ALLIANCE FOR EXCELLENT EDUCATION

CLIMATE CHANGE:
Providing Equitable Access to a Rigorous and Engaging Curriculum

NOVEMBER 2013

TEACHING

DISCIPLINE

STUDENTS

SUPPORT

COURSE WORK

CURRICULUM

EQUITY

SAFE ENVIRONMENT

LEARNING

ENGAGEMENT

CHALLENGING AND ENGAGING COURSE WORK

RIGOROUS CURRICULUM

WELL-PREPARED AND EFFECTIVE TEACHING

POSITIVE SCHOOL CLIMATE

MOTIVATED AND RESPECTED STUDENTS

WELCOMING AND ORDERLY ATMOSPHERE

SAFE AND SUPPORTIVE SCHOOL ENVIRONMENT
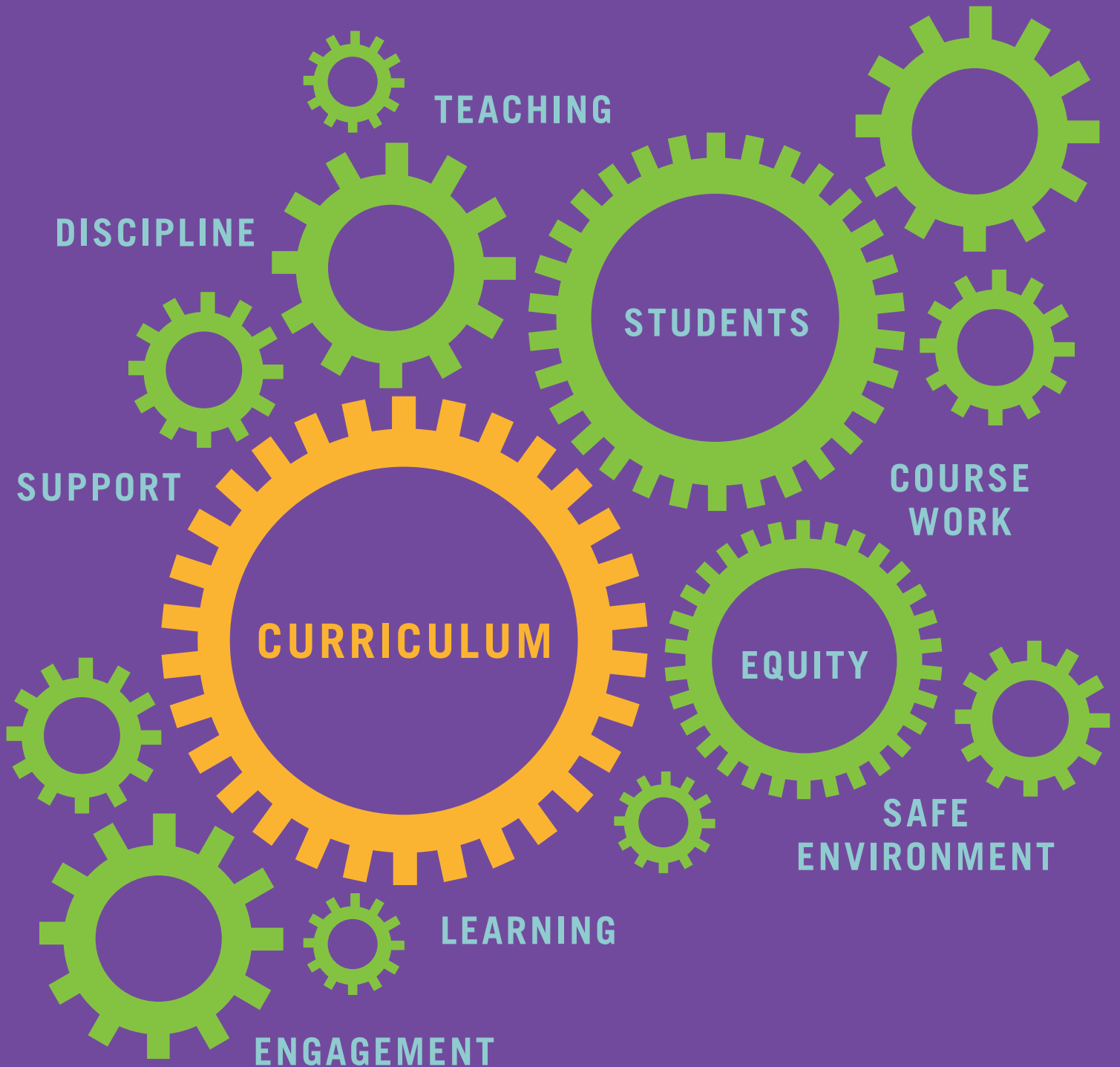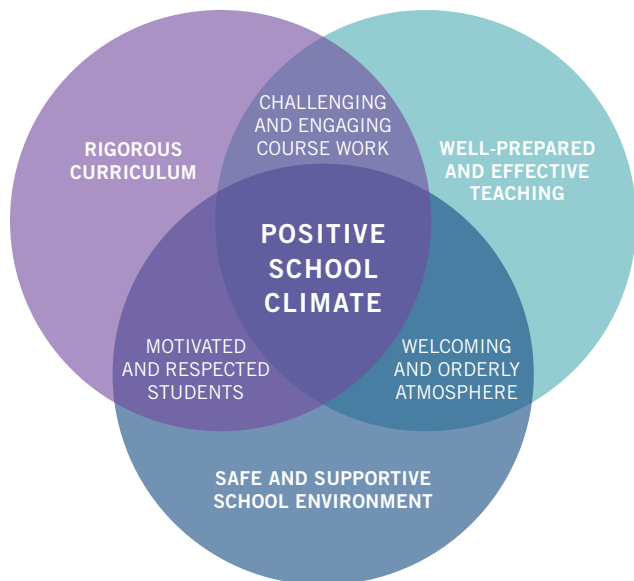
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"Those that are doing well, they are doing well because they were taught, and they are doing well because they were given an opportunity, and they are doing well because somebody believed in them, and said, 'You know what, I am going to invest in you.'"

