State Assessment and High School – *A square peg for a round hole*

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In the nearly five years since the Every Student Succeeds Act (ESSA), the latest reauthorization of the Elementary and Secondary Education Act of 1965, became law states have struggled to gain approval from the United States Department of Education (USED) for use of the ACT and SAT as their high school assessment. The primary sticking point is the alignment of those assessments to the depth and breadth of state high school content standards. USED is not incorrect in their interpretation of the law. States are not incorrect in either their desire to use the college admissions tests as their state assessment or in their inference that the law encourages them to do so. Unfortunately, this stalemate was as unavoidable as it is unsolvable under the current rules of play. It is also only the latest example of the difficulty in trying to design high school state assessment programs that meet federal assessment requirements.

Like the proverbial square pegs and round holes, some things just don't quite fit well together. Over the past twenty-five years, it has become clear that high school and state assessment fall into that category. The American concept of the comprehensive high school has been structured around students pursuing a variety of pathways to diverse postsecondary destinations. State assessment has been structured around the concept of all students traveling the same route at the same rate; arriving at a common destination at the same time. It should not come as a surprise, therefore, that when the irresistible force of high school meets the immovable object that is USED the result is nothing more than raised temperatures and a lot of wasted energy.

That is not to say that there is no role for state-sponsored or even state-mandated assessment in high school. As with any use of assessment, the key is determining how best to use assessment in a way that is consistent with, and ideally even advances, the purposes and goals of high school. Acknowledging that traditional approaches to state assessment in high school have not worked well is the first step to finding a solution. Accepting that the best use of state assessment in high school might require that we expand our thinking around what constitutes state assessment is the second step. After that, we can focus on the critical issues of defining the purpose and goals of high school and determining the ways in which to best use assessment to help educators and students achieve those goals.

In this white paper, we review conflicts between the traditional roles of high school and state assessment, examine the current context of state assessment within the federal requirements of ESSA, and share a vision for state assessment in high school that meets the spirit, if not the letter, of the law.

Part I – Purpose and goals of High School and State Assessment

The American High School

The comprehensive high school (aka, The American High School), if not unique to the United States, is a distinctly American concept (Conant, 1959; Tanner, 1982). With the first public high schools emerging in the mid-1800s, the concept of the comprehensive high school was shaped in the early 20th century. The comprehensive high school was designed to meet two fundamental, complementary goals, one academic and one clearly non-academic. The Cardinal Principles of Secondary Education set forth in

1918 by the Commission on the Reorganization of Secondary Education described these "two complementary functions of the comprehensive high school

- The specializing function would have the comprehensive high school serve the variegated needs of a heterogeneous student population through a variety of courses, programs, and activities.
- The unifying function required that the comprehensive high school include provisions for unifying youths with different backgrounds, abilities, and aspirations so that they would learn to live together in a diverse democratic society." (Wraga, 2000).

On the academic side, there would be a core body of knowledge and set of skills required of all students. Beyond that core, however, instruction would diverge to meet students' interests and/or needs. Through all other activities, students would learn to live, work, and interact with each other as they would after high school.

Over the century that followed, the education pendulum has swung away from the model of the comprehensive high school on several occasions. Support for the concept of separate vocational/technical high schools or other specialized high schools has ebbed and flowed; and thoughts on the purpose and definition of vocational education and vocational education programs has evolved over time (Jacob, 2017). After the publication of A Nation at Risk in the 1980s, the pendulum swung in the direction of a common curriculum for all students, proficiency for all, and an academically-oriented concept of college- and career-readiness (e.g., Algebra II is necessary for all careers (Carnevale, 2002)). Ultimately, however, the pendulum always returns to the vision of the American high school laid out in 1918; that is, an institution designed to prepare a heterogeneous population of students with diverse interests, abilities, and needs for postsecondary life in a diverse, democratic society.

The original vision of the purpose of the comprehensive high school is currently being expressed in the broad concept of college- and career-readiness and cloaked in terms such as personalization, competency-based education, and personal pathways. It is also clear that the aptly named "unifying function" of the comprehensive high school should be considered more important now than at any time in the past fifty years.

Although there may still be debate over what constitutes that yet to be defined core body of knowledge and skills needed by all students, that common core remains the starting point and not the end point of a high school education.

