitted to the Committee research, reports, surveys, and information from multiple sources that raised significant questions as to the validity, reliability, and fairness of the SBAC test and its impact on students. That research is included here. This report provides "the rest of the story" for those seeking to know more about SBAC and its effect in Connecticut.

The work of the Committee focused primarily on the new SBAC assessment, and this report focuses primarily on SBAC. Regarding the recent selection of the SAT as Connecticut's high school mastery examination, all of our concerns about using a mastery exam only for its designed and validated purposes apply equally to the SAT, and the SAT must be independently validated. The SAT is not designed for school ranking or educator evaluation. Additionally, the Science CMT being administered by the state is new and will require further review.¹

EXECUTIVE SUMMARY

Summative mastery examinations such as SBAC, when validated, can help to examine the broad effects of curriculum and instructional interventions. SBAC, however, suffers from numerous challenges to its validity, reliability, and fairness.

The SBAC test has inappropriately replaced academic standards as the driving force in Connecticut education. Some have characterized this as "the tail wagging the dog." Increased test prep and practice have cut into classroom instruction time. Computer labs and school libraries are increasingly off limits to students during the many weeks of SBAC testing.

The administration of the test on various electronic devices has had a discriminatory effect, especially for students from high-poverty communities, and threatens the validity, reliability and fairness of the test. SBAC's complex computer adaptive format has not been independently validated. The invalid use of the test for ranking schools and evaluating educators has encouraged the proliferation of additional testing—practice exams, programs, and other tests that purport to predict performance on Common Core-related tests such as SBAC—that have further diminished classroom instruction time and a diverse curriculum.

For all of the time that schools are required to spend on the administration of SBAC, the test does not inform classroom instruction, nor does it assist teachers in addressing the academic needs of their students. During the three years of SBAC use in Connecticut, the test has had a negative impact on teaching, students, and student learning time.

The future of the Smarter Balanced Consortium is uncertain, as the number of states affiliated with SBAC has declined dramatically. Unfortunately, hundreds of millions of federal education dollars have been wasted on a test that a majority of states have rejected and replaced with other assessments.²

Connecticut can seek alternatives. The new federal Every Student Succeeds Act provides greater flexibility for assessment and statewide mastery examinations. Connecticut is no longer limited to a standardized examination that does not address the needs of students (see Examples of Summative Assessments, and Conclusion, below). Other states such as New Hampshire are innovating with portfolio systems that show growth and academic progress throughout a school year.

RECOMMENDATIONS

1. Connecticut should explore why the majority of states have left the Smarter Balanced Consortium entirely and prepare a Request for Proposals for an alternative mastery examination when the state's current contract with SBAC ends. Thirty-one (31) states originally signed up with the Consortium; today only fourteen (14) states remain, nine of which do not use SBAC for high school assessment (including Connecticut). Connecticut risks uncertainty in its assessment program as states continue to replace SBAC and potentially undermine the Consortium's viability.
2. The state should investigate why the SBAC test discriminates against students in high-poverty communities (computer device and fluency disparities, summer loss and the lack of sufficient enhanced summer academic opportunities as well as other issues discussed in this report). The state should address these inequities and encourage a holistic and diverse rather than narrowed curriculum. Testing experts, as well as the Every Student Succeeds Act, define appropriate testing as that which is valid, reliable, and fair. SBAC is not fair to all students.
3. The state should put into place a plan, pursuant to guidelines outlined by the Council of Chief State School Officers (see Section II), to investigate and continuously monitor a) computer device effects, b) variance in student computer skills and fluency, and c) computer adaptive test alignment and question pool issues. All of these factors currently threaten mastery examination validity and comparability.
4. The state mastery examination should not be used for purposes beyond its design and validity. As testing expert James Popham recently stated in *Education Week*, "Tests built chiefly for comparisons are not suitable for purposes of instruction or evaluation of instructional quality in education. These tests provide teachers with few instructional insights and typically lead to inaccurate evaluations of a teacher's instructional quality."³
5. The purpose of the state mastery examination should be to accurately assess student knowledge for use by local and state educators in making programmatic and curricular decisions to advance student learning. SBAC is not designed for or meant to serve as a diagnostic measure to directly inform a teacher's classroom instruction or student learning objective, a school rating, or an educator evaluation. Instruction should be driven by holistic academic standards, not tests.
6. The state should measure student growth through assessments and tools that have been designed and independently validated for that purpose. The state should not use SBAC as part of a "student growth model" that will lack validity and reliability (see Sections III and IV).
7. The state should reassess the developmental appropriateness of SBAC, particularly for elementary school students.