— E. Williams, Youth Program Director

INTRODUCTION

When a student enters high school, their goal is to leave four years later with the knowledge and skills necessary to be successful in college and a career. Preparing students for life after high school requires a schoolwide curriculum that is rigorous, engaging, and includes opportunities for accelerated course work.[a] Rigorous curriculum is demonstrated by its alignment to standards for college and career readiness, while an engaging curriculum is one that provides students with an understanding of its relevance and opportunities to apply learning.[b]

In addition to preparing students for college and a career, a rigorous and engaging curriculum contributes to creating a positive school climate for students. For the purposes of this paper, a "positive school climate" is defined as an environment that reflects a commitment to meeting and developing the academic, social, and emotional needs of students. Providing a rigorous and engaging curriculum is a critical part of meeting these needs. A rigorous and engaging curriculum can also address students' social and emotional needs. For example, **research suggests that student behavior problems, and subsequent suspensions, can in part be addressed and reduced by providing students with course work that is academically rigorous and engaging.**[1] The impact of rigorous and engaging curriculum on a positive school climate and college and career readiness can be visualized as follows:

Increased academic content knowledge and improved student behavior

Rigorous and engaging curriculum

Positive school climate and college and career readiness
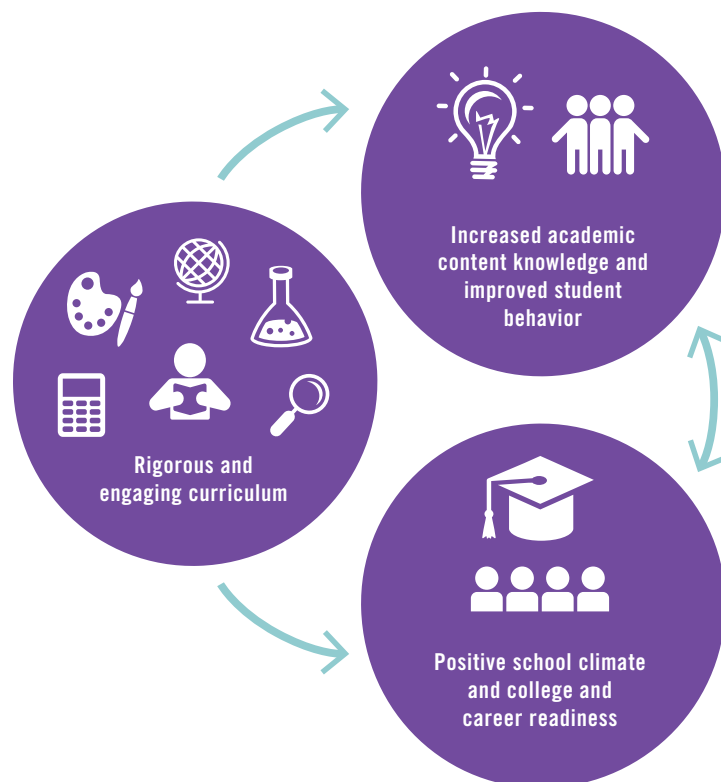
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[a] For the purposes of this paper, "accelerated course work" refers to college-level courses such as Advanced Placement, International Baccalaureate, or dual enrollment opportunities.

[b] For the purposes of this paper, "applied learning" refers to project-based, work-based, and service learning.

Unfortunately, for far too many students from low-income families, students of color, students with disabilities, and English language learners, the high schools they enter are not structured to provide them with a rigorous and engaging curriculum. This, in turn, negatively affects the creation of a positive school climate and denies these students access to opportunities to gain the knowledge and skills necessary for college, a career, and success.

This paper, the third in the Alliance's Climate Change series, will discuss

- the relationship between rigorous and engaging curriculum and a positive school climate;

- the current state of access to a rigorous and engaging curriculum and accelerated courses for students from low-income families, students of color, students with disabilities, and English language learners;

- promising approaches to increasing access to a rigorous and engaging curriculum and accelerated courses; and

- recommendations for policymakers.

THE RELATIONSHIP BETWEEN A POSITIVE SCHOOL CLIMATE AND STUDENT ENGAGEMENT

As discussed in the previous Climate Change paper, focusing on discipline, creating a positive school climate requires appropriate and equitable responsive practices to school discipline issues. It also requires implementing preventive practices that eliminate the school-based factors contributing to discipline issues. One such school-based factor that contributes to the creation of discipline issues is student engagement, which can be defined as "the effort, enjoyment, and interest expressed while participating in academic activities."[2] Students who are engaged in classroom interactions, who have a genuine interest in learning, and who are motivated are less likely to be bored, inattentive, and disrespectful.[3] In comparison, students who are disengaged are more likely to exhibit negative behavior that is reflective of that disengagement.

According to a recent study, student academic disengagement has the strongest relationship with disciplinary referrals across racial groups.[4] Highly disengaged students frequently fail to complete or turn in assignments, do not work up to their full potential, are tardy, and find schoolwork difficult to understand.[5] Disengaged students are less likely to aspire to higher educational goals and have lower grades.[6] One longitudinal study found lower academic achievement levels among students prior to suspension and found significantly lower levels of academic gains throughout the three years after suspension.[7] These low academic gains can result in grade retention.[8] Further, for African American males, academic disengagement is also a strong predictor of truancy (defined as a student being absent without permission).[9]

What results is a cycle that begins with disengagement, which can then lead to increased disciplinary referrals and decreased attendance. This then leads to lost instructional time,[c] low student achievement, and possible grade retention, all of which further disengages the student.[10] According to a study by the National Research Council, academic disengagement is detrimental and debilitating, setting off a downward spiral of low self-esteem, impeded effort,

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[c] Schools often fail to provide students who are excluded from the school setting through suspensions and expulsions with ongoing instructional support, homework assignments, or catch-up work while they are out of school or when they come back. The result is often an extraordinary number of lost instructional days for students, particularly students of color and students with disabilities. (U.S. Department of Education, *For Each and Every Child—A Strategy for Education Equity and Excellence* [Washington, DC: Author, 2013].)