State Assessment

The history of state assessment in the United States covers much of the same period as the history of the comprehensive high school. Its beginnings can be traced back to the Horace Mann's administration of common exams in the mid-1800s and the introduction of the New York Regents exams in the 1865 (U.S. Congress, OTA, 1992). Advances in scientific management and technology in the early 20th century paved the way for large-scale standardized testing. The Elementary and Secondary Education Act of 1965 (ESEA) and its requirements for testing as part of Title 1 evaluation laid the foundation for education as a civil rights issue, increased central government (i.e., federal and state) involvement in education, and assessment for accountability. In the decade following the passage of ESEA, the number of states which mandated district- or state-level testing jumped from four to thirty-

three (Mazzeo, 2001). State mandated basic skills or minimum competency testing for low-stakes and high-stakes purposes (i.e., high school graduation) emerged in the 1970s. The National Assessment of Educational Progress (NAEP), first administered in 1969, became the model for a modern era of state assessment that began in the 1980s.

In the late 1980s and early 1990s, the focus of large-scale K-12 assessment shifted from merely describing student and school performance to comparing student performance to established benchmarks, also known as performance standards or achievement standards. Results on NAEP and state assessments were reported in terms of the percentage of students within achievement levels (or at or above achievement level thresholds) with names such as Basic, Proficient, and Advanced (NAEP). There were variations across states in the names of the proficient achievement level (e.g., Mastery, Meets the Standard) and the level of student achievement needed to meet that standard.

The Improving America's Schools Act (IASA), the 1994 reauthorization of ESEA, required states to establish state assessment programs and achievement standards at the elementary, middle, and high school levels, and to report student and school performance in terms of those achievement standards. No Child Left Behind (NCLB), the next reauthorization of ESEA in 2001, solidified state assessments and achievement standards, increased annual testing to include all students in grades 3 through 8 plus once in high school, and attached accountability consequences to school performance on state assessments. The Every Student Succeeds Act, the long-awaited 2015 reauthorization of ESEA maintained much of the state assessment infrastructure; that is, testing all students at grades 3 through 8 plus once in high school, achievement standards, and test-based school accountability.

Over time, there have been shifts in the level of student performance required to achieve that common proficiency benchmark. There have shifts in the population of students included in state assessment and expected to meet the benchmark. And there have been shifts in the frequency of testing.

From Horace Mann through ESSA, however, the common thread across all of the changes in the scope of state assessment is that the primary function of state assessment has been to measure student performance against a common benchmark. A tenet of administering a common state assessment to all students at a particular point in time (e.g., the end of grade 4, 8, or 12) is that there is a common interpretation of the results of that assessment that apply equally well to all students and schools.

State Assessment and High School

There is an obvious conflict between high schools designed to meet the varied needs and goals of individual students and state assessments designed to measure all students against a common benchmark. Over time, the extent of that conflict has been closely tied to the ebbs and flows in thinking about the purpose of high school. During periods in which the balance shifts toward an emphasis on the core knowledge that is needed by all students, there is a natural and easy fit between high school and state assessment. The period from the mid-1980s through the early 2010s was such a period. When the pendulum swings away from core knowledge toward an emphasis on personalized academic knowledge and skills, the fit between high school and state assessment becomes forces and uneasy. It appears that we are in the early years of such a period again.

The fit between high school and state assessment is further affected by the balance between the academic and non-academic functions of the American high school. Preparing students to live and work together in a diverse, multicultural, democratic society has long been deemed a critical function of public education, in general, and high school, in particular. That is not a body of knowledge, skills, and *values,* however, easily measured through a state assessment. School accountability systems based solely on test scores or factors that directly affect or are derived from test scores will inevitably short-change, or underrepresent, the unifying function of high school.

Part II – High School in the context of ESSA

With regard to a state's academic content standards, ESSA requires states to adopt challenging academic standards (i.e., content and achievement standards) which are "aligned with entrance requirements for credit-bearing coursework in the system of public higher education in the state and relevant state career and technical education standards" (Sec. 1111 (b)(1)(D)(i)). The state's academic standards must be the same standards for all public schools and public school students in the state; and must include the same knowledge, skills, and levels of achievement expected of all public school students in the state (Sec. 1111(b)(1)(B)(i)(ii)).