STATUTORY AUTHORITY AND REQUIREMENTS

The legislature approved the following mandatory inquiries for the Connecticut Mastery Examination Committee and required that the committee shall examine:

- The impact of the statewide mastery examination on teaching, students, and student learning time
- The administration of the statewide mastery examination on computers or other devices
- Whether the statewide mastery examination is an appropriate student assessment
- Whether the statewide mastery examination:
 - Responds to student needs
 - Offers accommodations for students with disabilities and students who are English language learners
- Informs teachers of student progress
- Aligns with curriculum standards adopted by the State Board of Education
- Complies with the requirements of federal law
- The feasibility of decreasing the amount of time required to complete the statewide mastery examination by using alternative formats or alternative methods of delivery
- Ways to facilitate timely communication between the State Board of Education and local and regional boards of education with regard to the statewide mastery examination

FINDINGS

I. The impact of the statewide mastery examination on teaching, students and student learning time

Teaching: Ninety percent (90%) of teachers in Connecticut stated that practicing and prepping for the Smarter Balanced Consortium exam (SBAC) takes away significant time and resources from teaching and learning in the classroom.⁴ The schools that suffer the worst from lost time and resources are those in high-poverty districts.⁵

- Eighty-seven percent (87%) of Connecticut’s teachers stated that SBAC does not provide them with information to help improve student learning, nor does it provide students with academic assistance or feedback.⁶
- Ninety-one percent (91%) of school administrators stated that formative assessments would do a better job than SBAC in assessing and improving student achievement.⁷

The use of SBAC for invalid purposes, such as the numeric ranking of schools and educator evaluation, has encouraged schools to narrow the curriculum, de-emphasize non-tested subjects and skills, and focus on test preparation and practice.⁸ This undermines academic diversity for students.

“Testing is an important part of education, and of life,” said Michael Casserly, executive director of the Council of Great City Schools, which represents 67 urban school systems. “But it’s time that we step back and see if the tail is wagging the dog.”⁹

Performance on SBAC and meeting the demands of the assessments is increasingly the goal that drives instruction instead of academic standards and skills (such as creativity, critical thinking, communication, and collaboration). In its literature explaining the availability of practice questions and tests, the Smarter Balanced Consortium noted, “Educators can use them to plan the shifts in instruction that help students meet the demands of the assessments.”¹⁰ This shift in the substance of what the Consortium encourages educators to emphasize—“the demands of the assessments”—underscores how the SBAC test is inappropriately replacing academic standards as the driving force in Connecticut instruction. It may also mislead students and parents into believing that an adequate SBAC or SAT test score is a proxy for a well-rounded education and success in life.¹¹

Students: The SBAC test has resulted in increased frustration and anxiety for many students, especially those in high-poverty districts.

- Eighty-five percent (85%) of elementary school teachers stated that the computerized format of the test was not developmentally appropriate for their students.¹²
- More than two-thirds (69%) of teachers in the state’s poorest schools stated that SBAC has had a negative effect on the social and emotional well-being of children, compared to 53% in the wealthiest schools.¹³

The test’s lack of developmental appropriateness and its bias against students in high-poverty school districts skews the results for many children. This hurts students in a variety of ways, including not only lost learning time but also in creating distorted inferences about student growth, achievement gaps, and the misalignment of educational resources and student needs. These outcomes harm all students, especially those in Connecticut’s poorest communities.

Student learning time: Student learning time has decreased in proportion to the amount of time that is increasingly spent on test prep, practice, and the administration of the SBAC test. The SBAC test has decreased student access to computer labs (the facilities are used for many weeks for testing), decreased time for classroom teaching, and encouraged teaching to the test. Seventy-seven percent (77%) of teachers stated that their students have lost significant access to computers and technology throughout the school year because the SBAC test preparation and administration limited their access to computer labs and school libraries.¹⁴

II. The administration of the statewide mastery examination on computers or other devices

While the administration of the SBAC test on computers has certain advantages, such as greater ease of scoring for the testing consortium, drawbacks include problems with validity and discriminatory impacts for students who have less access to computers. In California, 115 university researchers examined the SBAC format which requires Internet connectivity, computer familiarity, and computer use for the assessments and practice assessments. They concluded that SBAC assessments “favor middle and high-income students who typically have easier access to technology, Internet connectivity, and keyboard practice both inside and outside of school.”¹⁵

FINDINGS, continued

Variances in student computer skills and fluency:

Students who have advanced computer skills and fluency have an advantage taking the SBAC test and score higher compared to students with less computer familiarity.¹⁶ Multiple studies have indicated that varying degrees of computer fluency, especially for students who do not have access to computers outside of school, impacts those students, their test scores, and the validity of the test. The computer format of SBAC discriminates against students who have less access to computers at school, at home, and during the summer. *Education Week* recently noted that “a mounting body of evidence suggests that some students tend to do worse on computer-based versions of an exam, for reasons that have more to do with technology than with their academic knowledge and skills.”¹⁷