A Closer Look: Impact on Attendance

According to a report by the Everyone Graduates Center, between 5 million and 7.5 million students are chronically absent from school each year. Chronic absenteeism is defined as missing 10 percent of a school year for any reason. A high proportion of students miss school because they do not understand the importance or see the value in attending school or because they feel they can pass their classes while only attending periodically. One reason expressed by students surveyed in the report is that they miss school because they think not much is going on and they can pass the course even if they only attend sporadically. Without an engaging and rigorous curriculum, students may decide not to come to school because they feel as though the classroom content is not relevant, not challenging, or not supportive of their efforts to meet any challenges.

Source: R. Balfanz and V. Byrnes, *The Importance of Being in School: A Report on Absenteeism in the Nation's Public Schools* (Baltimore: Johns Hopkins University Center for Social Organization of Schools, May 2012).

and escalating failure.[11] Further, students with "negative mindsets about school or about themselves as learners are likely to withdraw from the behaviors essential for academic success and to give up easily when they encounter setbacks or difficulty."[12] The end result is a dramatically increased likelihood that the student will drop out of school.[13] **Student disengagement can be the beginning of a continuous cycle that has a lasting and harmful impact on the student. A curricular framework designed to increase student engagement and achievement is critical to ending this cycle.**

The importance of rigor

While an engaging curriculum can keep students in school by decreasing discipline referrals and lost instructional time, equally important is ensuring that students graduate prepared for college and a career. A rigorous and engaging curriculum is evidenced by its alignment to standards for college and career readiness and its relevancy and opportunities for applied learning. Further, as states transition to the implementation of more rigorous standards for college and career readiness, students must be provided with the support needed to meet those standards. Unfortunately, across the nation, too many students are denied access to a rigorous and engaging curriculum, starting a process that decreases the likelihood that these students will either graduate or graduate ready for college and a career.

TO WHAT EXTENT ARE SCHOOLS PROVIDING A RIGOROUS AND ENGAGING CURRICULUM?

The effects of the No Child Left Behind Act on rigor and engagement

Evidence suggests that the passage of the No Child Left Behind Act (NCLB) in 2001[14] resulted in an emphasis on test-based accountability that contributes to the problem of student disengagement. Specifically, "test-based instruction that ignores critical real-world skills, especially for lower-income and lower-performing students, a

narrower curriculum, and a less useful and engaging education overall."[15] While multiple choice standardized tests are easily scored, most are not representative of the kinds of complex skills, such as critical thinking and problem-solving, that students need to succeed in college and career.[16] For example, results from a recent RAND Corporation study showed that the quality of state assessments is remarkably low. Specifically, among the seventeen states with available data, fewer than 2 percent of mathematics items and only 21 percent of reading/writing items required higher-level processing and complex analyses.[17] Further, only 3 to 10 percent of elementary, middle, and high school students were assessed using extended activities that called for complex analyses and the ability to synthesize complex ideas.[18]

In schools using these lower-quality assessments, rigor and engagement are often replaced with a narrow, rote approach to curriculum and assessment.[19] Rather than providing students with different learning styles with increased and varied opportunities to demonstrate what they have learned, these types of assessments require a minimal demonstration of knowledge. Further, this narrows the type of instruction delivered to students to primarily focus only on tested subjects and the low-level assessments used to test those subjects.

Compare this narrow approach to curriculum and assessment to the approach most often found in high schools that are better resourced, particularly in terms of funding. In these schools, one is more likely to find an educational philosophy that emphasizes mastery of academic skills and the development of curiosity, creativity, and responsibility.[20] There is also more likely to be a sophisticated and varied core curriculum.[21] Unfortunately, evidence demonstrates that students from low-income families, students of color, students with disabilities, and English language learners are less likely to attend these schools. While the intent of NCLB may have been to increase accountability for the performance of all students, evidence demonstrates that the means by which this was done has contributed to students attending schools less likely to provide a rigorous and engaging curriculum.

Student Perspectives

The question of why students drop out may be best answered by young people themselves. In a national survey of sixteen- to twenty-five-year-olds who left high school without graduating, 47 percent of respondents reported that they dropped out because their classes were not interesting.[22] Two-thirds of those respondents said that they would have engaged more in school and tried harder if more had been asked of them (through higher academic standards and other demands).[23]

Student access to a rigorous and engaging curriculum: What course opportunities are available and to whom?

Access to rigorous course work aligned to standards for college and career readiness is associated with higher student achievement. High school graduates completing a rigorous curriculum have been shown to earn the highest National Assessment of Educational Progress (NAEP)[24] mathematics and science scores. For example, the average NAEP algebra and geometry scores are higher for graduates who have completed more rigorous algebra and geometry courses than those who took beginner or intermediate courses.[25] According to the most recent Office

for Civil Rights Data Collection (CRDC), only about 50 percent of high schools offer calculus and 62 percent offer physics, denying a significant number of students access to these courses. Further, while 73 percent of high schools offer their students chemistry, 79 percent offer Algebra II, and more than 80 percent offer Algebra I, geometry, and biology, student access to these courses varies significantly depending on the individual high school and the race of the student. The CRDC reported the following:

- **Algebra II:** Only **65 percent** of high schools with the **highest** enrollment of African American and Latino students offer Algebra II, compared to **82 percent** of high schools with the **lowest** of African American and Latino students.

- **Physics:** Only **40 percent** of high schools with the **highest** enrollment of African American and Latino students offer physics, compared to **66 percent** of high schools with the **lowest** enrollment of African American and Latino students.