It is in interpreting and meeting those requirements within the context of the comprehensive high school that remains a challenge. The fundamental question that applied to comprehensive high schools in the early twentieth century still applies today: What is the core body of knowledge and skills in language arts or reading, mathematics, and science that should be common to all students?

High School Curriculum

The high school curriculum is not designed with the goal that at the end of four years all students will have mastered the same set of academic standards. With few exceptions, there is not an expectation that all public school students in the state will demonstrate the same level of achievement in each and every content area. Even programs such as Indiana's 'Core 40' which served as a national model of a common curriculum for all in the late 1990s through the early 2000s fractured into a system with four distinct types, or levels, of diplomas, each with its own set of requirements: General, Core40, Core40 with Academic Honors, Core40 with Technical Honors (Indiana Department of Education, 2018)

Within systems that have the same broad course requirements for all high school students (e.g., 4 years of English, 3 years of mathematics, 3 years laboratory science), there is rarely an expectation that all students complete the same sequence of courses. At the individual course level, within courses such as Algebra 1 or Chemistry that are nominally the same, there is often considerable intentional variation in the breadth and depth of content covered based on individual students' needs and interests.

An Uncommon Common Bar

Explicit in the name and requirements of ESSA is the expectation that K-12 public education will prepare all students to engage successfully in postsecondary activities aligned to their needs and interests. Obama administration policies were based on the belief and data that showed that for virtually all productive careers those postsecondary activities would include some level of formal education or training beyond high school (Carnevale, Smith, and Strohl, 2010). In the broad sense of college as an institution or organization providing higher education or specialized professional and

vocational training, all students will have to be college-ready in order to be ready for jobs in the 21st century. The common bar for K-12 education, therefore, is that all students will graduate high school college-ready.

A scenario in which all students leaving high school college-ready would need to possess the same knowledge and skills, however, would be quite uncommon. The specific knowledge and skills required for a student to be considered college-ready varies from program to program based on the individual student's interests and needs. Each postsecondary career requires a unique set of knowledge and skills that a student must possess. The common bar that all students are college-ready, therefore, is less a specific set of academic standards in content areas such as language arts or reading, mathematics, and science, and more a general readiness to engage in an appropriate postsecondary activity which, in turn, will lead to a productive career.

Is content king?

In addition to the unique requirements for individual programs, however, there likely is a core set of knowledge and skills common to all programs and needed by all students. It is that elusive body of knowledge and skills that defines the core that would be included on a common state assessment required of all students. But what are those knowledge and skills?

Research, practice, and common sense have demonstrated that the Common Core State Standards (CCSS) is not the core. The full set of high school English language arts/literacy and mathematics standards contained in the CCSSS far exceed the knowledge and skills required by all students. The same is almost certainly true for the high school portion of the Next Generation Science Standards. Similarly, the "Algebra II for All" movement promoted via the American Diploma Project has waned as it became clear that Algebra II, particularly as defined by the CCSS and similar sets of college-ready standards, was too high a bar. If not Algebra II, then what is the core for mathematics? And what is the core for English language arts/literacy, science, technology/engineering, social studies, the arts, and foreign languages? Is there a core?

Additionally, how important is academic content in the core knowledge and skill students need to be college-ready? The pre-eminence of academic content in that core is being called into question in states across the country. In Indiana, home of the Core 40, newly adopted graduation requirements go well beyond content to require project-, service-, or work-based learning designed to develop the "knowledge and skills that the state's employers say they want their workers to have." All of this directed toward the "intention to convert Indiana's education system into an employment skills training pipeline for Hoosier business." (Carden, 2017). At best, it appears that academic content is a coequal partner with other knowledge and skills students need to be college ready.

Part III – State Assessment in the context of ESSA

With regard to federal requirements for state assessment and test-based accountability, ESSA largely has maintained the status quo. States are required to administer a state assessment in English language arts or reading, mathematics, and science at least one time during high school. With limited exceptions, the same assessment must be administered to all students statewide. Those assessments must be aligned to state academic standards in the respective content areas. The results of the state

assessments, at least in English language arts or reading and mathematics, must form the basis of the school accountability system required by ESSA.