A study of the 2011 computer administration of the NAEP assessment concluded:

“Students who had greater access to technology in and out of school and had teachers that required its use for school assignments used technology in more powerful ways to write and scored significantly higher on the NAEP writing achievement test.... Such clear and direct relationships are few and far between in education—and these findings raise many implications for states and districts as they shift to online assessment.”¹⁸

While one of the goals of schools has been to provide students with more opportunities to use technology, the fact that many students lack the in-school and at-home computer resources of other students will continue to adversely impact the validity and reliability of SBAC scores, especially for students in high-poverty school districts.

Teacher observations: After the third Connecticut administration of the SBAC test in the spring of 2016:

- More than half (53%) of teachers stated that they observed system and computer crashes; the number was significantly higher in the poorest school districts (62%).
- Forty-four percent (44%) of teachers observed problems logging into the test; the number was higher (52%) in the poorest school districts.
- One-third (33%) observed students not being able to complete portions of the test due to technical problems; the number was higher (41%) in the poorest school districts.¹⁹

Administrator observations: The Connecticut Association of School Administrators received feedback from 320 public school administrators in January and February of 2016:

- Nearly three-quarters (72%) of administrators disagreed with the statement that “the computerized test administration is user friendly and developmentally appropriate for students in my school.”
- A majority (55%) of administrators agreed with the statement, “many students do not exhibit the computer or fine motor skills necessary to perform the test.”²⁰

Parent observations: The Connecticut PTA asked parents whether the administration of the Smarter Balanced test on computers and other electronic devices was “a step forward,” “difficult for children,” “helpful to analyze students’ progress,” or “time consuming.”

- Sixty-nine percent (69%) of Connecticut parents selected either “difficult for children” (42.4%) or “time consuming” (26.8%).²¹
- Only 10% said that the computerized format was “helpful to analyze students’ progress.”

Testing device effects and threats to validity: When Connecticut students take the SBAC test on different electronic devices, there is a threat to the validity and reliability of the test if the limitations or effects of the device impact the performance of the student. This threat is different from the computer fluency issue discussed above—it relates to wide variations in the hardware students use to take the test, as opposed to the computer skills of the student. The difference in screen size, keyboard, mouse or track pad, processing speed of the device, speed of the Internet connection, etc., can all contribute to testing outcomes for some students that are influenced by the devices and limitations of technology rather than comparable student knowledge.

Education Week recently noted:

“Relatively little is known about how comparable state tests are when delivered on desktop computers, laptops, tablets, or Chromebooks. Each type of device has different screen sizes and ways of manipulating material—touchscreen vs. mouse, for example—and inputting information—onscreen vs. detached keyboard—factors that could contribute to different experiences and results for students.”²²

FINDINGS, continued

Education Week reported on recent studies showing that digital device choices could impact Common Core test results. A 2016 report by the Council of Chief State School Officers (CCSSO) concluded that “device effects” pose a threat to the validity of student test results.

“The use of different technology-based devices presents the state with comparability concerns that the state must address individually and collectively. The steps taken to mitigate each of the threats posed to comparability and the evidence needed to demonstrate comparability vary across the conditions. It is critical for the state to a) identify individual threats to comparability, b) develop a plan to mitigate each threat individually, c) identify evidence to document or support the steps identified in that plan, and d) identify and collect the evidence needed to demonstrate that score comparability exists collectively across all of the conditions that apply to the particular state assessment program. It is equally critical for the state to consider the interactions among all of the identified threats to comparability and to consider how those threats fit within the larger context of the assessment program.”²³

The state should put in place a plan pursuant to guidelines outlined by the CCSSO to investigate and continuously monitor device effects that can undermine mastery test validity and comparability.

Computer adaptive test: The SBAC test is a “computer adaptive test” (CAT). This means that in addition to being administered on a computer, the test can adjust the difficulty of questions throughout the assessment based on the student’s response. If a student answers a question correctly, the next question will be harder; if a student answers incorrectly, the next question will be easier.

Computer adaptive tests hold the promise of being able to determine the level of student summative skills beyond a single grade level. The validity and reliability of such a test, however—where questions vary for every student, and no two students take the same test—is harder to predict. The test is not standardized and comparable on its face because no two tests are the same. The validity of CAT results depends upon the degree to which the items administered to the test taker represent the intended content, while at the same time emphasizing the content that provides optimal challenge for that student. This alignment will differ from one student to another.²⁴

The validity of the test will also depend upon the adequacy of the pool of test questions over multiple grade

levels. A CAT designed to determine how a student is performing within one grade level (SBAC under the “grade level” requirements of the No Child Left Behind Act of 2001) requires a different pool of questions than a CAT that seeks to determine how a student is performing among multiple grade levels (as SBAC now seeks to do). The pool of test questions for any test is a small sample of the many that could have been asked. If the questions for SBAC are poorly selected or inadequate to accurately measure domains and standards, a student’s test score will be subject to distortion and lack of validity.