- **Calculus:** Only **29 percent** of high schools with the **highest** enrollment of African American and Latino students offer calculus, compared to **55 percent** of high schools with the **lowest** enrollment of African American and Latino students.

- Further, the completion of advanced courses is predicated on the completion of prerequisites, such as Algebra I, geometry, and biology. While the percentage of high school graduates who took Algebra I before entering high school was 29 percent for white students, it was only 12 percent for African American students and 17 percent for Latino students.[26]

This evidence demonstrates that in terms of access to rigorous and advanced course work, certain high schools provide less opportunity to their students than other high schools, and often students of color have less access than

Physics: Only 40 percent of high schools with the highest enrollment of African American and Latino students offer physics,

40%

compared to 66 percent of high schools with the lowest enrollment of African American and Latino students.

66%

—

Calculus: Only 29 percent of high schools with the highest enrollment of African American and Latino students offer calculus,

29%

compared to 55 percent of high schools with the lowest enrollment of African American and Latino students.

55%

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their white peers within the same schools. Also, while in some instances course availability may seem relatively high, it is important to note that many colleges require courses like Algebra II for admission. Therefore, unless all schools provide access to these courses to all students, some students will be limited in their postsecondary options.

Student access to Advanced Placement (AP) courses also varies by race. Access to these college-level courses is beneficial for numerous reasons. In addition to exposing students to the type of college-level work that will be expected of them once they graduate, students have the opportunity to take exams that position them to earn college credit. This can improve the transition to college while also reducing the cost. The availability of these courses is even more significant in states where public universities

ACCORDING TO THE CRDC, AFRICAN AMERICAN AND LATINO STUDENTS ARE LESS LIKELY THAN THEIR WHITE PEERS TO TAKE AN AP COURSE, TAKE AN AP TEST, AND PASS THE AP TEST.

award additional credit in the admission process for earning specific grades in AP courses.[27] According to the CRDC, African American and Latino students are less likely than their white peers to take an AP course, take an AP test, and pass the AP test. Specifically,

- White students make up 55 percent of the students enrolled in grades 9–12, yet they represent 59 percent of the students enrolled in at least one AP course, 63 percent of the students taking at least one AP exam, and 68 percent of those passing at least one AP exam.

- African American students make up 17 percent of the students enrolled in grades 9–12, yet they represent 10 percent of the students enrolled in at least one AP course, 9 percent of the students taking at least one AP exam, and 5 percent of those passing at least one AP exam.

- Latino students make up 21 percent of the students enrolled in grades 9–12, yet they represent 19 percent of the students enrolled in at least one AP course,

16 percent of the students taking at least one AP exam, and 13 percent of those passing at least one AP exam.

Access to rigorous course work is further limited in schools that track students.[d] Students who are placed on pathways that consist of less rigorous courses are often precluded from gaining access to the curriculum needed to prepare them for postsecondary education. These tracked courses, particularly at the low achievement levels, reinforce lower standards, engender student belief that they lack academic competence, and prevent interaction between low and high achievers.[28] According to the Equity and Excellence Commission, consigning students to instructional tracks that do not have the content needed for students to be academically successful codifies[29] low expectations by denying them the instructional content needed to prepare them for college and a career.[30]

The practice of student tracking disproportionately impacts students of color, English language learners, and students with disabilities. **Further, according to the U.S. Department of Education, the placement of students on lower-level tracks often "results in the over-identification of students—particularly boys of color—into special education or remedial classes that do not include critical features of the core curriculum** … Similarly, English-language learners may be mistakenly placed in remedial reading programs or under-resourced special education services when their actual needs involve English-language development."[31] Tracking students also includes the placement of students in alternative educational schools "from which they may never emerge or fail to keep track of how faithfully students are pursuing the core courses they need to graduate."[32]

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[d] Tracking refers to "the practice of grouping high school students by ability into a series of courses with differentiated curriculums; students take high-, middle-, or low-level courses related to the track they have selected or been assigned to." (M. H. Futrell and J. Gomez, "Special Topic: How Tracking Creates a Poverty of Learning," *Educational Leadership* 65, no. 8 [May 2008], http://www.ascd.org/publications/educational-leadership/may08/vol65/num08/How-Tracking-Creates-a-Poverty-of-Learning.aspx [accessed October 22, 2013].)

Looking beyond course titles: To what extent does the rigor of course content vary?

Students of color, English language learners, and students with disabilities are less likely to have access to courses intended to prepare them for college and a career. While the availability of, and student access to, these courses is important, it is equally critical that the actual content of these courses is rigorous and truly prepares students for college and a career.

To date, almost all states have adopted standards for college and career readiness. Successful implementation of these standards requires implementing a curriculum that is fully aligned to these standards. In 2009, prior to the implementation of the standards, the NAEP released a study examining the curriculum levels of courses. According to this study, only 14 percent of white high school graduates[e] completed a rigorous curriculum.[33] For students of color, the percentage is approximately half of their white peers, with only 6 percent of African American graduates and 8 percent of Latino graduates completing a rigorous curriculum.[34]

In addition, the NAEP study found that school course titles often overstated course content and the level of challenge.[35] For example, according to the study, approximately 73 percent of graduates who took an Algebra I class labeled "honors" by their school received a curriculum that was more appropriately defined as "intermediate."[36] According to the NAEP report, of the graduates who completed a two-year series of Algebra I courses, about 37 percent of Latino graduates received a curriculum equivalent to a beginner Algebra I course, compared to 19 percent each of white and African American

graduates.[37] Of the graduates who completed "honors" geometry courses, about 37 percent of white graduates received a curriculum equivalent to a rigorous geometry course, compared to 17 percent of Latino and 21 percent of African American graduates.[38] There are also differences in the rigor of course content for English language learners and students with disabilities. Sixty-three percent of English language learners and 45 percent of students with disabilities[f] completed a below-standard curriculum compared with approximately 25 percent of non–English language learners and students without disabilities.[39]