Without altering the requirements for alignment, technical quality, etc. in place for state assessments, ESSA does recognize high school assessment as something distinct from assessment in grades 3-8 by including a provision that allows local school districts to petition states to allow use of a "nationally-recognized high school academic assessment" in lieu of the state assessment in high school. (Sect. 1111(b)(2)(H)(i))

> LOCALLY-SELECTED ASSESSMENT.—
> "(i) IN GENERAL.—Nothing in this paragraph shall be construed to prohibit a local educational agency from administering a locally-selected assessment in lieu of the State-designed academic assessment under subclause (I)(bb) and subclause (II)(cc) of subparagraph
> (B)(v), if the local educational agency selects a nationally-
> recognized high school academic assessment that has been approved for use by the State as described in clause (iii) or (iv) of this subparagraph.

In regulations released in the final weeks of the Obama administration, USED defined a nationally-recognized high school academic assessment as "an assessment … that is administered in multiple States and is recognized by institutions of higher education in those or other States for the purposes of entrance or placement into courses in postsecondary education or training programs." (CCSSO, 2017). Through this definition the USED clearly signaled the importance of college-readiness as a purpose of high school assessment.

Of course, high school assessment was already distinct from assessment at grades 3-8 in that only one test administration is required during high school. On one level, the shift from annual administration at grades 3-8 to a single administration in high school reflects a fundamental difference between the structure and organization of high schools versus middle and elementary schools. On other levels, it also likely reflects a) that there are other measures of academic achievement that are relevant at the high school level and b) that measurement of outcomes at the end of a K-12 program (i.e., high school) may be different than measurement of intermediate markers toward those desired outcomes at grades 3 through 8.

Despite the clear distinctions acknowledged for high school assessment, ESSA and USED regulations make few, if any, distinctions in the requirements for review and approval of grades 3-8 and high school assessments. One should not conclude, however, that simply because the requirements contain the same words that those words have the same interpretation when applied to high school state assessment. Context (i.e., the intended purpose and use of an assessment) has always been critical in evaluating the appropriateness and technical quality of an assessment for a particular use. That was true for the evaluation of high state assessments under NCLB and is no less true under ESSA.

Alignment of High School Assessments to State Content Standards

ESSA Requirements for State Content Standards and Assessments	
Content and Achievement Standards	Assessments
Each State shall demonstrate that the challenging State academic standards are aligned with entrance requirements for credit-bearing coursework in the system of public higher education in the State and relevant State career and technical education standards.	The assessments … shall – ''(ii) be aligned with the challenging State academic standards, and provide coherent and timely information about student attainment of such standards and whether the student is performing at the student's grade level;

ESSA lays out lofty requirements for state content and achievement standards as well as for the assessments designed to measure student attainment of those standards. USED regulations and peer review criteria add additional language to ensure that state assessments "*address the depth and breadth of those standards*." Those are the requirements that apply to all standards and assessments across all grade levels; but the language is particularly relevant as students reach high school and the end of the K-12 phase of their lifelong educational experience. To a much lesser degree than at grades 3-8, the interpretation of language related to alignment to state standards and a student performing at grade level was not straightforward. As discussed previously, even in states with a nominally common curriculum and students progressing through a series of three English and Mathematics courses, the concept of grade level performance does not really apply.

Since states have administered a state assessment in high school they have had to make choices about the grade level(s) to administer the assessment, the content that would be covered, and the level of performance that would be expected. Initially, some states chose to test students at grade 12, as NAEP does, but by the time of NCLB that idea had been largely abandoned for a number of well-documented reasons. By the early 2000s, more than half of the states had linked student graduation to performance on the high school assessment(s) which affected not only the grade level in which the test was administered, but also the content covered and the expected level of performance.

Given that states were not testing students in the spring of grade 12, they would not be designing assessments aligned to the full breadth and depth of their high school standards. States made a wide variety of choices for their high school state assessment programs. A fundamental decision was whether to administer a single, comprehensive assessment or multiple end-of-course assessments. Smarter Balanced states, for example, chose to administer a comprehensive assessment at the end of grade 11 aligned to standards across the grade 9-11 grade span. PARCC states, in contrast, chose to administer one or more of end-of-course tests, each test aligned to a set of standards designated for a particular course. Other examples from just the New England states show a variety of approaches to high school assessment.