In a recent article on computer adaptive tests, researcher Steven L. Wise noted, “It is important to emphasize that research related to content alignment in adaptive tests is in its infancy.”²⁵ Wise acknowledged that formal processes for evaluating alignment and validity for computer adaptive tests have not been established. Morgan Polikoff, of the Thomas Fordham Institute, recently wrote:

“Computer adaptive tests such as Smarter Balanced are just a different beast than traditional fixed-form tests. Thus, measuring the quality of computer adaptive tests and fixed-form tests using the same methodology is fraught with difficulty.... There’s a tendency for computer adaptive advocates to excuse all manner of sins—about item quality, student exposure to aligned content, etc.—simply because the tests are adaptive, and that’s not appropriate either. Computer adaptive tests clearly offer some advantages, but they offer challenges as well. And we can’t be naïve about either their strengths or limitations.”²⁶

The Smarter Balanced Consortium conceded in its Technical Report that there was significant variation in internal consistency reliability—used to assess the consistency of results across items within a test; even the strongest-performing items did not meet standards for commercially developed high-stakes tests.²⁷ The Technical Report also noted, “It is likely that the CAT combined with the performance task will result in sufficient overall levels of reliability.”²⁸ If true, the elimination of the Performance Task will diminish the overall internal reliability of Connecticut’s SBAC testing regimen (see Section V below).

The complex computer adaptive technology that SBAC employs has not been independently validated, and whether it distorts outcomes for students is unknown.

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III. Whether the statewide mastery examination is an appropriate student assessment

As discussed above, there are multiple challenges that SBAC faces regarding validity, reliability, and fairness for its designed purpose—to inform district and school accountability and help local leaders evaluate the broad effects of curriculum and instructional interventions. SBAC’s computer format introduces validity problems related to varying degrees of student computer skills and fluency, device effects, bias, and the uncertainty of content and student-ability alignment within the computer adaptive system. These concerns are especially problematic for students in high-poverty communities. CARE-ED, the California Alliance of Researchers for Equity in Education, examined the SBAC test and concluded that it lacks “validity, reliability, and fairness.”²⁹ The researchers reported that SBAC:

“...not only de-professionalizes teaching and narrows the curriculum, but in so doing also reduces the quality of education and student learning, engagement, and success. The impact is also on student psychological well-being: without an understanding that the scores have not been proven to be valid or fair for determining proficiency or college readiness, students and their parents are likely to internalize failing labels with corresponding beliefs about academic potential.”³⁰

The Smarter Balanced Consortium has acknowledged that for certain student demographic groups with lower-than-average scores, the SBAC test has lower levels of reliability than for the student population as a whole.³¹

Inappropriate for informing classroom instruction, educator evaluation, or school ranking: The validity, reliability, and fairness of the statewide mastery examination plummets when it is used for an objective beyond its purpose and design. The Connecticut State Department of Education has stated that SBAC is not designed or valid for the purpose of informing specific classroom instruction. In addition, SBAC is not designed or valid for educator evaluation or for the purpose of numeric ranking of schools. If SBAC is used as one of a number of indicators for such purpose, it is still invalid and unreliable, and will result in erroneous outcomes that can harm students and schools.

Unreliable for measuring growth over time for an individual student or small groups of students:

Inferences about growth are less accurate than inferences about status at one point in time because the growth score on any test is influenced by measurement error in

each of the two annual tests (see Section IV below as to “student progress” and “student growth model”).

All tests have a degree of measurement error. The impact of measurement error for an otherwise valid test, while relatively large when measuring individual student growth, decreases when that growth is attributed to larger groups. Using a small subset of scores to evaluate a teacher’s effectiveness, however, is prone to a much higher degree of measurement error; this recently opened the door to litigation in New York. The *Lederman* case in the spring of 2016 led to the suspension of linking test scores to individual teachers’ performance evaluations in New York.