The findings from the NAEP study are further confirmed by a report from the Equity and Excellence Commission. According to this report, inequities in the educational opportunities low-income students receive are perpetuated through course work that is low in academic rigor, regardless of the course of study.[40] Districts and schools, in an effort to make the curriculum more "accessible" to low-achieving students, water down course work, keeping students away from the advanced content they need to

NAEP 2009: Percentage of High School Graduates by Subgroup Who Completed a Rigorous Curriculum

14%	**6%**	**8%**
White	African American	Latino
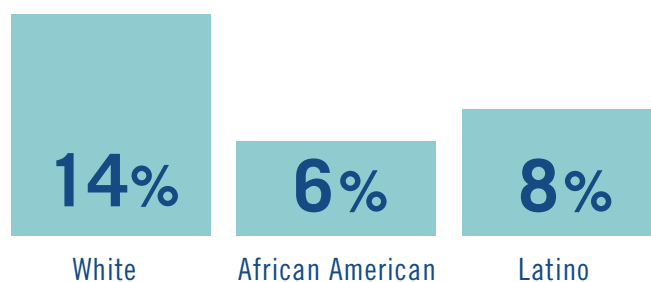
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[e] Even more concerning is that this data is based on high school graduates. It is fair to presume that the completion rates of rigorous course work for those who do not graduate are even lower.

[f] As previously noted, this study is limited to high school graduates.

succeed in subsequent grades.[41] Specifically, this is often done through the excessive use of leveled texts written specifically for students with poor reading skills.[42] **These materials fail to stretch students academically beyond their current literacy levels[g] and can overemphasize decoding skills rather than the comprehension skills needed to be successful in later grades.[43]**

According to an analysis of the high school experience for students, "not all school curricula are equal. The curricula for the children of the wealthy are enriched and demanding; the curricula for the children of the working class and poor are minimal and boring. The children of the wealthy learn to use complex and heavily class-coded language while other children learn a stripped-down style of communication, often based on popular media."[44] In urban districts, in particular, serving students from low-income families and students of color, teachers often rely on rote, low-level instruction, rather than building students' content knowledge, problem-solving abilities, collaborative capacities, communication skills, and learning strategies over time, thereby reinforcing messages of inadequacy and limited potential.[45]

Further, the importance of the physical characteristics of the school should not be overlooked. Well-resourced schools provide students with access to labs equipped with the newest technology, well-lit classrooms, state-of-the-art computers, and facilities for the arts and recreation.[46] These resources also allow for more elective courses, interdisciplinary studies, and study abroad programs.[47] These types of curricular resources represent the difference between curricula that is adequate at best and one that is inspiring.[48]

A lack of access to rigor is likely to result in students being disengaged, further resulting in higher rates of student discipline, lower attendance and graduation rates,

and fewer students prepared for college and a career. According to a report on student academic mind-sets, "For chronically failing students—or for students in chronically failing schools—the most important result of schooling may be not only a lack of knowledge and skills, but an image of themselves as having little to offer and few capabilities worth developing."[49] The resulting "academic failure[50] reduces students' interest in school and attenuates their relationship to whole fields of study that might have otherwise provided potential career opportunities."[51]

While the adoption of higher state standards has the potential of increasing access to a more rigorous and engaging curriculum for all students, course content needs to be fully aligned to those standards and effectively delivered in order for this potential to be realized.

> A LACK OF ACCESS TO RIGOR IS LIKELY TO RESULT IN STUDENTS BEING DISENGAGED, FURTHER RESULTING IN HIGHER RATES OF STUDENT DISCIPLINE, LOWER ATTENDANCE AND GRADUATION RATES, AND FEWER STUDENTS PREPARED FOR COLLEGE AND A CAREER.

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[g] The Common Core State Standards are explicitly designed to correct this practice by requiring students to read appropriately complex texts.

Turning the Great Unequalizer into the Great Equalizer

by Peter W. Cookson Jr.
Principal Researcher, American Institutes for Research

Equality of educational opportunity is a cherished part of the American story of upward mobility and social justice. But the evidence that where and with whom a student goes to school significantly influences his or her life chances and lifestyles is substantial. I recently completed a study of five American high schools that enroll students from different social class backgrounds ranging from the wealthiest to the poorest.

While I was aware that high schools tend to reproduce social class divisions due to residential segregation, private schools for the wealthy, and our tendency to allocate academic and social resources unevenly and generally in favor of the advantaged, I was shocked by the academic and social sorting and selecting machine we have created.

Instead of having a system of high schools acting, in Horace Mann's memorable phase, as the Great Equalizers, we have a fragmented system acting as the Great *Unequalizers*. High schools differ dramatically in terms of the academic and social environments students experience, whether we examine architecture and ascetics, leadership, teaching and curriculum, safety, and students' sense of well-being and efficacy. Not to mention that the higher the social status of a high school, the greater the likelihood that its graduates will be accepted at selective colleges.

The consequences of this stratification of educational opportunity go deep—right down to how students see themselves as citizens, leaders, and members of the workforce. High schools are hothouses of emotion where students pass through class-based rites of passage in which they internalize who they are, where they fit into society, and their most likely life chances. High schools are power systems designed for long-lasting socialization; what students hear, see, feel, and fear shapes their worldviews and sense of the possible. Inequality of opportunity is baked into the system and into the hearts and minds of students.

This is the deep curriculum of high schools that doesn't show up in school mission statements, descriptions of the curriculum, and the Common Core State Standards. But it is real. Very real. And very wrong. How can we begin the long journey back to equality of educational opportunity?

I don't underestimate the power of vested interest; meaningful change will require courageous leadership. One place, however, that educators can start to undo some of the damage done to young people is by developing class-inclusive and innovative curriculum. Educational visionaries such as James Banks have developed multicultural curriculum; I suggest we develop multi-*class* curriculum, or, more precisely, trans-class twenty-first-century curriculum.