Examples of High School State Assessment Decisions in New England States
Massachusetts education reform law of 1993 required that one condition for high school graduation was student performance on tenth grade assessments aligned to end of tenth grade standards (i.e.,

Examples of High School State Assessment Decisions in New England States
grade 9-10 standards). The law included additional provisions for students who also intended to demonstrate college readiness or career readiness.
In the early 2000s, New Hampshire, Rhode Island, and Vermont joined forces to develop the New England Common Assessment Program (NECAP) and adopted a comprehensive high school assessment measuring end of tenth grade standards designed to demonstrate student readiness to engage in credit-bearing coursework at the community college level. All students were expected to meet those standards in high school, and additional high school standards were in place for the majority of students who would meet those standards by the end of tenth grade.
In 2005, Maine dropped its long-standing custom state assessment program administered at the end of eleventh grade and adopted the SAT as its high school state assessment. Reasons given for "the switch" included "about 2/3 of Maine's graduating classes were already taking the SAT at their own expense," "it has relevance and meaning…,"it is widely recognized and accepted by institutions around the world," "it does not measure low-level, algorithmic or recall-only understanding," "it fits into the Department's vision of graduating all students college, career, and citizenship ready," and "it could potentially serve as a catalyst in providing a rigorous curriculum to all high school students."
Massachusetts, in the late 1990s, revised its science standards and quickly abandoned its comprehensive high school science test in favor of a set of tests aligned to one-year introductory high school courses in biology, chemistry, introductory physics, and technology/engineering. Students were required to participate in only one of the tests, and in fact, were not eligible to participate in other tests after they had met the "passing score" for graduation on one science test.
Rhode Island, a PARCC state through 2017, required only a portion of the PARCC suite of high school end-of-course assessments. Rhode Island began by requiring students in grades 9 and 10 to participate in the assessment, taking the test appropriate to their current course. In 2016, the testing requirement was reduced to a single high school test – Algebra 1 (or Geometry) and English 9 for most students. Subsequently, Rhode Island dropped the PARCC high school tests in favor of the SAT.
Connecticut, a Smarter Balanced state, chose in 2015 to abandon the Smarter Balanced high school test after one year in favor of the SAT. Reasons cited for adopting the SAT included reducing duplicative testing in high school and "leveling the playing field" by ensuring that no students would be excluded from taking the SAT because of cost.

Alignment of high school state assessments with state standards is clearly a fluid concept. In each of the cases cited above, the state made and defended the claim that their high school state assessment was aligned to their state academic standards. States have molded their alignment claims to fit the intended purpose and use of their state assessment and/or the practical realities of state assessment in high school.

It is not only the assessment side of the alignment equation that is affected by states' assessment choices. Through their assessment decisions, states have also made it clear that the state academic content standards at the high school level are not intended to represent the core body of knowledge and skills that all students should attain by the end of twelfth grade. In that sense, states' assessment decisions are aligned with their decisions regarding high school curriculum and instruction. That common core body of knowledge and skills remains elusive.

Part IV – The Purpose and Use of High School State Assessment

Accepting for the sake of argument that high school state assessment is not intended to measure all students' attainment of the breadth and depth of a state's academic content standards then states are left in the position of defining its purpose.

At the present time, high school state assessment is driven primarily by the assessment and accountability requirements of ESSA. Even within that framework, however, there are still hints of five purposes or uses of assessment that have motivated states to assess their high school students over the years. This is not an exhaustive list nor are the purposes and uses listed here mutually exclusive. A state may be using its high school state assessment to attempt to accomplish more than one of these purposes.

Measuring the Elusive Core

Not departing too far from the model of state assessments designed to measure the breadth and depth of the state standards are high school state assessments designed to measure the core standards – the subset of content knowledge and skills expected to be attained by all high school students. Of the examples cited above, Massachusetts, NECAP, and Rhode Island PARCC are each examples of states defining a core set of standards to be achieved by all students.

Massachusetts and NECAP defined that core as the portion of the state standards students complete through the tenth grade. Ideally, the state content standards were designed to reflect that view. The state assessment was a comprehensive assessment, similar in design to the grade 3-8 assessments, designed to measure student achievement of the end of grade 10 standards.

The Rhode Island PARCC case is an example of an end-of-course assessment approach to accomplishing a similar goal. Rhode Island began by defining the core as Algebra I and Geometry in mathematics and the ninth and tenth grade standards in English language arts. Subsequently, they reduced the core to Algebra 1 and the ninth grade English language arts standards.