Mastery examination pressures lead to more testing: When SBAC is used for purposes such as school ranking and educator evaluation, school districts often respond with increased testing in an attempt to boost student scores. This includes utilizing practice tests, questions, and interim assessments provided by the Consortium. In addition, schools often choose from a variety of vendors promoting tests that purport to be aligned with Common Core standards and promise to boost SBAC scores. A recently released testing program “allows educators to predict their students’ performance on the Smarter Balanced Assessment Consortium’s ELA assessments.” The company claims its test is “designed to help educators predict and enhance student performance on high stakes state reading tests,” which “translates to better SBAC scores.”³²

The test preparation industry for SBAC is catching up with the well-established industry of preparation services and programs for the SAT, where Connecticut schools are pressured to participate in a test preparation “arms race.” At one high school, departments meet each month to focus “on how to best support student learning with SAT preparation.” Teacher professional development focuses on SAT preparation, and ninth-, tenth-, and eleventh-grade students take the PSAT, SAT practice exams, as well as other SAT preparation exercises.³³ This is a predictable and logical extension of the pressures that result when the mastery examination is mandated for invalid purposes such as school ranking which impacts students, educators, and even the property values of a municipality. State policy must not—by accident or design—equate standardized assessments with the substance and end goal of education, to the detriment of the values of a diverse, standards-based curriculum, and critical academic skills (creativity, critical thinking, collaboration, communication).

FINDINGS, continued

Parent observations:

- Sixty percent (60%) of parents disagree with the statement, “The Smarter Balanced Assessment offers constructive information regarding the individual student needs in math and English language arts.” Only 17% agree.
- Sixty-one percent (61%) of parents disagree with the statement, “The Smarter Balanced Assessment takes the appropriate amount of time.” Only 11% agree.³⁴

Administrator observations:

- Eighty-five (85%) percent of administrators agree with the following: “I support replacing the SBAC test at all grade levels with a new assessment tool that is developed specific to Connecticut and with input from teachers and administrators.”
- Eighty-five percent (85%) of administrators disagree with the statement, “Overall, SBAC has helped improve student learning in my school.”³⁵

Teacher observations:

- Ninety percent (90%) of teachers disagree with the statement, “SBAC is a useful indicator of school effectiveness.”
- Seventy-seven percent (77%) of teachers agree that Connecticut should select or develop an alternative test.³⁶

The future of the SBAC consortium is uncertain:

Thirty-one (31) states originally signed up with the Smarter Balanced Consortium; today only fourteen (14) states remain, nine of which do not use SBAC for high school assessment (including Connecticut). Connecticut should explore why the majority of states have left the Consortium entirely and the alternative mastery examinations those states have selected. By remaining with a test that a majority of states have rejected, Connecticut risks instability and uncertainty in its assessment program.

The Smarter Balanced Consortium may lack financial stability in the near future as more states leave the Consortium and chose other assessments. The University of California at Los Angeles has given notice that it will no longer serve as the fiscal agent for SBAC when its contract ends in 2017. SBAC’s sister consortium, PARCC, issued a Request for Information in 2016 seeking proposals to reorganize the Consortium, which continues to shrink in size (from more than 20 to just seven in 2016).³⁷ The majority of states in the country use tests other than the consortia tests, and Connecticut

should investigate the growing number of assessment options.

IV. Whether the statewide mastery examination:

Responds to student needs:

Answer: SBAC does not respond to student needs. The Connecticut Department of Education acknowledges that SBAC is not designed to inform specific classroom instruction and is not valid for that purpose. Teachers and administrators agree. SBAC does not provide teachers with information to help them meet the academic needs of their students—the results of the test arrive after the school year has ended, and the results would be of no value even if they arrived in the final days of the school year. Schools must rely on other assessments to identify and respond to student needs. The state could, however, choose a mastery examination other than SBAC that would inform classroom instruction and respond to student needs, and not require as many additional, time-consuming tests.

Offers accommodations for students with disabilities and students who are English language learners:

Answer: The SBAC test is required to offer accommodations for students with disabilities and those who are English language learners. Those accommodations, however, have received poor reviews from educators. CARE-ED researchers concluded that SBAC assessments “have not provided for adequate accommodations for students with disabilities and English-language learners, or for adequate communication about such accommodations to teachers.”³⁸

- Eighty-two percent (82%) of Connecticut school administrators disagreed with the statement, “SBAC is user-friendly for students with disabilities.”
- Eighty-six percent (86%) of Connecticut school administrators disagreed with the statement, “SBAC is user-friendly for ELL students.”³⁹
- Sixty-four percent (64%) of teachers did not agree that SBAC’s built-in methods of providing accommodations for students with disabilities worked well.⁴⁰

The Smarter Balanced Consortium has worked to address failings and improve its online accommodations during the past two years. The *Los Angeles Times* reported, however, that problems remain:

“The new test promised technology unavailable to students with disabilities during the old paper-and-pencil