This curriculum would go a long way toward breaking down the rigid divisions in children's educational opportunities by beginning the process of creating shared cultural and learning experiences. This trans-class curriculum should include cross-school visitations, shared field trips (not just to art museums, but to those hidden places where inequality hides), and teacher exchanges in which all teachers have the opportunity to teach in schools that vary by the social class background of their students.

Would these policy baby steps make a difference and move us down the road to educational excellence and equality of opportunity? Only time will tell. But before we can run we need to learn to walk, down the long and winding road to educational justice.

HOW CAN ACCESS TO RIGOROUS AND ENGAGING CURRICULUM BE INCREASED?

In addition to ensuring that curricular content is aligned to standards for college and career readiness, to be fully accessible to all students the content must be delivered in an engaging and supportive way. According to an analysis of student engagement in high schools by the National Academies, the picture of many urban high schools is one that includes a curriculum that is unresponsive to the needs and interests of students, especially students from high-poverty neighborhoods, students of color, English language learners, or those who entered high school with weak skills in reading and mathematics.[52] Instead, instruction in these schools should draw on students' preexisting understandings, interests, culture, and real-world experiences in order for the curriculum to be meaningful and cognitively, emotionally, and behaviorally engaging.[53]

A school's capacity to provide a positive school climate is directly related to its capacity to provide a rigorous and engaging curriculum. In order to be more engaged, many students need course work that is more demanding of their critical thinking and higher-order skills. **Schools, districts, and states should consider the following approaches in their efforts to increase access to rigorous and engaging course work.**

Advanced Placement

As previously mentioned, there is a considerable racial gap in students taking AP courses and passing the exams. Increasing the number of students of color passing AP exams will help the nation compete in a global and knowledge-based economy. For example, a statewide study conducted in Texas found that the six-year college graduation rates rose from approximately 15 percent for African American and Latino students to more than 60 percent if they scored a 3 or higher on at least one AP exam.[54] This is likely due to the fact that in order to receive a 3 or higher on an AP exam, a student likely has developed the academic content knowledge and mind-set that leads to success in college. **By providing low-income students and students of color with access to AP classes, exams, and instruction to support their success in such rigorous course work, school climate and postsecondary outcomes are likely to improve.**

Federal, state, and local efforts to support an increase of Advanced Placement curriculum can include[55]

- the development of strategies to effectively communicate to students and parents the importance and availability of AP courses;

- the use of teacher preparation and professional development resources to better prepare and support educators on how to effectively provide AP instruction;

- the isolation and addressing of barriers in identifying potential students who were not considered previously;

- an increase in federal funding in Title I, Part G, for Advanced Placement programs as well as any state and local resources in order to increase availability and range of courses;

- analysis at the district and school levels of student and school data to determine student access and outcomes; and

- the consideration of how to effectively use technology to support rural schools in providing greater access, such as distance-learning partnerships with higher education institutions.

Dual enrollment

Dual enrollment programs for high school students, in which students enroll in both high school and college classes, are an opportunity for students to prepare for what will be expected of them in college.[56] Students in dual enrollment programs earn credit for any completed college courses.[57] Dual enrollment can be beneficial not only for high-achieving students but for struggling learners as well. **Research suggests that dual enrollment programs help underserved students meet higher standards and reduce dropout rates,[58] and participating students also are more successful in college than are nonparticipants from otherwise comparable backgrounds.** The benefits also appear to be greater for students typically underrepresented in college.[59]

Federal, state, and local efforts to support an increase of dual enrollment programs can include[60]

- the development of relationships with institutions of higher education for the purpose of creating articulation agreements to provide students with dual enrollment opportunities;

- the determination and removal of any barriers to providing dual enrollment courses, such as restrictions on location and requirements for student eligibility, course credit, and credit transfer;

- the establishment of clear standards and components of dual enrollment in an effort to ensure and maintain consistent educational quality across secondary and postsecondary institutions;

- the stipulation of the basis of financial support and partnership responsibilities for implementing dual enrollment programs; and

- increased support from states to assist districts and higher education institutions to cover the costs of providing dual enrollment programs, such as educator licensing and professional development, transportation, materials, and course credit.

States should encourage and support districts in expanding opportunities for course work that is aligned to prepare students for the rigors of postsecondary education.

Deeper learning

The basic concepts of deeper learning are not new to education; indeed, they are routine educational practice for many accomplished individual teachers and educators and in many high-performing schools. These successful practices are now being confirmed by increasing bodies of evidence underscoring the necessity for deeper learning as an integral part of the educational process. Deeper learning prepares students to

- **know and master core academic content;**

- **think critically and solve complex problems;**

- **work collaboratively;**

- **communicate effectively;**

- **be self-directed and able to incorporate feedback; and**

- **develop academic mind-sets.**

Federal and state efforts to increase opportunities for deeper learning can include the following recommendations.

- States should broaden and invest in high-quality assessments that engage students with work that resembles what they will do outside of school, challenges them intellectually,[61] connects students to their own learning process, and builds their capacity to assess their own learning.[62] This may include the use of portfolios, projects, or extended performance tasks that assess the full range of academic standards.

- Teacher preparation and professional development should support teachers in implementing instructional strategies that provide students with opportunities for deeper learning.

- Districts and schools should encourage and support instruction that provides students with ongoing opportunities to "find, evaluate, synthesize, and use knowledge in new contexts, frame and solve non-routine problems, and produce research findings and solutions … [and] acquire well-developed thinking, problem solving, design, and communication skills."[63]

Linked Learning

The Linked Learning approach connects rigorous high school course work with real-world experience in a wide range of industry-themed pathways, such as engineering, arts and media, and biomedical and health sciences, with the goal of preparing students for postsecondary education, work, and life. **A well-designed Linked Learning pathway consists of rigorous academics, real-world technical skills, work-based learning, and personalized supports.**[64] Linked Learning has been implemented in several districts in California, and pilot programs now exist in districts in Detroit and Houston. This approach has shown early signs of promise in increasing student engagement and retention rates.