Other states may choose to extend their mathematics core through grade 11 and Algebra II. When push came to shove, however, the Algebra II for all movement fizzled and few PARCC and Smarter Balanced states required administration of the culminating mathematics assessments developed by those programs. States may also choose to include other subject areas such as Civics, U.S. History, or Biology in their core. The defining characteristic is that there is a common body of knowledge and skills expected of all students.

Student Certification

A common use of state assessment at the high school level is student certification. Prior to the adoption of the Common Core State Standards and assessments aligned to them more than half the states in the United States had some type of test-based graduation requirement (American Diploma Project, 2004; Education Commission of the States, 2007). This use of state assessment for student certification is often closely connected to the concept of high school assessments designed to measure the core body of knowledge and skills expected of all high school students, or in this case, high school graduates.

Both the comprehensive and end-of-course models have been used by states using the state assessment as a graduation requirement. Massachusetts remains one prominent example both approaches with its use of the comprehensive model with its tenth grade English language arts and mathematics assessments and the end-of-course model with its science assessments. Ohio was an early adopter of the end-of-course model requiring students to pass multiple tests as a requirement for high school graduation. Recently, states such as Pennsylvania have explored ways to combine state assessment and course performance to certify student performance in selected content areas (Pennsylvania Department of Education, 2020).

College and Career Readiness

In 2010, it appeared that the primary purpose of high school state assessment would be to serve as an indicator of students' college- and career-readiness. The adoption of the Common Core State Standards by nearly all states and the formation of assessment consortia funded by the Race to the Top Assessment Program signaled a clear purpose for high school state assessment. Although states have largely abandoned PARCC and Smarter Balanced high school assessments, use of the high school assessment as an indicator of college- and career-readiness remains a primary purpose of state high school assessment. Approximately half of U.S. states now administer the ACT or SAT as their high school state assessment or as part of its high school state assessment system (Gewertz, 2017).

Traditional college admissions examinations such as the ACT and SAT used a predictive, rather than standards-based model, for defining college-and-career readiness with higher education . With the most recent revision of the SAT, the College Board has attempted to maintain the predictive model, but with an assessment more closely aligned to the content taught in high schools, that is, the Common Core State Standards. As stated in the premise for this paper, however, as of this writing it has proven quite difficult for those assessments to receive full approval from the United States Department of Education as high school state assessments. In high school assessment as in life, apparently, it is difficult to serve two masters.

Historically, states have also used high performance on the state assessment as an indicator of college-and-career readiness in a variety of ways. The New York Regents Diploma is possibly the oldest and most well-known example with California's Golden State Merit Diploma serving as another prominent example. California's Early Assessment Program (EAP) is an example of the use of a state assessment for placement in college courses. (CA Department of Education, 2019) Other states award

scholarships to in-state public institutions of higher education for high performance on the high school state assessment.

Equity and Accountability

Like all other state assessments, assessments at the high school level are also used to promote and monitor equity through accountability for students as described above, for schools as part of federal ESSA requirements, and in some cases for teachers. As described earlier in this paper, however, with federal law requiring state assessment only once during a student's high school career (and virtually no states testing twelfth grade students) it has been difficult for states to determine how best to use their state assessment for accountability to ensure equity.

With high school as the culmination of the K-12 public education experience, the state assessment is one of many measures or indicators available to states to monitor equity. As demonstrated by this partial list, the options available to states are comprehensive and include immediate, short-term, and long-term indicators.

A Partial List of Indicators Available to States Monitor Equity at the Completion of High School
Course-taking patterns Graduation Rates Successful completion of career and technical education programs Participation and performance in Advanced Placement courses
Participation and performance in dual enrollment courses Performance on college admissions examinations Enrollment in two-year and four-year colleges
Successful postsecondary transition Short-term and longer-term postsecondary success

Compliance

No list of the purposes and uses of high school state assessment would be complete without acknowledging that simple compliance is often a factor in decisions related to state assessment in high school. At the highest level, of course, there are design decisions driven almost entirely by compliance with the requirements necessary to win federal approval of a state's high school assessment program. Prior to the federal assessment requirements that began in the mid-1990s, many states used public reporting of school results as a medium-stakes method of increasing school compliance with the state assessment program and hopefully the larger system of curricular and instructional requirements. The shift in state assessment from mirroring NAEP to testing students at the eleventh or tenth grade rather than the twelfth grade and the reporting of individual student scores were decisions related to increasing student compliance. In addition to its equity and college-readiness components, many states also viewed the decision shift to the ACT or SAT as their high school state assessment as a way to increase student compliance.