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exams. Instead of teachers reading the test aloud to students with disabilities, the new test had headphones and a dictation tool. And instead of an interpreter standing in front of the class to sign for students with hearing impairments, the new test provided videos of interpreters and closed captioning. But for many, the upgrades were a letdown. The dictation tool used a robotic voice reading the text at a fast clip. In the videos, signs used by American Sign Language (ASL) interpreters were often indecipherable because the interpreters were wearing light-colored clothing or because they were using an ASL dialect unfamiliar to students. The text-to-speech tool did not work for students taking the test who were also using Braille or magnification.”⁴¹

Informs teachers of student progress:

Answer: SBAC is a summative test that provides a snapshot in time of a student’s knowledge of the questions on the test. As researchers have noted:

“Summative assessments (or more accurately, large-scale, standardized assessments) are frequently criticized for a variety of reasons: 1) they provide information too late about a student’s performance; 2) they are disconnected from actual classroom practice; 3) they suffer from ‘construct underrepresentation,’ meaning that one assessment typically cannot represent the full content area, so only those areas that are easily measured will be assessed, and hence, taught; and 4) they have a lack of ‘consequential validity,’ meaning that the test results are used in an inappropriate way.”⁴²

When otherwise valid, a mastery examination can, as CSDE has said, “inform district and school accountability” and “help local leaders to evaluate the broad effects of curriculum and instructional interventions.” The test can inform education leaders about a student’s progress toward mastery of the questions on the exam at the time the test is taken (which for SBAC is often in April). In the near future, however, CSDE intends to use successive SBAC tests as a means to plot and predict student growth, which has numerous validity and reliability problems, explained below.

- **“Student growth model” is not valid.** Using SBAC data to extrapolate and predict student growth in the form of increased scores on future SBAC tests is problematic and potentially harmful to students for many reasons. Inferences and predictions about student growth are less accurate than estimations of academic status at one point in time because:

a) the SBAC test is designed to estimate academic status at one point in time, and is not designed or validated for “student growth models,” b) the score on any student growth model is impacted by measurement error in each of the annual tests, and c) measuring across school years (April to April) as opposed to within a school year (September to June) introduces significant distortion and inequity due to factors outside the classroom, especially the widely recognized issue of “summer loss,” where students who lack summer enrichment fall further behind academically:

“A review of 13 empirical studies representing approximately 40,000 students found that, on average, the reading proficiency levels of students from lower-income families declined over the summer months, while the reading proficiency levels of students from middle-income families improved modestly. In a single academic year, this decline resulted in an estimated three-month achievement gap between more advantaged and less advantaged students. Between grades 1 and 6, the potential cumulative impact of this achievement gap could compound to 1.5 years’ worth of reading development lost in the summer months alone.... Some have suggested that nearly 80% of the achievement difference between high-income and low-income students may be attributable to summer reading loss.”⁴³

Comparing successive years of SBAC test scores administered each April will especially hurt students who are not exposed to enriching activities in the summer; their growth during the September to June school year will not be accurately measured, and the percentage of their summer loss will be impossible to quantify. As a result, appropriate remedies to assist these students will be obscured or missed altogether. Conversely, students in wealthy districts who are afforded enriching summer activities will continue to advance academically outside of the classroom; their “progress” on the SBAC growth model will also not reflect their true growth during the September to June school year, and may infer greater gains in the classroom than actually occurred. In addition, schools will be encouraged to spend even more time and resources on test prep, practice tests, and programs that rob resources and classroom instruction time from students.

If the new SBAC growth model is used to influence instruction, curriculum, school ranking, student learning objectives, and educator evaluation, erroneous conclusions will result. This will hurt schools and

students—especially those in high-poverty communities. “Student growth models” have been deemed to be even less reliable than controversial “value added measures” that include factors such as family income, environment, and influence of peers.⁴⁴

The Smarter Balanced Consortium has not examined the use of SBAC as part of a student growth model for validity, reliability or fairness. The Consortium stated in its technical Report:

“Ultimate use of test scores is determined by Consortium members. Each member decides the purpose and interpretation of scores and each has crafted its own system of reporting and accountability. The Consortium provides information about test content and technical quality, but does not interfere in member use of scores. The Consortium does not endorse or critique member uses.”⁴⁵

There is no independent validation of the use of SBAC for the purpose of this new growth construct, and the use of the tests for this purpose may undermine efforts to increase student learning and achievement. The CSDE should not pursue plans to use SBAC data for this purpose.

Aligns with curriculum standards adopted by the State Board of Education:

Answer: Uncertain. SBAC claims to measure against and align with Connecticut’s Common Core Standards. The transition to these new standards, however, may have introduced noise and error into the scores based on inconsistent implementation of the new Common Core across districts, and unmeasured proficiencies achieved by older students based on the previous Connecticut standards. According to the SBAC Technical Report, “content domain representation and congruence to the Common Core State Standards must be substantiated.”⁴⁶ Also, according to the Technical Report, validity testing to date has been only “partial.” The SBAC Consortium recommends a “host of longer-range validation studies.”⁴⁷ All of the validity testing conducted thus far has focused on the internal structure of the test.