Climate Changer

Boston After School & Beyond (BASB) connects school, afterschool, and summer learning strategies so that young people have the opportunity to learn and thrive. In 2013, BASB enhanced partnerships among seventy organizations and sixty schools, reaching thousands of youth with innovative programming. BASB convenes the Partnership Council, a growing coalition of more than seventy organizations with the shared commitment to closing the opportunity gap for Boston children. Boston's Summer Learning Project, comanaged by BASB and the Boston Public Schools, reaches 1,700 children and youth and is growing. At sites across the city, teachers and community staff codevelop and deliver engaging, full-day programs that integrate math and literacy instruction with opportunities to build important skills in communication, taking initiative, and forming relationships. **High school students in this project have used the summer to get on track for graduation. In doing so, they have earned course credits and improved their academic standing. Additionally, they have improved key skills like critical thinking, perseverance, and relationships with both peers and adults.**

Federal and state efforts to increase opportunities for Linked Learning can include the following recommendations.

- States and districts should establish relationships with business and industry to provide meaningful work-based learning opportunities. These opportunities should be aligned to standards for college and career readiness.

- States and districts should be encouraged to remove barriers to expanding the school day in order to provide greater flexibility and learning opportunities off campus and outside of the traditional school day.

- Educators should be provided with professional development that supports students as they participate in work-based learning experiences that connect to classroom instruction.

SUPPORTING STUDENTS' SUCCESS

Not only do students need these types of engaging education approaches, they also need to be provided the academic and integrated supports needed to succeed with more rigorous course work. Student engagement increases when students have a sense of self-efficacy, defined as "one's ability to cope, perform, and be successful."[65] **If more is expected of students, more assistance must be provided in order to support their achievement.**

Despite how engaging and rigorous a given high school's courses may be, a student with unmet medical needs or with a personal crisis may be unable to focus on course material in ways that will allow them to be successful in school. Along with investing in more engaging and rigorous course work, investing in student supports to assist

students with academic deficiencies, family problems, and economic challenges is vital. Findings from one federal research grant project suggest that many high-risk youth reconnect with educational goals once their lives become more stable after receiving wraparound interventions and supports.[66] Wraparound services in this context are a complex method of providing holistic, culturally relevant, and community-based interventions to meet the academic, physical, mental, social, and emotional needs of students. The important element of wraparound services is the focus on connecting families, schools, and community partners in effective problem-solving relationships.[67]

Wraparound services that are sustainable and comprehensive need effective coordination between the school and community-based initiatives and/or organizations. This allows them to provide the specific interventions that the students need in order to be able to engage in a successful educational experience. Fundamental components of an effective wraparound service plan can include the following:[68]

- **Coordination:** Coordinate, negotiate, mediate, and make connections among nonprofits, schools, and other partners. It is especially important to have a high-level district coordinator in place.

- **Needs assessment/planning:** Identify service needs, gaps, and existing programs; examine and share relevant research; develop plans; and provide training and support to build local capacity.

- **Communication:** Engage a wide range of stakeholders; communicate among families, school staff, external service providers, and the wider community.

- **Accountability:** Collect, maintain, analyze, and disseminate data on programs and participants. Integrate with existing school data system.

- **Resource development:** Seek financial support for services through grant writing and other fund-raising activities.

As previously discussed, there are a number of school-based factors that can increase student engagement, but a school's efforts to improve engagement will be limited without a plan to provide interventions for non-school-based factors affecting the ability of students to learn.

THE ROLE OF TEACHERS AND LEADERS

For a school to provide a rigorous and engaging curriculum, it must be structured and staffed in a manner that facilitates that provision. The full implementation of standards for college and career readiness requires teachers and leaders who have the necessary skills and support. These skills and support apply as well to their ability to create a safe and respectful environment. The critical role of teachers and leaders in creating a positive school climate will be discussed in the next Climate Change paper.

CONCLUSION

Creating a positive school climate requires increased access to engaging and rigorous curriculum that prepares all students for college and a career. Unfortunately, high schools across the country provide unequal access to courses that teach the skills and provide the content knowledge necessary for students to succeed in life after high school. Too often, students of color, English language learners, students with disabilities, and low-income students are not provided advanced learning opportunities at the rates of their white and wealthier peers. Further, this limited access serves to disengage students, resulting in a disconnect from school that can lead to higher rates of discipline, truancy, lost instructional time, and poor academic outcomes. Efforts to create a positive school climate must include providing all students with access to a rigorous and engaging curriculum. It is said that the key to success is a great education. If we do not provide that education, then our students cannot unlock the door to their bright futures.
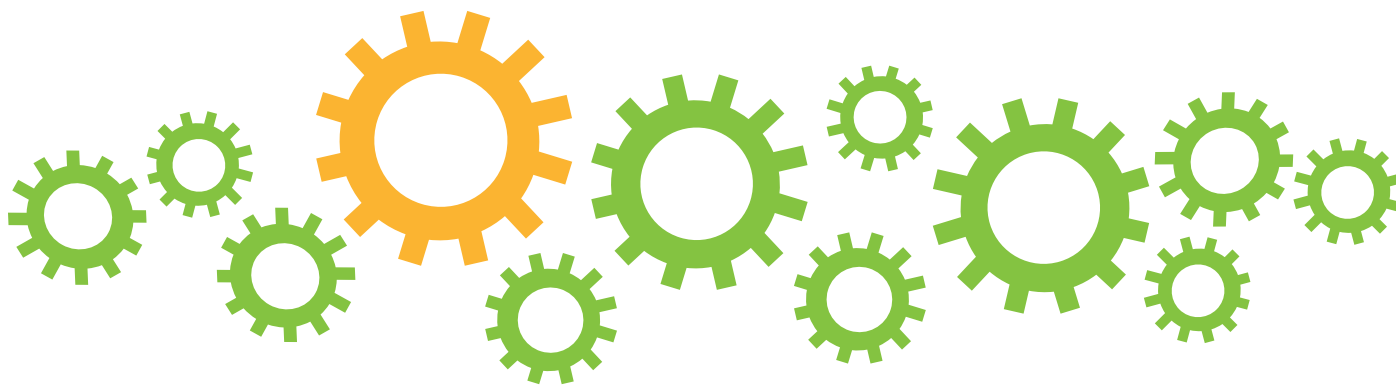
Previously Released and Upcoming Climate Change Publications