Summary

With states attempting to use their single administration of a state assessment in high school for two, three, or more of the purposes and uses described above should there be any surprise that state assessment and high school just do not fit well together. We already alluded to the difficulty of an assessment program serving two masters with respect the College Board attempting to meet the needs of secondary schools and institutions of higher education with the redesigned SAT. The difficulties grow exponentially as states attempt to serve the multiple masters described above with a single state assessment.

Where does that leave us with regard to state assessment and high school? In my opinion it leads us back to the single, simple question that should drive the development, design, and implementation of any assessment program – "Why?" Basic test development workshops are built around the questions "Who?, What?, When?, Where?, How?, and Most Importantly, Why?" We can frame the discussion in the language of evidence-centered design or a theory of action, but it all leads back to answering fundamental questions about why you are administering assessment in high school. What inferences are you trying to make about student performance? – To answer which questions and to support which decisions.

Rather than wasting any more precious time or effort on trying to figure out how to get United States Department of Education approval for the use of the SAT and ACT as state high school assessments, let's step back for a moment and consider those fundamental questions.

Part V - A Clear Vision for High School, High School Assessment and Accountability

The Comprehensive American High School

Ultimately, developing a clear vision for high school assessment must begin with a clear vision for the future of high school, its purpose within the public education system, and its function within society. It is beyond the scope of this paper or the capacities of this author to present such a vision. I would be very surprised, however, if that vision strayed too far from the century-old vision of the comprehensive American high school discussed at the beginning of this paper: an institution designed to prepare a heterogeneous population of students with diverse interests, abilities, and needs for postsecondary life in a diverse, democratic society.

For the purposes of this paper, let's assume that the high school experience, in whatever physical and virtual form it takes in the future will be built upon a foundation that includes:

- A core body of knowledge that is expected of all students. The vast majority of this core body of knowledge, however, will be acquired before students begin high school. It will be maintained and applied throughout high school. (Additional critical concepts and skills in content areas such as English language arts, mathematics, and social studies can be best taught and learned in courses appropriate to the interests, abilities, and needs of the individual student.)
- A core body of skills and values that can be taught, developed, and applied within a variety of different content areas or disciplines aligned to the interests, abilities, and needs of the individual student.

- Advanced instruction and application in an area aligned to the interests, abilities, and needs of the individual student.

At a very high level, such a high school experience is quite similar to the experience my parents' generation encountered attending high school in Boston in the 1940s, my experiences as a high school student in the 1970s and high school teacher in the 1980s, and the high schools that are being designed today around student-selected pathways, dual enrollments programs, and an expansive view of career and technical education.

The Comprehensive High School State Assessment System

What would a comprehensive state assessment system designed to support the high schools described above look like? Ideally, it would have multiple components whose purpose, design, and use reflect and support the purpose and values of the school described above. It would likely include a common assessment administered to all students to assess the core body of knowledge expected of all students. That assessment, however, would be administered very early in a student's high school career and might be the only assessment required of all students by the state.

Importantly, the system would also include multiple components developed by the state or made available by the state, but which are designed for use by local districts and schools. There might be additional student-level assessment requirements mandated by the state, but those assessment would be aligned to the curriculum and pathway of the student. The state might choose to make college admissions tests such as the SAT or ACT and preparatory examinations such as the PSAT available to all students but may not require that all students participate.

A Model System

The individual components of the high school assessment system might not look very different than those currently used in high schools. With the exception of state-supported curriculum-embedded performance assessments, each component listed below is likely to be found in most states across the country. The primary differences will be in how the assessments are used and to whom they are administered. We hope, of course, that the state-supported assessments will also be of high technical quality.

- **Common Assessment** – Tests in English language arts, mathematics and science designed to assess the core body of knowledge expected of all students. This assessment would be administered at the end of the ninth grade and would be the only assessment required of all students. Placement of this component at the end of the ninth grade is based on the following assumptions:
    - Instruction through the ninth grade would remain largely common across students with a minimal amount of differentiation in mathematics.
    - Focus of instruction in the ninth grade would be on application of knowledge attained through eighth grade, and grounding in 21st Century skills that will be an integral part of instruction in grades ten through twelve.
    - In addition to achievement scores, the common assessment will produce growth scores used to demonstrate the effectiveness of the school in understanding where students are when they enter high school and moving them forward over the course of the year.