Complies with the requirements of federal law:

Answer: Use of SBAC as a mastery examination complies with federal law. Since the commencement of the Connecticut Mastery Examination Committee, however, federal law has changed; the new Every Student Succeeds Act (ESSA) permits greater flexibility in the selection and use of a mastery exam. Other models, such as a cumulative portfolio of student work (in use in New Hampshire and New York), are possible under ESSA’s Innovation Assessment program.

V. The feasibility of decreasing the amount of time required to complete the statewide mastery examination by using alternative formats or alternative methods of delivery

The Committee did not investigate other examinations and compare completion times. The Connecticut State Department of Education did note that testing time was reduced in high school by replacing SBAC with the SAT assessment.

- Eighty-five percent (85%) of school administrators agreed with the statement, “the recent elimination of the SBAC test for high school juniors was a sensible step and one supported by administrators in my district.”⁴⁸

In addition, the CSDE indicated that removing the “performance” (writing) section from SBAC’s English Language Arts (ELA) examination reduced the time necessary to take the test by nearly half.

The removal of the performance section—which resulted in a welcome reduction of testing time—may nonetheless have impacted the validity of the test. The Smarter Balanced Consortium has stated that a key goal of its assessment is to provide some measure of “the ability to integrate knowledge and skills across multiple content standards.” The Consortium has stated that the “performance” section of the test would fulfill that goal. “Smarter Balanced will address this ability through performance tasks, *because it cannot be adequately assessed with selected-response or constructed-response items*” (emphasis added).⁴⁹ The removal of the performance section from the ELA test appears to have diminished the assessment of a student’s “ability to integrate knowledge and skills across multiple content standards.”

VI. Ways to facilitate timely communication between the State Board of Education and local and regional boards of education with regard to the statewide mastery examination

The Connecticut Department of Education has stated that it works in close consultation with local school districts regarding the state mastery examination and communicates with local educators through newsletters and online resources.

DEFINITIONS

Definition of the state Mastery Exam—Connecticut has defined the state mastery exam by state statute (CGS 10-14n):

“Mastery examination” for students enrolled in grades three through eight means an examination “that measures essential and grade-appropriate skills in reading, writing or mathematics” and “science,” and for students enrolled in grade eleven, a nationally recognized college readiness assessment that “measures essential and grade-appropriate skills in reading, writing and mathematics.”

Connecticut’s Mastery Exam, the Smarter Balanced Consortium or SBAC test, is a summative assessment. The Council of Chief State School Officers has defined “summative assessment” as follows:

“Definition: Assessment referred to as summative is designed to provide information regarding the level of student, school, or program success at an end point in time. Summative tests are administered after the conclusion of instruction. The results are used to fulfill summative functions, such as to (1) reach an evaluative judgment about the effectiveness of a recently concluded educational program; (2) arrive at an inference about a student’s mastery of the curricular aims sought during an in-class instructional sequence; (3) arrive at a grade; or (4) meet local, state, and federal accountability requirements.”⁵⁰

The Connecticut Department of Education recently defined the purpose of the mastery exam as follows:

“An assessment must be conducted for a clear and stated purpose. The assessment instrument that is used must provide the information necessary to support the decisions for that purpose. The state summative academic assessment is an important component for ensuring that we—the state, districts, and schools—are fulfilling on the promise of a high-quality education for all students that prepares them for college, careers, and life. This summative assessment is akin to an annual physical. It can inform district and school accountability. It can help local leaders to evaluate the broad effects of curriculum and instructional interventions. It can also measure student growth over time. However, it is not meant as a diagnostic measure to directly inform a teacher’s classroom instruction on a daily/weekly basis. Such determinations are left to those who are better attuned to the academic needs of our students, i.e., our teachers and our instructional leaders. Consequently, the state summative assessment should remain focused on those elements that provide the essential information to fulfill the purposes outlined above without unduly burdening our teachers, students and families.”⁵¹

EXAMPLES OF SUMMATIVE ASSESSMENTS⁵²

(Under ESSA, mastery examinations are not limited to summative standardized tests that provide no instructional guidance to teachers, or classroom benefit for students)

- End-of-unit tests or projects. When assessments reflect the stated learning objectives, a well-designed end-of-unit test provides teachers with information about individual students (identifying any student who failed to meet objectives), as well as provides an overall indication of classroom instruction.
- Course grades. If end-of-course grades are based on specified criteria, course grades provide information on how well a student has met the overall expectations for a particular course. Course grades can be combined with end-of-unit tests or projects (above) and portfolios (below) for a comprehensive documentation of the evolution of student performance and growth within a school year.
- Standardized assessments. Tests that accurately reflect state performance and content standards provide an indication of how many students are achieving to established grade-level expectations.
- Portfolios. When used as part of an evaluation of student learning, portfolios provide evidence to support attainment of stated learning objectives.⁵³

CONCLUSION

Getting educational assessment right is critical for the future of Connecticut's children.