Secondary school reform efforts will be limited unless they take a holistic approach that examines every aspect of the school experience for students, teachers, and leaders. In the same way that one recognizes the importance of meeting the needs of the whole child, so too must the needs of the whole school be met. The Alliance has released or will release the following series of papers that provide a framework for effective and sustainable school reform:

- *Climate Change: Creating an Integrated Framework for Improving School Climate* (released August 2013)

- *Climate Change: Implementing School Discipline Practices That Create a Positive School Climate* (released September 2013)

- *Climate Change: Providing Equitable Access to Effective Teaching by Preparing, Supporting, and Developing Effective Instructional Practices* (upcoming)

In an effort to provide a positive school climate, in part by providing increased access to a rigorous and engaging curriculum, the Alliance for Excellent Education proposes the following federal, state, and local policy recommendations.

FEDERAL LEGISLATIVE RECOMMENDATIONS

Access to rigorous and advanced course work

- Support the development and implementation of technologies that can offer specialized and advanced courses to all students to address the challenges rural and urban schools may face in providing and staffing these courses.

- Require local education agencies (LEAs) to report on student access to and completion of rigorous course work, disaggregated by income quartile of schools under Section 1112 of ESEA. This should include access to opportunities to earn postsecondary credit while in high school such as through Advanced Placement and International Baccalaureate courses and exams, dual enrollment, and performance on Advanced Placement and International Baccalaureate exams. Local education plans under this section should also describe how the LEAs will identify and address any disparity within student subgroups in equitable access to rigorous course work, including access to the opportunities previously described. This data should be used to target resources and implement the previously described strategies to increase access to these students.

- School improvement plans under Section 1116 of ESEA should include a diagnostic review of data related to student and instructional staff, including but not limited to the most recent data submitted through the Department of Education's Civil Rights Data Collection and a strategy for addressing any disparities revealed by the data.

- School improvement plans under Section 1116 of ESEA should include strategies for increasing the provision of rigorous course work at the secondary school level, including opportunities to earn postsecondary credit while in high school such as through Advanced Placement and International Baccalaureate courses and exams and dual enrollment. These plans should also include strategies to increase student engagement and a progression of support for students to succeed in such course work.

Chronic absenteeism

- School report cards should be required to provide student attendance information in the aggregate and disaggregate, including rates of chronic absenteeism. According to the Everyone Graduates Center, a school can have average daily attendance of 90 percent and still have 40 percent of its students chronically absent, because on different days, different students make up that 90 percent.

Student assessments

- State and local assessment requirements under Section 1111 of ESEA should measure the full range of academic standards students are expected to meet. In addition, they should involve multiple measures of student academic achievement and include measures of students' deep content knowledge and their ability to use knowledge to think critically and solve problems and to communicate effectively, and may be delivered in the form of portfolios, projects, or extended performance tasks.

- Grants for assessments under Section 1113 of ESEA should support assessments that develop multiple measures of student academic achievement, including measures that assess higher-order thinking skills and understanding, and elicit complex student demonstrations or applications of knowledge and skills to increase the reliability and validity of state assessment systems; that are balanced assessment systems that include summative, interim, and formative assessments; and that may include computer adaptive assessments, performance assessments, technology-based assessments, and through-course assessments. Professional development should include preparing educators with strategies for effectively utilizing student assessment data to inform their practice.

STATE AND LOCAL RECOMMENDATIONS

- Curriculum should emphasize social and emotional learning as a tool for students and staff to promote safe and positive school learning communities.

- States should assess their teacher preparation and licensing requirements to ensure that educators enter the classroom prepared to provide more rigorous and engaging instruction.

- Funding should be increased to support the expansion of AP course offerings and dual enrollment programs.

ENDNOTES

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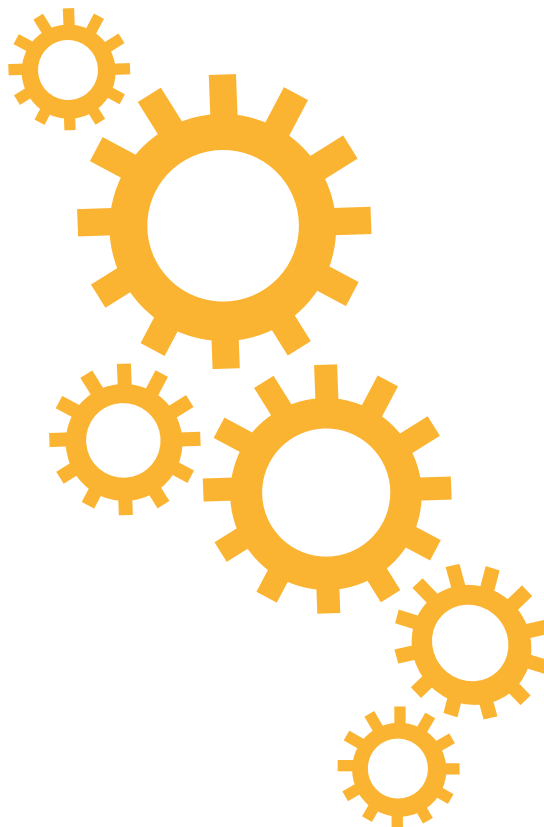
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