- **State-supported Performance Assessments** – The state would support the development and use of performance assessments to be administered and used by districts and schools within their local curriculum.
- **State-supported End-of-Course Assessments** – The state would support the development and use of end-of-course assessments aligned to the state's content standards in each content areas. The assessments would be administered and used by districts and schools within their local curriculum.
- **College Admissions Test(s)** – The primary purpose of this assessment would be for students to demonstrate readiness for college and the primary purpose for the state sponsoring the assessment would be related to equity and access.
- **External Certification Tests** – These would be tests designed to allow students to demonstrate that they have acquired the advanced knowledge and skills required in their chosen pathways. These might be Advanced Placement tests, industry-sponsored tests administered at the end of a career and technical education program, or some other type of demonstration recognized by the student's chosen field.

High School Accountability

Accountability at the high school level, like assessment, will include many of the same components that states already include in their current ESSA accountability systems such as graduation rates and other indicators of readiness for postsecondary success. The focus of the system, however, will be on program evaluation and support for continuous improvement rather than on classification.

Student achievement will be measured primarily through student performance in and successful completion of their chosen pathways rather than on the common assessment. The growth score from the common assessment will be used as part of the school accountability system as an indicator of the school's effectiveness in meeting students where they are and moving them forward.

The assessment system described above addressed the academic knowledge and skills that students will be expected to acquire through high school. The accountability system must also address the non-academic skills and values that are a critical part of the mission statement in most schools and districts (Stemler and DePascale, 2016).

Perhaps most importantly, the high school accountability system must distinguish between factors that are directly related to the effectiveness of the school and factors that reflect the position of the high school as the culmination of thirteen or more years of education within the school system. The cumulative effects of education across elementary, middle, and high school must be considered in the program evaluation that is developed for the high school.

Conclusion

The premise of this paper is that there is a fundamental mismatch between the purpose and design of high schools in the United States and the purpose and design of state assessment – specifically, state assessment as it has been defined by the federal government under successive reauthorizations of the Elementary and Secondary Education Act since the mid-1990s.

- State assessment is designed to measure all students against a common body of knowledge and skills, namely the content standards adopted by the state.
- In contrast, the purpose of the comprehensive American high school is to meet the individual interests and needs of a heterogeneous group of students; that is, high schools are not designed to ensure that all student acquire a common body of knowledge and skills across during their high school experience.

The particular case in point is the fact that we are approaching the fifth anniversary of the signing of ESSA and it has been virtually impossible for states to gain approval from the United States Department of Education for use of the ACT or SAT as either their high school state assessment or as an alternative under the locally-selected, nationally-recognized assessment option provided under ESSA. The major sticking point being that states cannot demonstrate adequate alignment between the college admissions tests and their state content standards.

At this point the states have two options to gain approval for their desired use of the ACT and SAT. They can continue to try to formulate an argument that will convince the United States Department of Education that the college admissions examinations are adequately aligned with state standards or they can adopt the assessment standards as their state content standards. Neither option makes sense for states and it is simply time to stop wasting precious time and resources on this issue.

My personal preference is that states administer a common assessment at the end of ninth grade and then administer the college admissions assessments in eleventh grade. The ninth-grade assessment would be aligned to a subset of state standards – the core set of knowledge and skills expected of all students. States could probably gain approval of those tests as their state assessment even though they do not measure the breadth and depth of the state's content standards are the college admissions tests, but that is not the point.

States have decided that there are valid educational reasons for offering the ACT and SAT as their high school state assessment. As we demonstrated through numerous examples from just a handful of states, over the years of states have been making similar choices with their high school assessment program. It is time for the federal government to acknowledge what is clear to everyone: high school is different from grades 3-8 and it makes no sense to apply the same assessment requirements across elementary, middle, and high school.

High schools in the United States are designed to prepare a diverse group of students with diverse interests and needs to become productive members of a democratic society. It is time that we follow the first rule of assessment design and allow states to develop an assessment system that is aligned with the purpose and design of high schools.

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