Students, parents and educators have witnessed years of a failed national experiment that claimed increased testing would improve student learning and eliminate inequality. In fact, increased testing has diminished student learning, discouraged a rich and diverse curriculum, and deepened inequality. The proliferation of tests and test prep has not enriched students; instead it has enriched testing corporations.

In Connecticut, we have an opportunity to move forward in a positive way. We can reduce time spent on wasteful testing and the "arms race" of the test preparation industry by using the mastery examination only for its designed and validated purposes. Assessments must serve and not supplant academic standards and student learning, and they must be independently validated. Connecticut should select a mastery examination that *does* inform classroom instruction and address student needs.

Increased standardized testing has proven to be no substitute for real solutions to inequality in education, such as high-quality pre-K for all, math and literacy coaches, Family Resource Centers, low student-to-teacher ratios, school social workers to meet the social and emotional needs of students, access to a high-quality school library, early identification and support for special needs students, summer academic programs for high-risk students, Community School engagement and internship programs that help end the school-to-prison pipeline, and well-educated and well-qualified teachers and administrators.

Monty Neill, the executive director of the National Center for Fair & Open Testing, recently said:

"The way we measure students' academic progress sends powerful messages about what kinds of learning we value. When measurement systems are used to evaluate schools, the factors they emphasize can control classroom practices, for good or ill.

The test-and-punish approach embodied in the federal No Child Left Behind (NCLB) law undermined educational quality for many and inhibited school improvement. With these harmful consequences, it also delivered a message that deep learning and supportive, healthy school environments do not matter.

The damage has been most severe in the most under-resourced communities. There, the fixation on boosting test scores not only undermined teaching and learning. It also led to mass firings, school closings, and deteriorating educational climates that fed the school-to-prison pipeline. The Every Student Succeeds Act (ESSA), which replaces NCLB, creates the possibility for states to shift the focus of accountability from punishment of schools and teachers to policies that genuinely help improve educational quality and equity.

ESSA includes an 'Innovative Assessment' pilot project, which opens the door to significantly better assessments.... The "Innovative Assessment Demonstration Authority" allows up to seven states to implement new state assessment systems. These will be phased in over time to replace existing standardized tests. This initiative could lead states to fundamentally improve student assessment.... States that take advantage of this provision should focus on measurement practices that support rich, deep learning for all children. That will liberate classroom assessment from the confines of standardized tests, as well as provide useful accountability data."⁵⁴

ENDNOTES

- 1 The charge of the Committee included a review of all statewide mastery exams, such as the SBAC test, the revised SAT administered in the 11th grade, and the new Science CMT. Reviews of the SAT and alternative options for a high school mastery examination to be selected by districts under the Every Student Succeeds Act were not discussed and remain beyond the scope of this report. Therefore, this minority report focuses on the SBAC test.
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- 6 Experience With The Implementation Of SBAC In Connecticut, Abacus Associates Survey Report, October 2016.
- 7 Connecticut Association of School Administrators 2016 Member Survey.
- 8 Common Core State Standards Assessments In California: Concerns And Recommendations, CARE-ED, February 2016.
- 9 https://www.washingtonpost.com/local/education/school-standardized-testing-is-under-growing-attack-leaders-pledge-changes/2014/10/15/bd1201b8-549b-11e4-ba4b-f6333e2c0453_story.html
- 10 <https://www.smarterbalanced.org/assessments/sample-questions/>
- 11 https://www.michigan.gov/documents/mde/Integration_Research_document_v9.10.14_469022_7.pdf “The inclusion of all curricular areas is important to the education of students, e.g., integrating creative writing, music, and/or arts enhances student achievement in other subject areas rather than reducing learning to focus subjects in accountability systems (Jacobs, 1989; Drake 2007). Application of skills from process-oriented disciplines strengthens both the skill and content learning in the subject areas into which process is integrated (Hartzler, 2000). Integration results in teaching of depth versus breadth, encourages multiple intelligences, and allows for the infusion of literacy and/or thinking skills, amongst other enhancements (Hartzler, 2000; Drake, 2007) aligned to 21st century academic abilities.”
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- 44 Audrey Amrein-Beardsley, *Rethinking Value-Added Models In Education*, Routledge, pg. 70, (2014).
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